

AP-111

AGWMR
(4 of 5)

2015

APPENDIX G

HALL LABORATORY ANALYTICAL DATA

(ON ATTACHED CD)



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

April 20, 2015

Cheryl Johnson

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

RE: 2015 Semi-Annual Ponds

OrderNo.: 1503B57

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 7 sample(s) on 3/25/2015 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", is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-2

Project: 2015 Semi-Annual Ponds

Collection Date: 3/24/2015 1:48:00 PM

Lab ID: 1503B57-001

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	35	1.0	*	mg/L	10	3/26/2015 10:56:27 AM	R25111
Chloride	1700	50		mg/L	100	3/26/2015 11:33:41 AM	R25111
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/26/2015 10:56:27 AM	R25111
Bromide	7.1	1.0		mg/L	10	3/26/2015 10:56:27 AM	R25111
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/26/2015 10:56:27 AM	R25111
Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	3/26/2015 10:56:27 AM	R25111
Sulfate	1200	50		mg/L	100	3/26/2015 11:33:41 AM	R25111
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.13	0.0020		mg/L	1	4/7/2015 5:26:16 PM	R25347
Cadmium	ND	0.0020		mg/L	1	4/7/2015 5:26:16 PM	R25347
Calcium	190	5.0		mg/L	5	4/7/2015 5:28:07 PM	R25347
Chromium	0.017	0.0060		mg/L	1	4/7/2015 5:26:16 PM	R25347
Copper	ND	0.0060		mg/L	1	4/7/2015 5:26:16 PM	R25347
Iron	4.0	0.10	*	mg/L	5	4/7/2015 5:28:07 PM	R25347
Magnesium	45	1.0		mg/L	1	4/7/2015 5:26:16 PM	R25347
Manganese	0.37	0.0020	*	mg/L	1	4/7/2015 5:26:16 PM	R25347
Potassium	64	1.0		mg/L	1	4/7/2015 5:26:16 PM	R25347
Silver	ND	0.0050		mg/L	1	4/7/2015 5:26:16 PM	R25347
Sodium	1400	50		mg/L	50	4/8/2015 3:06:27 PM	R25371
Zinc	0.086	0.010		mg/L	1	4/7/2015 5:26:16 PM	R25347
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.14	0.0020		mg/L	1	4/3/2015 3:54:05 PM	18398
Cadmium	ND	0.0020		mg/L	1	4/3/2015 3:54:05 PM	18398
Chromium	0.017	0.0060		mg/L	1	4/3/2015 3:54:05 PM	18398
Copper	0.0073	0.0060		mg/L	1	4/3/2015 3:54:05 PM	18398
Iron	4.4	0.20	*	mg/L	10	4/3/2015 4:51:24 PM	18398
Manganese	0.42	0.0020	*	mg/L	1	4/6/2015 4:31:49 PM	18398
Silver	ND	0.0050		mg/L	1	4/3/2015 3:54:05 PM	18398
Zinc	0.089	0.010		mg/L	1	4/3/2015 3:54:05 PM	18398
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.10	*	mg/L	100	4/7/2015 7:12:45 PM	R25358
Lead	ND	0.20		mg/L	200	4/13/2015 5:51:12 PM	R25474
Selenium	ND	0.10	*	mg/L	100	4/7/2015 7:12:45 PM	R25358
Uranium	ND	0.010		mg/L	10	4/7/2015 7:15:49 PM	R25358
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.20		mg/L	200	4/14/2015 6:33:39 PM	18398
Lead	ND	0.010		mg/L	10	4/8/2015 2:58:15 PM	18398

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 1 of 50
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-2

Project: 2015 Semi-Annual Ponds

Collection Date: 3/24/2015 1:48:00 PM

Lab ID: 1503B57-001

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Selenium	ND	0.20	*	mg/L	200	4/14/2015 6:33:39 PM	18398
Uranium	ND	0.010		mg/L	10	4/8/2015 2:58:15 PM	18398
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	4/4/2015 2:05:55 PM	18521
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Acenaphthylene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Aniline	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Anthracene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Azobenzene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Benz(a)anthracene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Benzo(a)pyrene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Benzo(b)fluoranthene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Benzo(g,h,i)perylene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Benzo(k)fluoranthene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Benzoic acid	ND	200		µg/L	1	4/1/2015 3:39:36 PM	18434
Benzyl alcohol	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Bis(2-chloroethoxy)methane	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Bis(2-chloroethyl)ether	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Bis(2-chloroisopropyl)ether	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Bis(2-ethylhexyl)phthalate	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
4-Bromophenyl phenyl ether	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Butyl benzyl phthalate	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Carbazole	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
4-Chloro-3-methylphenol	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
4-Chloroaniline	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
2-Chloronaphthalene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
2-Chlorophenol	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
4-Chlorophenyl phenyl ether	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Chrysene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Di-n-butyl phthalate	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Di-n-octyl phthalate	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Dibenz(a,h)anthracene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Dibenzofuran	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
1,2-Dichlorobenzene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
1,3-Dichlorobenzene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
1,4-Dichlorobenzene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
3,3'-Dichlorobenzidine	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 2 of 50
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-2

Project: 2015 Semi-Annual Ponds

Collection Date: 3/24/2015 1:48:00 PM

Lab ID: 1503B57-001

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
Diethyl phthalate	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Dimethyl phthalate	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
2,4-Dichlorophenol	ND	200		µg/L	1	4/1/2015 3:39:36 PM	18434
2,4-Dimethylphenol	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
4,6-Dinitro-2-methylphenol	ND	200		µg/L	1	4/1/2015 3:39:36 PM	18434
2,4-Dinitrophenol	ND	200		µg/L	1	4/1/2015 3:39:36 PM	18434
2,4-Dinitrotoluene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
2,6-Dinitrotoluene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Fluoranthene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Fluorene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Hexachlorobenzene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Hexachlorobutadiene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Hexachlorocyclopentadiene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Hexachloroethane	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Indeno(1,2,3-cd)pyrene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Isophorone	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
1-Methylnaphthalene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
2-Methylnaphthalene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
2-Methylphenol	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
3+4-Methylphenol	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
N-Nitrosodi-n-propylamine	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
N-Nitrosodimethylamine	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
N-Nitrosodiphenylamine	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Naphthalene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
2-Nitroaniline	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
3-Nitroaniline	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
4-Nitroaniline	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Nitrobenzene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
2-Nitrophenol	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
4-Nitrophenol	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Pentachlorophenol	ND	200		µg/L	1	4/1/2015 3:39:36 PM	18434
Phenanthrene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Phenol	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Pyrene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Pyridine	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
1,2,4-Trichlorobenzene	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
2,4,5-Trichlorophenol	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
2,4,6-Trichlorophenol	ND	100		µg/L	1	4/1/2015 3:39:36 PM	18434
Surr: 2-Fluorophenol	43.0	17.6-104		%REC	1	4/1/2015 3:39:36 PM	18434

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

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Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-2

Project: 2015 Semi-Annual Ponds

Collection Date: 3/24/2015 1:48:00 PM

Lab ID: 1503B57-001

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Surr: Phenol-d5	35.2	17.7-89.9		%REC	1	4/1/2015 3:39:36 PM	18434
Surr: 2,4,6-Tribromophenol	59.7	16.3-122		%REC	1	4/1/2015 3:39:36 PM	18434
Surr: Nitrobenzene-d5	54.3	45.3-117		%REC	1	4/1/2015 3:39:36 PM	18434
Surr: 2-Fluorobiphenyl	50.3	43-113		%REC	1	4/1/2015 3:39:36 PM	18434
Surr: 4-Terphenyl-d14	52.9	47.6-122		%REC	1	4/1/2015 3:39:36 PM	18434
EPA METHOD 8260B: VOLATILES					Analyst: KJH		
Benzene	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
Toluene	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
Ethylbenzene	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
1,2,4-Trimethylbenzene	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
1,3,5-Trimethylbenzene	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
Naphthalene	ND	20		µg/L	10	4/2/2015 11:28:32 AM	R25263
1-Methylnaphthalene	ND	40		µg/L	10	4/2/2015 11:28:32 AM	R25263
2-Methylnaphthalene	ND	40		µg/L	10	4/2/2015 11:28:32 AM	R25263
Acetone	520	100		µg/L	10	4/2/2015 11:28:32 AM	R25263
Bromobenzene	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
Bromodichloromethane	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
Bromoform	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
Bromomethane	ND	30		µg/L	10	4/2/2015 11:28:32 AM	R25263
2-Butanone	ND	100		µg/L	10	4/2/2015 11:28:32 AM	R25263
Carbon disulfide	ND	100		µg/L	10	4/2/2015 11:28:32 AM	R25263
Carbon Tetrachloride	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
Chlorobenzene	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
Chloroethane	ND	20		µg/L	10	4/2/2015 11:28:32 AM	R25263
Chloroform	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
Chloromethane	ND	30		µg/L	10	4/2/2015 11:28:32 AM	R25263
2-Chlorotoluene	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
4-Chlorotoluene	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
cis-1,2-DCE	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
cis-1,3-Dichloropropene	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	4/2/2015 11:28:32 AM	R25263
Dibromochloromethane	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
Dibromomethane	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
1,2-Dichlorobenzene	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
1,3-Dichlorobenzene	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
1,4-Dichlorobenzene	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263

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

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CLIENT: Western Refining Southwest, Gallup

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Matrix: AQUEOUS

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Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: KJH			
Dichlorodifluoromethane	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
1,1-Dichloroethane	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
1,1-Dichloroethene	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
1,2-Dichloropropane	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
1,3-Dichloropropane	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
2,2-Dichloropropane	ND	20		µg/L	10	4/2/2015 11:28:32 AM	R25263
1,1-Dichloropropene	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
Hexachlorobutadiene	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
2-Hexanone	ND	100		µg/L	10	4/2/2015 11:28:32 AM	R25263
Isopropylbenzene	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
4-Isopropyltoluene	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
4-Methyl-2-pentanone	ND	100		µg/L	10	4/2/2015 11:28:32 AM	R25263
Methylene Chloride	ND	30		µg/L	10	4/2/2015 11:28:32 AM	R25263
n-Butylbenzene	ND	30		µg/L	10	4/2/2015 11:28:32 AM	R25263
n-Propylbenzene	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
sec-Butylbenzene	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
Styrene	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
tert-Butylbenzene	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	4/2/2015 11:28:32 AM	R25263
Tetrachloroethene (PCE)	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
trans-1,2-DCE	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
trans-1,3-Dichloropropene	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
1,2,3-Trichlorobenzene	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
1,2,4-Trichlorobenzene	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
1,1,1-Trichloroethane	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
1,1,2-Trichloroethane	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
Trichloroethene (TCE)	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
Trichlorofluoromethane	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
1,2,3-Trichloropropane	ND	20		µg/L	10	4/2/2015 11:28:32 AM	R25263
Vinyl chloride	ND	10		µg/L	10	4/2/2015 11:28:32 AM	R25263
Xylenes, Total	ND	15		µg/L	10	4/2/2015 11:28:32 AM	R25263
Surr: 1,2-Dichloroethane-d4	99.6	70-130		%REC	10	4/2/2015 11:28:32 AM	R25263
Surr: 4-Bromofluorobenzene	105	70-130		%REC	10	4/2/2015 11:28:32 AM	R25263
Surr: Dibromofluoromethane	101	70-130		%REC	10	4/2/2015 11:28:32 AM	R25263
Surr: Toluene-d8	87.2	70-130		%REC	10	4/2/2015 11:28:32 AM	R25263
SM2510B: SPECIFIC CONDUCTANCE				Analyst: JRR			
Conductivity	8200	0.010		µmhos/cm	1	3/26/2015 1:34:31 PM	R25114

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-2

Project: 2015 Semi-Annual Ponds

Collection Date: 3/24/2015 1:48:00 PM

Lab ID: 1503B57-001

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM4500-H+B: PH						Analyst: JRR	
pH	7.45	1.68	H	pH units	1	3/26/2015 1:34:31 PM	R25114

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 6 of 50
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-3

Project: 2015 Semi-Annual Ponds

Collection Date: 3/24/2015 2:30:00 PM

Lab ID: 1503B57-002

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	17	1.0	*	mg/L	10	3/26/2015 11:46:05 AM	R25111
Chloride	4000	250		mg/L	500	4/1/2015 2:12:17 AM	R25209
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/26/2015 11:46:05 AM	R25111
Bromide	5.4	1.0		mg/L	10	3/26/2015 11:46:05 AM	R25111
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/26/2015 11:46:05 AM	R25111
Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	3/26/2015 11:46:05 AM	R25111
Sulfate	900	50		mg/L	100	3/26/2015 11:58:30 AM	R25111
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.13	0.0020		mg/L	1	4/7/2015 5:30:08 PM	R25347
Cadmium	ND	0.0020		mg/L	1	4/7/2015 5:30:08 PM	R25347
Calcium	440	5.0		mg/L	5	4/7/2015 5:32:00 PM	R25347
Chromium	0.0088	0.0060		mg/L	1	4/7/2015 5:30:08 PM	R25347
Copper	ND	0.0060		mg/L	1	4/7/2015 5:30:08 PM	R25347
Iron	0.90	0.020	*	mg/L	1	4/7/2015 5:30:08 PM	R25347
Magnesium	110	5.0		mg/L	5	4/7/2015 5:32:00 PM	R25347
Manganese	0.31	0.0020	*	mg/L	1	4/7/2015 5:30:08 PM	R25347
Potassium	89	1.0		mg/L	1	4/7/2015 5:30:08 PM	R25347
Silver	ND	0.0050		mg/L	1	4/7/2015 5:30:08 PM	R25347
Sodium	2700	50		mg/L	50	4/8/2015 3:08:00 PM	R25371
Zinc	0.055	0.010		mg/L	1	4/7/2015 5:30:08 PM	R25347
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.13	0.0020		mg/L	1	4/3/2015 3:55:52 PM	18398
Cadmium	ND	0.0020		mg/L	1	4/3/2015 3:55:52 PM	18398
Chromium	0.010	0.0060		mg/L	1	4/3/2015 3:55:52 PM	18398
Copper	ND	0.0060		mg/L	1	4/3/2015 3:55:52 PM	18398
Iron	1.2	0.10	*	mg/L	5	4/3/2015 4:53:24 PM	18398
Manganese	0.33	0.0020	*	mg/L	1	4/6/2015 4:33:36 PM	18398
Silver	ND	0.0050		mg/L	1	4/3/2015 3:55:52 PM	18398
Zinc	0.021	0.010		mg/L	1	4/3/2015 3:55:52 PM	18398
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.10	*	mg/L	100	4/7/2015 7:18:53 PM	R25358
Lead	ND	0.20		mg/L	200	4/13/2015 5:54:15 PM	R25474
Selenium	ND	0.10	*	mg/L	100	4/7/2015 7:18:53 PM	R25358
Uranium	ND	0.010		mg/L	10	4/7/2015 7:21:58 PM	R25358
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.20		mg/L	200	4/14/2015 6:36:50 PM	18398
Lead	ND	0.20		mg/L	200	4/14/2015 6:36:50 PM	18398

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-3

Project: 2015 Semi-Annual Ponds

Collection Date: 3/24/2015 2:30:00 PM

Lab ID: 1503B57-002

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Selenium	ND	0.20		mg/L	200	4/14/2015 6:36:50 PM	18398
Uranium	ND	0.20		mg/L	200	4/14/2015 6:36:50 PM	18398
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	4/4/2015 2:07:43 PM	18521
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Acenaphthylene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Aniline	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Anthracene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Azobenzene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Benz(a)anthracene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Benzo(a)pyrene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Benzo(b)fluoranthene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Benzo(k)fluoranthene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Benzoic acid	ND	20		µg/L	1	3/30/2015 11:28:51 AM	18372
Benzyl alcohol	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Bis(2-ethylhexyl)phthalate	19	10		µg/L	1	3/30/2015 11:28:51 AM	18372
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Butyl benzyl phthalate	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Carbazole	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
4-Chloroaniline	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
2-Chloronaphthalene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
2-Chlorophenol	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Chrysene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Di-n-butyl phthalate	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Di-n-octyl phthalate	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Dibenzofuran	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
1,2-Dichlorobenzene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
1,3-Dichlorobenzene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
1,4-Dichlorobenzene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 8 of 50
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-3

Project: 2015 Semi-Annual Ponds

Collection Date: 3/24/2015 2:30:00 PM

Lab ID: 1503B57-002

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Diethyl phthalate	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Dimethyl phthalate	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
2,4-Dichlorophenol	ND	20		µg/L	1	3/30/2015 11:28:51 AM	18372
2,4-Dimethylphenol	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/30/2015 11:28:51 AM	18372
2,4-Dinitrophenol	ND	20		µg/L	1	3/30/2015 11:28:51 AM	18372
2,4-Dinitrotoluene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
2,6-Dinitrotoluene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Fluoranthene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Fluorene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Hexachlorobenzene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Hexachlorobutadiene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Hexachloroethane	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Isophorone	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
1-Methylnaphthalene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
2-Methylnaphthalene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
2-Methylphenol	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
3+4-Methylphenol	12	10		µg/L	1	3/30/2015 11:28:51 AM	18372
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
N-Nitrosodimethylamine	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Naphthalene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
2-Nitroaniline	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
3-Nitroaniline	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
4-Nitroaniline	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Nitrobenzene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
2-Nitrophenol	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
4-Nitrophenol	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Pentachlorophenol	ND	20		µg/L	1	3/30/2015 11:28:51 AM	18372
Phenanthrene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Phenol	340	50		µg/L	5	3/30/2015 5:10:44 PM	18372
Pyrene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Pyridine	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/30/2015 11:28:51 AM	18372
Surr: 2-Fluorophenol	81.0	17.6-104		%REC	1	3/30/2015 11:28:51 AM	18372

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 9 of 50
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-3

Project: 2015 Semi-Annual Ponds

Collection Date: 3/24/2015 2:30:00 PM

Lab ID: 1503B57-002

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Surr: Phenol-d5	78.0	17.7-89.9		%REC	1	3/30/2015 11:28:51 AM	18372
Surr: 2,4,6-Tribromophenol	90.2	16.3-122		%REC	1	3/30/2015 11:28:51 AM	18372
Surr: Nitrobenzene-d5	84.0	45.3-117		%REC	1	3/30/2015 11:28:51 AM	18372
Surr: 2-Fluorobiphenyl	49.3	43-113		%REC	1	3/30/2015 11:28:51 AM	18372
Surr: 4-Terphenyl-d14	43.6	47.6-122	S	%REC	1	3/30/2015 11:28:51 AM	18372
EPA METHOD 8260B: VOLATILES							Analyst: KJH
Benzene	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
Toluene	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
Ethylbenzene	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
1,2,4-Trimethylbenzene	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
1,3,5-Trimethylbenzene	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
Naphthalene	ND	20		µg/L	10	4/2/2015 11:57:23 AM	R25263
1-Methylnaphthalene	ND	40		µg/L	10	4/2/2015 11:57:23 AM	R25263
2-Methylnaphthalene	ND	40		µg/L	10	4/2/2015 11:57:23 AM	R25263
Acetone	280	100		µg/L	10	4/2/2015 11:57:23 AM	R25263
Bromobenzene	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
Bromodichloromethane	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
Bromoform	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
Bromomethane	ND	30		µg/L	10	4/2/2015 11:57:23 AM	R25263
2-Butanone	ND	100		µg/L	10	4/2/2015 11:57:23 AM	R25263
Carbon disulfide	ND	100		µg/L	10	4/2/2015 11:57:23 AM	R25263
Carbon Tetrachloride	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
Chlorobenzene	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
Chloroethane	ND	20		µg/L	10	4/2/2015 11:57:23 AM	R25263
Chloroform	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
Chloromethane	ND	30		µg/L	10	4/2/2015 11:57:23 AM	R25263
2-Chlorotoluene	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
4-Chlorotoluene	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
cis-1,2-DCE	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
cis-1,3-Dichloropropene	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	4/2/2015 11:57:23 AM	R25263
Dibromochloromethane	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
Dibromomethane	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
1,2-Dichlorobenzene	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
1,3-Dichlorobenzene	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
1,4-Dichlorobenzene	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-3

Project: 2015 Semi-Annual Ponds

Collection Date: 3/24/2015 2:30:00 PM

Lab ID: 1503B57-002

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: KJH			
Dichlorodifluoromethane	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
1,1-Dichloroethane	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
1,1-Dichloroethene	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
1,2-Dichloropropane	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
1,3-Dichloropropane	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
2,2-Dichloropropane	ND	20		µg/L	10	4/2/2015 11:57:23 AM	R25263
1,1-Dichloropropene	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
Hexachlorobutadiene	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
2-Hexanone	ND	100		µg/L	10	4/2/2015 11:57:23 AM	R25263
Isopropylbenzene	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
4-Isopropyltoluene	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
4-Methyl-2-pentanone	ND	100		µg/L	10	4/2/2015 11:57:23 AM	R25263
Methylene Chloride	ND	30		µg/L	10	4/2/2015 11:57:23 AM	R25263
n-Butylbenzene	ND	30		µg/L	10	4/2/2015 11:57:23 AM	R25263
n-Propylbenzene	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
sec-Butylbenzene	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
Styrene	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
tert-Butylbenzene	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	4/2/2015 11:57:23 AM	R25263
Tetrachloroethene (PCE)	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
trans-1,2-DCE	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
trans-1,3-Dichloropropene	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
1,2,3-Trichlorobenzene	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
1,2,4-Trichlorobenzene	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
1,1,1-Trichloroethane	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
1,1,2-Trichloroethane	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
Trichloroethene (TCE)	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
Trichlorofluoromethane	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
1,2,3-Trichloropropane	ND	20		µg/L	10	4/2/2015 11:57:23 AM	R25263
Vinyl chloride	ND	10		µg/L	10	4/2/2015 11:57:23 AM	R25263
Xylenes, Total	ND	15		µg/L	10	4/2/2015 11:57:23 AM	R25263
Surr: 1,2-Dichloroethane-d4	99.2	70-130		%REC	10	4/2/2015 11:57:23 AM	R25263
Surr: 4-Bromofluorobenzene	100	70-130		%REC	10	4/2/2015 11:57:23 AM	R25263
Surr: Dibromofluoromethane	102	70-130		%REC	10	4/2/2015 11:57:23 AM	R25263
Surr: Toluene-d8	91.1	70-130		%REC	10	4/2/2015 11:57:23 AM	R25263
SM2510B: SPECIFIC CONDUCTANCE				Analyst: JRR			
Conductivity	20000	0.10		µmhos/cm	10	4/1/2015 4:39:00 PM	R25244

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-3

Project: 2015 Semi-Annual Ponds

Collection Date: 3/24/2015 2:30:00 PM

Lab ID: 1503B57-002

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM4500-H+B: PH						Analyst: JRR	
pH	7.85	1.68	H	pH units	1	3/26/2015 1:38:55 PM	R25114

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 12 of 50
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-4

Project: 2015 Semi-Annual Ponds

Collection Date: 3/24/2015 2:55:00 PM

Lab ID: 1503B57-003

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	20	10	*	mg/L	100	3/26/2015 1:12:56 PM	R25111
Chloride	7200	500		mg/L	1E	4/1/2015 2:24:42 AM	R25209
Nitrogen, Nitrite (As N)	ND	10		mg/L	100	3/26/2015 1:12:56 PM	R25111
Bromide	4.3	1.0		mg/L	10	3/26/2015 1:00:32 PM	R25111
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/26/2015 1:00:32 PM	R25111
Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	3/26/2015 1:00:32 PM	R25111
Sulfate	1700	50		mg/L	100	3/26/2015 1:12:56 PM	R25111
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.12	0.0020		mg/L	1	4/7/2015 5:34:09 PM	R25347
Cadmium	ND	0.0020		mg/L	1	4/7/2015 5:34:09 PM	R25347
Calcium	400	5.0		mg/L	5	4/7/2015 5:36:01 PM	R25347
Chromium	0.0079	0.0060		mg/L	1	4/7/2015 5:34:09 PM	R25347
Copper	ND	0.0060		mg/L	1	4/7/2015 5:34:09 PM	R25347
Iron	0.46	0.020	*	mg/L	1	4/7/2015 5:34:09 PM	R25347
Magnesium	170	5.0		mg/L	5	4/7/2015 5:36:01 PM	R25347
Manganese	0.40	0.0020	*	mg/L	1	4/7/2015 5:34:09 PM	R25347
Potassium	190	5.0		mg/L	5	4/7/2015 5:36:01 PM	R25347
Silver	ND	0.0050		mg/L	1	4/7/2015 5:34:09 PM	R25347
Sodium	5000	100		mg/L	100	4/8/2015 3:09:33 PM	R25371
Zinc	ND	0.010		mg/L	1	4/7/2015 5:34:09 PM	R25347
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.13	0.0020		mg/L	1	4/3/2015 3:57:45 PM	18398
Cadmium	ND	0.0020		mg/L	1	4/3/2015 3:57:45 PM	18398
Chromium	0.0090	0.0060		mg/L	1	4/3/2015 3:57:45 PM	18398
Copper	ND	0.0060		mg/L	1	4/3/2015 3:57:45 PM	18398
Iron	0.81	0.020	*	mg/L	1	4/3/2015 3:57:45 PM	18398
Manganese	0.44	0.0020	*	mg/L	1	4/6/2015 4:35:15 PM	18398
Silver	ND	0.0050		mg/L	1	4/3/2015 3:57:45 PM	18398
Zinc	0.014	0.010		mg/L	1	4/3/2015 3:57:45 PM	18398
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	0.022	0.010	*	mg/L	10	4/7/2015 7:28:06 PM	R25358
Lead	ND	0.20		mg/L	200	4/13/2015 5:57:18 PM	R25474
Selenium	0.038	0.010		mg/L	10	4/7/2015 7:28:06 PM	R25358
Uranium	ND	0.010		mg/L	10	4/7/2015 7:28:06 PM	R25358
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.20		mg/L	200	4/14/2015 6:40:02 PM	18398
Lead	ND	0.20		mg/L	200	4/14/2015 6:40:02 PM	18398

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-4

Project: 2015 Semi-Annual Ponds

Collection Date: 3/24/2015 2:55:00 PM

Lab ID: 1503B57-003

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Selenium	ND	0.20		mg/L	200	4/14/2015 6:40:02 PM	18398
Uranium	ND	0.20		mg/L	200	4/14/2015 6:40:02 PM	18398
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	4/4/2015 2:13:16 PM	18521
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Acenaphthylene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Aniline	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Anthracene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Azobenzene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Benz(a)anthracene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Benzo(a)pyrene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Benzo(b)fluoranthene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Benzo(g,h,i)perylene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Benzo(k)fluoranthene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Benzoic acid	ND	200		µg/L	1	4/1/2015 4:07:30 PM	18434
Benzyl alcohol	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Bis(2-chloroethoxy)methane	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Bis(2-chloroethyl)ether	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Bis(2-chloroisopropyl)ether	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Bis(2-ethylhexyl)phthalate	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
4-Bromophenyl phenyl ether	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Butyl benzyl phthalate	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Carbazole	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
4-Chloro-3-methylphenol	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
4-Chloroaniline	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
2-Chloronaphthalene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
2-Chlorophenol	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
4-Chlorophenyl phenyl ether	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Chrysene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Di-n-butyl phthalate	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Di-n-octyl phthalate	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Dibenz(a,h)anthracene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Dibenzofuran	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
1,2-Dichlorobenzene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
1,3-Dichlorobenzene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
1,4-Dichlorobenzene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
3,3'-Dichlorobenzidine	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-4

Project: 2015 Semi-Annual Ponds

Collection Date: 3/24/2015 2:55:00 PM

Lab ID: 1503B57-003

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Diethyl phthalate	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Dimethyl phthalate	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
2,4-Dichlorophenol	ND	200		µg/L	1	4/1/2015 4:07:30 PM	18434
2,4-Dimethylphenol	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
4,6-Dinitro-2-methylphenol	ND	200		µg/L	1	4/1/2015 4:07:30 PM	18434
2,4-Dinitrophenol	ND	200		µg/L	1	4/1/2015 4:07:30 PM	18434
2,4-Dinitrotoluene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
2,6-Dinitrotoluene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Fluoranthene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Fluorene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Hexachlorobenzene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Hexachlorobutadiene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Hexachlorocyclopentadiene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Hexachloroethane	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Indeno(1,2,3-cd)pyrene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Isophorone	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
1-Methylnaphthalene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
2-Methylnaphthalene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
2-Methylphenol	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
3+4-Methylphenol	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
N-Nitrosodi-n-propylamine	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
N-Nitrosodimethylamine	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
N-Nitrosodiphenylamine	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Naphthalene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
2-Nitroaniline	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
3-Nitroaniline	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
4-Nitroaniline	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Nitrobenzene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
2-Nitrophenol	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
4-Nitrophenol	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Pentachlorophenol	ND	200		µg/L	1	4/1/2015 4:07:30 PM	18434
Phenanthrene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Phenol	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Pyrene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Pyridine	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
1,2,4-Trichlorobenzene	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
2,4,5-Trichlorophenol	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
2,4,6-Trichlorophenol	ND	100		µg/L	1	4/1/2015 4:07:30 PM	18434
Surr: 2-Fluorophenol	24.4	17.6-104		%REC	1	4/1/2015 4:07:30 PM	18434

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-4

Project: 2015 Semi-Annual Ponds

Collection Date: 3/24/2015 2:55:00 PM

Lab ID: 1503B57-003

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Surr: Phenol-d5	17.4	17.7-89.9	S	%REC	1	4/1/2015 4:07:30 PM	18434
Surr: 2,4,6-Tribromophenol	28.7	16.3-122		%REC	1	4/1/2015 4:07:30 PM	18434
Surr: Nitrobenzene-d5	30.5	45.3-117	S	%REC	1	4/1/2015 4:07:30 PM	18434
Surr: 2-Fluorobiphenyl	27.6	43-113	S	%REC	1	4/1/2015 4:07:30 PM	18434
Surr: 4-Terphenyl-d14	27.3	47.6-122	S	%REC	1	4/1/2015 4:07:30 PM	18434
EPA METHOD 8260B: VOLATILES							Analyst: KJH
Benzene	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
Toluene	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
Ethylbenzene	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
1,2,4-Trimethylbenzene	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
1,3,5-Trimethylbenzene	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
Naphthalene	ND	20		µg/L	10	4/2/2015 12:26:06 PM	R25263
1-Methylnaphthalene	ND	40		µg/L	10	4/2/2015 12:26:06 PM	R25263
2-Methylnaphthalene	ND	40		µg/L	10	4/2/2015 12:26:06 PM	R25263
Acetone	ND	100		µg/L	10	4/2/2015 12:26:06 PM	R25263
Bromobenzene	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
Bromodichloromethane	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
Bromoform	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
Bromomethane	ND	30		µg/L	10	4/2/2015 12:26:06 PM	R25263
2-Butanone	ND	100		µg/L	10	4/2/2015 12:26:06 PM	R25263
Carbon disulfide	ND	100		µg/L	10	4/2/2015 12:26:06 PM	R25263
Carbon Tetrachloride	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
Chlorobenzene	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
Chloroethane	ND	20		µg/L	10	4/2/2015 12:26:06 PM	R25263
Chloroform	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
Chloromethane	ND	30		µg/L	10	4/2/2015 12:26:06 PM	R25263
2-Chlorotoluene	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
4-Chlorotoluene	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
cis-1,2-DCE	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
cis-1,3-Dichloropropene	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	4/2/2015 12:26:06 PM	R25263
Dibromochloromethane	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
Dibromomethane	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
1,2-Dichlorobenzene	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
1,3-Dichlorobenzene	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
1,4-Dichlorobenzene	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-4

Project: 2015 Semi-Annual Ponds

Collection Date: 3/24/2015 2:55:00 PM

Lab ID: 1503B57-003

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst: KJH		
Dichlorodifluoromethane	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
1,1-Dichloroethane	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
1,1-Dichloroethene	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
1,2-Dichloropropane	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
1,3-Dichloropropane	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
2,2-Dichloropropane	ND	20		µg/L	10	4/2/2015 12:26:06 PM	R25263
1,1-Dichloropropene	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
Hexachlorobutadiene	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
2-Hexanone	ND	100		µg/L	10	4/2/2015 12:26:06 PM	R25263
Isopropylbenzene	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
4-Isopropyltoluene	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
4-Methyl-2-pentanone	ND	100		µg/L	10	4/2/2015 12:26:06 PM	R25263
Methylene Chloride	ND	30		µg/L	10	4/2/2015 12:26:06 PM	R25263
n-Butylbenzene	ND	30		µg/L	10	4/2/2015 12:26:06 PM	R25263
n-Propylbenzene	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
sec-Butylbenzene	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
Styrene	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
tert-Butylbenzene	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	4/2/2015 12:26:06 PM	R25263
Tetrachloroethene (PCE)	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
trans-1,2-DCE	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
trans-1,3-Dichloropropene	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
1,2,3-Trichlorobenzene	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
1,2,4-Trichlorobenzene	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
1,1,1-Trichloroethane	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
1,1,2-Trichloroethane	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
Trichloroethene (TCE)	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
Trichlorofluoromethane	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
1,2,3-Trichloropropane	ND	20		µg/L	10	4/2/2015 12:26:06 PM	R25263
Vinyl chloride	ND	10		µg/L	10	4/2/2015 12:26:06 PM	R25263
Xylenes, Total	ND	15		µg/L	10	4/2/2015 12:26:06 PM	R25263
Surr: 1,2-Dichloroethane-d4	94.1	70-130		%REC	10	4/2/2015 12:26:06 PM	R25263
Surr: 4-Bromofluorobenzene	102	70-130		%REC	10	4/2/2015 12:26:06 PM	R25263
Surr: Dibromofluoromethane	96.1	70-130		%REC	10	4/2/2015 12:26:06 PM	R25263
Surr: Toluene-d8	90.1	70-130		%REC	10	4/2/2015 12:26:06 PM	R25263
SM2510B: SPECIFIC CONDUCTANCE					Analyst: JRR		
Conductivity	29000	0.10		µmhos/cm	10	4/1/2015 4:43:19 PM	R25244

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-4

Project: 2015 Semi-Annual Ponds

Collection Date: 3/24/2015 2:55:00 PM

Lab ID: 1503B57-003

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM4500-H+B: PH						Analyst: JRR	
pH	7.79	1.68	H	pH units	1	3/26/2015 1:43:26 PM	R25114

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 18 of 50
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-5

Project: 2015 Semi-Annual Ponds

Collection Date: 3/24/2015 3:30:00 PM

Lab ID: 1503B57-004

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	17	1.0	*	mg/L	10	3/26/2015 1:25:20 PM	R25111
Chloride	7500	500		mg/L	1E	4/1/2015 2:37:06 AM	R25209
Nitrogen, Nitrite (As N)	ND	10		mg/L	100	3/26/2015 1:37:44 PM	R25111
Bromide	4.1	1.0		mg/L	10	3/26/2015 1:25:20 PM	R25111
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/26/2015 1:25:20 PM	R25111
Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	3/26/2015 1:25:20 PM	R25111
Sulfate	1600	50		mg/L	100	3/26/2015 1:37:44 PM	R25111
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.13	0.0020		mg/L	1	4/7/2015 5:45:09 PM	R25347
Cadmium	ND	0.0020		mg/L	1	4/7/2015 5:45:09 PM	R25347
Calcium	410	5.0		mg/L	5	4/7/2015 5:47:02 PM	R25347
Chromium	0.0075	0.0060		mg/L	1	4/7/2015 5:45:09 PM	R25347
Copper	ND	0.0060		mg/L	1	4/7/2015 5:45:09 PM	R25347
Iron	0.51	0.020	*	mg/L	1	4/7/2015 5:45:09 PM	R25347
Magnesium	170	5.0		mg/L	5	4/7/2015 5:47:02 PM	R25347
Manganese	0.44	0.0020	*	mg/L	1	4/7/2015 5:45:09 PM	R25347
Potassium	200	5.0		mg/L	5	4/7/2015 5:47:02 PM	R25347
Silver	ND	0.0050		mg/L	1	4/7/2015 5:45:09 PM	R25347
Sodium	4900	100		mg/L	100	4/8/2015 3:11:06 PM	R25371
Zinc	ND	0.010		mg/L	1	4/7/2015 5:45:09 PM	R25347
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.14	0.0020		mg/L	1	4/3/2015 3:59:40 PM	18398
Cadmium	ND	0.0020		mg/L	1	4/3/2015 3:59:40 PM	18398
Chromium	0.010	0.0060		mg/L	1	4/3/2015 3:59:40 PM	18398
Copper	ND	0.0060		mg/L	1	4/3/2015 3:59:40 PM	18398
Iron	0.89	0.020	*	mg/L	1	4/3/2015 3:59:40 PM	18398
Manganese	0.48	0.0020	*	mg/L	1	4/6/2015 4:37:06 PM	18398
Silver	ND	0.0050		mg/L	1	4/3/2015 3:59:40 PM	18398
Zinc	0.016	0.010		mg/L	1	4/3/2015 3:59:40 PM	18398
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.20		mg/L	200	4/13/2015 6:00:22 PM	R25474
Lead	ND	0.20		mg/L	200	4/13/2015 6:00:22 PM	R25474
Selenium	ND	0.10		mg/L	100	4/7/2015 7:31:10 PM	R25358
Uranium	ND	0.010		mg/L	10	4/7/2015 7:40:23 PM	R25358
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.022	0.010	*	mg/L	10	4/8/2015 3:30:15 PM	18398
Lead	ND	0.010		mg/L	10	4/8/2015 3:30:15 PM	18398

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-5

Project: 2015 Semi-Annual Ponds

Collection Date: 3/24/2015 3:30:00 PM

Lab ID: 1503B57-004

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Selenium	ND	0.20		mg/L	200	4/14/2015 6:43:13 PM	18398
Uranium	ND	0.010		mg/L	10	4/8/2015 3:30:15 PM	18398
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	4/4/2015 2:15:06 PM	18521
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Acenaphthylene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Aniline	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Anthracene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Azobenzene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Benz(a)anthracene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Benzo(a)pyrene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Benzo(b)fluoranthene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Benzo(k)fluoranthene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Benzoic acid	ND	20		µg/L	1	3/30/2015 12:24:55 PM	18372
Benzyl alcohol	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Bis(2-ethylhexyl)phthalate	16	10		µg/L	1	3/30/2015 12:24:55 PM	18372
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Butyl benzyl phthalate	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Carbazole	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
4-Chloroaniline	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
2-Chloronaphthalene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
2-Chlorophenol	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Chrysene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Di-n-butyl phthalate	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Di-n-octyl phthalate	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Dibenzofuran	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
1,2-Dichlorobenzene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
1,3-Dichlorobenzene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
1,4-Dichlorobenzene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-5

Project: 2015 Semi-Annual Ponds

Collection Date: 3/24/2015 3:30:00 PM

Lab ID: 1503B57-004

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Diethyl phthalate	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Dimethyl phthalate	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
2,4-Dichlorophenol	ND	20		µg/L	1	3/30/2015 12:24:55 PM	18372
2,4-Dimethylphenol	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/30/2015 12:24:55 PM	18372
2,4-Dinitrophenol	ND	20		µg/L	1	3/30/2015 12:24:55 PM	18372
2,4-Dinitrotoluene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
2,6-Dinitrotoluene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Fluoranthene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Fluorene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Hexachlorobenzene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Hexachlorobutadiene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Hexachloroethane	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Isophorone	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
1-Methylnaphthalene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
2-Methylnaphthalene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
2-Methylphenol	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
3+4-Methylphenol	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
N-Nitrosodimethylamine	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Naphthalene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
2-Nitroaniline	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
3-Nitroaniline	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
4-Nitroaniline	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Nitrobenzene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
2-Nitrophenol	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
4-Nitrophenol	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Pentachlorophenol	ND	20		µg/L	1	3/30/2015 12:24:55 PM	18372
Phenanthrene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Phenol	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Pyrene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Pyridine	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/30/2015 12:24:55 PM	18372
Surr: 2-Fluorophenol	18.6	17.6-104		%REC	1	3/30/2015 12:24:55 PM	18372

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-5

Project: 2015 Semi-Annual Ponds

Collection Date: 3/24/2015 3:30:00 PM

Lab ID: 1503B57-004

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Surr: Phenol-d5	33.7	17.7-89.9		%REC	1	3/30/2015 12:24:55 PM	18372
Surr: 2,4,6-Tribromophenol	22.4	16.3-122		%REC	1	3/30/2015 12:24:55 PM	18372
Surr: Nitrobenzene-d5	61.8	45.3-117		%REC	1	3/30/2015 12:24:55 PM	18372
Surr: 2-Fluorobiphenyl	47.5	43-113		%REC	1	3/30/2015 12:24:55 PM	18372
Surr: 4-Terphenyl-d14	39.5	47.6-122	S	%REC	1	3/30/2015 12:24:55 PM	18372
EPA METHOD 8260B: VOLATILES							Analyst: KJH
Benzene	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
Toluene	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
Ethylbenzene	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
1,2,4-Trimethylbenzene	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
1,3,5-Trimethylbenzene	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
Naphthalene	ND	20		µg/L	10	4/2/2015 12:54:46 PM	R25263
1-Methylnaphthalene	ND	40		µg/L	10	4/2/2015 12:54:46 PM	R25263
2-Methylnaphthalene	ND	40		µg/L	10	4/2/2015 12:54:46 PM	R25263
Acetone	ND	100		µg/L	10	4/2/2015 12:54:46 PM	R25263
Bromobenzene	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
Bromodichloromethane	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
Bromoform	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
Bromomethane	ND	30		µg/L	10	4/2/2015 12:54:46 PM	R25263
2-Butanone	ND	100		µg/L	10	4/2/2015 12:54:46 PM	R25263
Carbon disulfide	ND	100		µg/L	10	4/2/2015 12:54:46 PM	R25263
Carbon Tetrachloride	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
Chlorobenzene	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
Chloroethane	ND	20		µg/L	10	4/2/2015 12:54:46 PM	R25263
Chloroform	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
Chloromethane	ND	30		µg/L	10	4/2/2015 12:54:46 PM	R25263
2-Chlorotoluene	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
4-Chlorotoluene	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
cis-1,2-DCE	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
cis-1,3-Dichloropropene	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	4/2/2015 12:54:46 PM	R25263
Dibromochloromethane	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
Dibromomethane	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
1,2-Dichlorobenzene	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
1,3-Dichlorobenzene	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
1,4-Dichlorobenzene	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-5

Project: 2015 Semi-Annual Ponds

Collection Date: 3/24/2015 3:30:00 PM

Lab ID: 1503B57-004

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst: KJH		
Dichlorodifluoromethane	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
1,1-Dichloroethane	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
1,1-Dichloroethene	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
1,2-Dichloropropane	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
1,3-Dichloropropane	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
2,2-Dichloropropane	ND	20		µg/L	10	4/2/2015 12:54:46 PM	R25263
1,1-Dichloropropene	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
Hexachlorobutadiene	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
2-Hexanone	ND	100		µg/L	10	4/2/2015 12:54:46 PM	R25263
Isopropylbenzene	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
4-Isopropyltoluene	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
4-Methyl-2-pentanone	ND	100		µg/L	10	4/2/2015 12:54:46 PM	R25263
Methylene Chloride	ND	30		µg/L	10	4/2/2015 12:54:46 PM	R25263
n-Butylbenzene	ND	30		µg/L	10	4/2/2015 12:54:46 PM	R25263
n-Propylbenzene	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
sec-Butylbenzene	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
Styrene	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
tert-Butylbenzene	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	4/2/2015 12:54:46 PM	R25263
Tetrachloroethene (PCE)	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
trans-1,2-DCE	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
trans-1,3-Dichloropropene	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
1,2,3-Trichlorobenzene	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
1,2,4-Trichlorobenzene	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
1,1,1-Trichloroethane	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
1,1,2-Trichloroethane	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
Trichloroethene (TCE)	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
Trichlorofluoromethane	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
1,2,3-Trichloropropane	ND	20		µg/L	10	4/2/2015 12:54:46 PM	R25263
Vinyl chloride	ND	10		µg/L	10	4/2/2015 12:54:46 PM	R25263
Xylenes, Total	ND	15		µg/L	10	4/2/2015 12:54:46 PM	R25263
Surr: 1,2-Dichloroethane-d4	95.8	70-130		%REC	10	4/2/2015 12:54:46 PM	R25263
Surr: 4-Bromofluorobenzene	85.5	70-130		%REC	10	4/2/2015 12:54:46 PM	R25263
Surr: Dibromofluoromethane	100	70-130		%REC	10	4/2/2015 12:54:46 PM	R25263
Surr: Toluene-d8	106	70-130		%REC	10	4/2/2015 12:54:46 PM	R25263

SM2510B: SPECIFIC CONDUCTANCE

Analyst: **JRR**

Conductivity	31000	0.10	µmhos/cm	10	4/1/2015 4:47:28 PM	R25244

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-5

Project: 2015 Semi-Annual Ponds

Collection Date: 3/24/2015 3:30:00 PM

Lab ID: 1503B57-004

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM4500-H+B: PH						Analyst: JRR	
pH	7.82	1.68	H	pH units	1	3/26/2015 1:47:51 PM	R25114

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 24 of 50
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Trip Blank

Project: 2015 Semi-Annual Ponds

Collection Date:

Lab ID: 1503B57-005

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: KJH			
Benzene	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
Toluene	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
Ethylbenzene	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
Naphthalene	ND	2.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
1-Methylnaphthalene	ND	4.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
2-Methylnaphthalene	ND	4.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
Acetone	ND	10		µg/L	1	4/2/2015 1:23:29 PM	R25263
Bromobenzene	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
Bromodichloromethane	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
Bromoform	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
Bromomethane	ND	3.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
2-Butanone	ND	10		µg/L	1	4/2/2015 1:23:29 PM	R25263
Carbon disulfide	ND	10		µg/L	1	4/2/2015 1:23:29 PM	R25263
Carbon Tetrachloride	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
Chlorobenzene	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
Chloroethane	ND	2.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
Chloroform	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
Chloromethane	ND	3.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
2-Chlorotoluene	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
4-Chlorotoluene	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
cis-1,2-DCE	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
Dibromochloromethane	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
Dibromomethane	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
1,1-Dichloroethane	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
1,1-Dichloroethene	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
1,2-Dichloropropane	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
1,3-Dichloropropane	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
2,2-Dichloropropane	ND	2.0		µg/L	1	4/2/2015 1:23:29 PM	R25263

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Trip Blank

Project: 2015 Semi-Annual Ponds

Collection Date:

Lab ID: 1503B57-005

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: KJH			
1,1-Dichloropropene	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
Hexachlorobutadiene	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
2-Hexanone	ND	10		µg/L	1	4/2/2015 1:23:29 PM	R25263
Isopropylbenzene	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
4-Isopropyltoluene	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
4-Methyl-2-pentanone	ND	10		µg/L	1	4/2/2015 1:23:29 PM	R25263
Methylene Chloride	ND	3.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
n-Butylbenzene	ND	3.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
n-Propylbenzene	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
sec-Butylbenzene	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
Styrene	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
tert-Butylbenzene	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
trans-1,2-DCE	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
Trichlorofluoromethane	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
Vinyl chloride	ND	1.0		µg/L	1	4/2/2015 1:23:29 PM	R25263
Xylenes, Total	ND	1.5		µg/L	1	4/2/2015 1:23:29 PM	R25263
Surr: 1,2-Dichloroethane-d4	117	70-130		%REC	1	4/2/2015 1:23:29 PM	R25263
Surr: 4-Bromofluorobenzene	98.2	70-130		%REC	1	4/2/2015 1:23:29 PM	R25263
Surr: Dibromofluoromethane	115	70-130		%REC	1	4/2/2015 1:23:29 PM	R25263
Surr: Toluene-d8	96.2	70-130		%REC	1	4/2/2015 1:23:29 PM	R25263

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015 Semi-Annual Ponds

Collection Date: 3/24/2015

Lab ID: 1503B57-006

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: KJH			
Benzene	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
Toluene	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
Ethylbenzene	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
Naphthalene	ND	2.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
1-Methylnaphthalene	ND	4.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
2-Methylnaphthalene	ND	4.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
Acetone	ND	10		µg/L	1	4/2/2015 1:52:26 PM	R25263
Bromobenzene	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
Bromodichloromethane	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
Bromoform	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
Bromomethane	ND	3.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
2-Butanone	ND	10		µg/L	1	4/2/2015 1:52:26 PM	R25263
Carbon disulfide	ND	10		µg/L	1	4/2/2015 1:52:26 PM	R25263
Carbon Tetrachloride	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
Chlorobenzene	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
Chloroethane	ND	2.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
Chloroform	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
Chloromethane	ND	3.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
2-Chlorotoluene	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
4-Chlorotoluene	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
cis-1,2-DCE	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
Dibromochloromethane	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
Dibromomethane	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
1,1-Dichloroethane	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
1,1-Dichloroethene	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
1,2-Dichloropropane	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
1,3-Dichloropropane	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
2,2-Dichloropropane	ND	2.0		µg/L	1	4/2/2015 1:52:26 PM	R25263

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015 Semi-Annual Ponds

Collection Date: 3/24/2015

Lab ID: 1503B57-006

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: KJH			
1,1-Dichloropropene	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
Hexachlorobutadiene	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
2-Hexanone	ND	10		µg/L	1	4/2/2015 1:52:26 PM	R25263
Isopropylbenzene	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
4-Isopropyltoluene	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
4-Methyl-2-pentanone	ND	10		µg/L	1	4/2/2015 1:52:26 PM	R25263
Methylene Chloride	ND	3.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
n-Butylbenzene	ND	3.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
n-Propylbenzene	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
sec-Butylbenzene	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
Styrene	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
tert-Butylbenzene	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
trans-1,2-DCE	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
Trichlorofluoromethane	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
Vinyl chloride	ND	1.0		µg/L	1	4/2/2015 1:52:26 PM	R25263
Xylenes, Total	ND	1.5		µg/L	1	4/2/2015 1:52:26 PM	R25263
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	4/2/2015 1:52:26 PM	R25263
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	4/2/2015 1:52:26 PM	R25263
Surr: Dibromofluoromethane	106	70-130		%REC	1	4/2/2015 1:52:26 PM	R25263
Surr: Toluene-d8	97.2	70-130		%REC	1	4/2/2015 1:52:26 PM	R25263

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Blind Duplicate

Project: 2015 Semi-Annual Ponds

Collection Date: 3/24/2015

Lab ID: 1503B57-007

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Acenaphthylene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Aniline	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Anthracene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Azobenzene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Benz(a)anthracene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Benzo(a)pyrene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Benzo(b)fluoranthene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Benzo(g,h,i)perylene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Benzo(k)fluoranthene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Benzoic acid	ND	200		µg/L	1	4/1/2015 4:35:27 PM	18434
Benzyl alcohol	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Bis(2-chloroethoxy)methane	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Bis(2-chloroethyl)ether	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Bis(2-chloroisopropyl)ether	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Bis(2-ethylhexyl)phthalate	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
4-Bromophenyl phenyl ether	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Butyl benzyl phthalate	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Carbazole	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
4-Chloro-3-methylphenol	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
4-Chloroaniline	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
2-Chloronaphthalene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
2-Chlorophenol	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
4-Chlorophenyl phenyl ether	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Chrysene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Di-n-butyl phthalate	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Di-n-octyl phthalate	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Dibenz(a,h)anthracene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Dibenzofuran	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
1,2-Dichlorobenzene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
1,3-Dichlorobenzene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
1,4-Dichlorobenzene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
3,3'-Dichlorobenzidine	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Diethyl phthalate	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Dimethyl phthalate	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
2,4-Dichlorophenol	ND	200		µg/L	1	4/1/2015 4:35:27 PM	18434
2,4-Dimethylphenol	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
4,6-Dinitro-2-methylphenol	ND	200		µg/L	1	4/1/2015 4:35:27 PM	18434
2,4-Dinitrophenol	ND	200		µg/L	1	4/1/2015 4:35:27 PM	18434

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B57

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Blind Duplicate

Project: 2015 Semi-Annual Ponds

Collection Date: 3/24/2015

Lab ID: 1503B57-007

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
2,6-Dinitrotoluene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Fluoranthene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Fluorene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Hexachlorobenzene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Hexachlorobutadiene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Hexachlorocyclopentadiene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Hexachloroethane	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Indeno(1,2,3-cd)pyrene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Isophorone	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
1-Methylnaphthalene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
2-Methylnaphthalene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
2-Methylphenol	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
3+4-Methylphenol	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
N-Nitrosodi-n-propylamine	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
N-Nitrosodimethylamine	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
N-Nitrosodiphenylamine	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Naphthalene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
2-Nitroaniline	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
3-Nitroaniline	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
4-Nitroaniline	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Nitrobenzene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
2-Nitrophenol	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
4-Nitrophenol	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Pentachlorophenol	ND	200		µg/L	1	4/1/2015 4:35:27 PM	18434
Phenanthrene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Phenol	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Pyrene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Pyridine	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
1,2,4-Trichlorobenzene	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
2,4,5-Trichlorophenol	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
2,4,6-Trichlorophenol	ND	100		µg/L	1	4/1/2015 4:35:27 PM	18434
Surr: 2-Fluorophenol	12.8	17.6-104	S	%REC	1	4/1/2015 4:35:27 PM	18434
Surr: Phenol-d5	26.7	17.7-89.9		%REC	1	4/1/2015 4:35:27 PM	18434
Surr: 2,4,6-Tribromophenol	10.9	16.3-122	S	%REC	1	4/1/2015 4:35:27 PM	18434
Surr: Nitrobenzene-d5	58.2	45.3-117		%REC	1	4/1/2015 4:35:27 PM	18434
Surr: 2-Fluorobiphenyl	52.1	43-113		%REC	1	4/1/2015 4:35:27 PM	18434
Surr: 4-Terphenyl-d14	56.3	47.6-122		%REC	1	4/1/2015 4:35:27 PM	18434

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

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



Wet Chemistry by Method 410.4

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
COD	610		50.0	5	03/30/2015 13:58	WG778750

1

2

3

4

5

6

7

8

9

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc



Wet Chemistry by Method 410.4

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
CGD	977		10.0	1	03/30/2015 13:59	WG778750

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L756134



Wet Chemistry by Method 410.4

	Result	<u>Qualifier</u>	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l		date / time	
COD	730		10.0	1	04/01/2015 03:50	<u>WG778998</u>

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Wet Chemistry by Method 410.4

	Result	<u>Qualifier</u>	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l		date , time	
COD	860		10.0	1	04/01/2015 03:51	<u>WG778998</u>

1

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) 03/30/15 13:51

	MB Result	MB Qualifier	MB RDL
Analyte	mg/l		
COD	ND		10.0

L756046-01 Original Sample (OS) • Duplicate (DUP)

(OS) 03/30/15 13:54 • (DUP) 03/30/15 13:55

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
COD	59	62	1	5.0		5

L756129-05 Original Sample (OS) • Duplicate (DUP)

(OS) 03/30/15 13:57 • (DUP) 03/30/15 13:57

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
COD	ND	ND	1	0.00		5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 03/30/15 13:51 • (LCSD) 03/30/15 13:51

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
COD	183	182	187	99.5	102	90.0-110			2.71	5

L756129-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 03/30/15 13:56 • (MS) 03/30/15 13:56 • (MSD) 03/30/15 13:56

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
COD	400	16.1	411	416	98.8	100	1	90.0-110			1.21	5

Wet Chemistry by Method 410.4

L756134-03.04

Method Blank (MB)

(MB) 04/01/15 03:44

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
COD	ND		10.0

L755698-06 Original Sample (OS) • Duplicate (DUP)

(OS) 04/01/15 03:49 • (DUP) 04/01/15 03:49				
Analyte	Original Result mg/l	DUP Result mg/l	DUP RPD %	DUP RPD Limits %
COD	130	130	0.00	5

L756210-05 Original Sample (OS) • Duplicate (DUP)

(OS) 04/01/15 03:52 • (DUP) 04/01/15 03:52				
Analyte	Original Result mg/l	DUP Result mg/l	DUP RPD %	DUP RPD Limits %
COD	13	12	8.0	5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/01/15 03:45 • (LCSD) 04/01/15 03:45						
Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %
COD	183	181	182	98.9	99.5	90.0-110

L756203-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/01/15 03:52 • (MS) 04/01/15 03:52 • (MSD) 04/01/15 03:52									
Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	RPD Limits %
COD	400	147	410	410	103	103	1	90.0-110	5

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B57

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID:	R25347	RunNo:	25347					
Prep Date:		Analysis Date:	4/7/2015	SeqNo:	750124	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	SampType:	LCS	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW	Batch ID:	R25347	RunNo:	25347					
Prep Date:		Analysis Date:	4/7/2015	SeqNo:	750125	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	95.2	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.5	85	115			
Calcium	49	1.0	50.00	0	97.8	85	115			
Chromium	0.48	0.0060	0.5000	0	96.0	85	115			
Copper	0.47	0.0060	0.5000	0	93.3	85	115			
Iron	0.47	0.020	0.5000	0	94.5	85	115			
Magnesium	50	1.0	50.00	0	99.3	85	115			
Manganese	0.46	0.0020	0.5000	0	92.2	85	115			
Potassium	47	1.0	50.00	0	94.3	85	115			
Silver	0.10	0.0050	0.1000	0	103	85	115			
Zinc	0.48	0.010	0.5000	0	95.8	85	115			

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID:	R25347	RunNo:	25347					
Prep Date:		Analysis Date:	4/7/2015	SeqNo:	750126	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								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B57

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID:	R25347	RunNo:	25347					
Prep Date:		Analysis Date:	4/7/2015	SeqNo:	750126	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW	Batch ID:	R25347	RunNo:	25347					
Prep Date:		Analysis Date:	4/7/2015	SeqNo:	750127	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.7	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.8	85	115			
Calcium	50	1.0	50.00	0	99.9	85	115			
Chromium	0.49	0.0060	0.5000	0	97.4	85	115			
Copper	0.48	0.0060	0.5000	0	95.3	85	115			
Iron	0.48	0.020	0.5000	0	96.0	85	115			
Magnesium	49	1.0	50.00	0	99.0	85	115			
Manganese	0.47	0.0020	0.5000	0	93.8	85	115			
Potassium	47	1.0	50.00	0	94.8	85	115			
Silver	0.11	0.0050	0.1000	0	105	85	115			
Zinc	0.49	0.010	0.5000	0	97.6	85	115			

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID:	R25371	RunNo:	25371					
Prep Date:		Analysis Date:	4/8/2015	SeqNo:	750783	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sodium	ND	1.0								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW	Batch ID:	R25371	RunNo:	25371					
Prep Date:		Analysis Date:	4/8/2015	SeqNo:	750784	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sodium	49	1.0	50.00	0	98.2	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B57

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	MB-18398		SampType: MBLK		TestCode: EPA Method 200.7: Total Metals					
Client ID:	PBW		Batch ID: 18398		RunNo: 25227					
Prep Date:	3/28/2015		Analysis Date: 4/1/2015		SeqNo: 745953		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-18398		SampType: LCS		TestCode: EPA Method 200.7: Total Metals					
Client ID:	LCSW		Batch ID: 18398		RunNo: 25227					
Prep Date:	3/28/2015		Analysis Date: 4/1/2015		SeqNo: 745954		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.51	0.0020	0.5000	0	102	85	115			
Cadmium	0.51	0.0020	0.5000	0	103	85	115			
Chromium	0.52	0.0060	0.5000	0	104	85	115			
Copper	0.51	0.0060	0.5000	0	103	85	115			
Iron	0.50	0.020	0.5000	0	101	85	115			
Manganese	0.49	0.0020	0.5000	0	98.5	85	115			
Silver	0.10	0.0050	0.1000	0	99.9	85	115			
Zinc	0.50	0.010	0.5000	0	99.2	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B57

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25358		RunNo: 25358					
Prep Date:			Analysis Date: 4/7/2015		SeqNo: 750641		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	96.8	85	115			
Selenium	0.023	0.0010	0.02500	0	93.3	85	115			
Uranium	0.025	0.0010	0.02500	0	100	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25358		RunNo: 25358					
Prep Date:			Analysis Date: 4/7/2015		SeqNo: 750642		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	92.7	85	115			
Selenium	0.024	0.0010	0.02500	0	95.7	85	115			
Uranium	0.021	0.0010	0.02500	0	85.9	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R25358			RunNo: 25358					
Prep Date:		Analysis Date: 4/7/2015			SeqNo: 750643		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R25358			RunNo: 25358					
Prep Date:		Analysis Date: 4/7/2015			SeqNo: 750644		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25474		RunNo: 25474					
Prep Date:			Analysis Date: 4/13/2015		SeqNo: 754635		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	93.2	85	115			
Lead	0.023	0.0010	0.02500	0	93.9	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B57

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25474		RunNo: 25474					
Prep Date:			Analysis Date: 4/13/2015		SeqNo: 754636		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.022	0.0010	0.02500	0	89.6	85	115			
Lead	0.023	0.0010	0.02500	0	90.8	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R25474			RunNo: 25474					
Prep Date:		Analysis Date: 4/13/2015			SeqNo: 754638		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R25474			RunNo: 25474					
Prep Date:		Analysis Date: 4/13/2015			SeqNo: 754639		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B57

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	LLLCS-18398		SampType: LCSLL		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	BatchQC		Batch ID: 18398		RunNo: 25382					
Prep Date:	3/28/2015		Analysis Date: 4/8/2015		SeqNo: 751311		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.026	0.0010	0.02500	0	102	85	115			
Lead	0.027	0.0010	0.02500	0	107	85	115			
Selenium	0.025	0.0010	0.02500	0	98.4	85	115			
Uranium	0.027	0.0010	0.02500	0	108	85	115			

Sample ID	MB-18398		SampType: MBLK		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	PBW		Batch ID: 18398		RunNo: 25382					
Prep Date:	3/28/2015		Analysis Date: 4/8/2015		SeqNo: 751316		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B57

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	MB-18521	SampType:	MBLK	TestCode:	EPA Method 245.1: Mercury					
Client ID:	PBW	Batch ID:	18521	RunNo:	25306					
Prep Date:	4/3/2015	Analysis Date:	4/4/2015	SeqNo:	748550	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	LCS-18521	SampType:	LCS	TestCode:	EPA Method 245.1: Mercury					
Client ID:	LCSW	Batch ID:	18521	RunNo:	25306					
Prep Date:	4/3/2015	Analysis Date:	4/4/2015	SeqNo:	748551	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0051	0.00020	0.005000	0	102	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B57

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	MB		SampType: MBLK			TestCode: EPA Method 300.0: Anions				
Client ID:	PBW		Batch ID: R25111			RunNo: 25111				
Prep Date:			Analysis Date: 3/26/2015			SeqNo: 741670		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Bromide	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Phosphorus, Orthophosphate (As P)	ND	0.50								
Sulfate	ND	0.50								

Sample ID	LCS		SampType: LCS			TestCode: EPA Method 300.0: Anions				
Client ID:	LCSW		Batch ID: R25111			RunNo: 25111				
Prep Date:			Analysis Date: 3/26/2015			SeqNo: 741673		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.53	0.10	0.5000	0	107	90	110			
Chloride	5.0	0.50	5.000	0	101	90	110			
Nitrogen, Nitrite (As N)	0.99	0.10	1.000	0	98.7	90	110			
Bromide	2.6	0.10	2.500	0	103	90	110			
Nitrogen, Nitrate (As N)	2.6	0.10	2.500	0	105	90	110			
Phosphorus, Orthophosphate (As P)	5.6	0.50	5.000	0	112	90	110			S
Sulfate	10	0.50	10.00	0	104	90	110			

Sample ID	1503B57-001CMS		SampType: MS			TestCode: EPA Method 300.0: Anions				
Client ID:	EP-2		Batch ID: R25111			RunNo: 25111				
Prep Date:			Analysis Date: 3/26/2015			SeqNo: 741678		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrite (As N)	8.6	1.0	10.00	0	86.1	66.4	111			
Bromide	33	1.0	25.00	7.079	103	82.5	103			S
Nitrogen, Nitrate (As N)	26	1.0	25.00	0	104	84	109			

Sample ID	1503B57-001CMSD		SampType: MSD			TestCode: EPA Method 300.0: Anions				
Client ID:	EP-2		Batch ID: R25111			RunNo: 25111				
Prep Date:			Analysis Date: 3/26/2015			SeqNo: 741681		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrite (As N)	8.9	1.0	10.00	0	89.0	66.4	111	3.27	20	
Bromide	33	1.0	25.00	7.079	105	82.5	103	1.33	20	S
Nitrogen, Nitrate (As N)	27	1.0	25.00	0	107	84	109	2.63	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B57

20-Apr-15

Client: Western Refining Southwest, Gallup**Project:** 2015 Semi-Annual Ponds

Sample ID MB	SampType: MBLK			TestCode: EPA Method 300.0: Anions						
Client ID: PBW	Batch ID: R25209			RunNo: 25209						
Prep Date:	Analysis Date: 3/31/2015			SeqNo: 745213		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID LCS	SampType: LCS			TestCode: EPA Method 300.0: Anions						
Client ID: LCSW	Batch ID: R25209			RunNo: 25209						
Prep Date:	Analysis Date: 3/31/2015			SeqNo: 745214		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.9	0.50	5.000	0	97.2	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B57

20-Apr-15

Client: Western Refining Southwest, Gallup**Project:** 2015 Semi-Annual Ponds

Sample ID	5mL-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R25263			RunNo: 25263					
Prep Date:		Analysis Date: 4/2/2015			SeqNo: 746881	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B57

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	5mL-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R25263	RunNo:	25263					
Prep Date:		Analysis Date:	4/2/2015	SeqNo:	746881	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.8	70	130			
Surr: 4-Bromofluorobenzene	8.4		10.00		84.0	70	130			
Surr: Dibromofluoromethane	11		10.00		105	70	130			
Surr: Toluene-d8	8.9		10.00		88.7	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID:	R25263	RunNo:	25263					
Prep Date:		Analysis Date:	4/2/2015	SeqNo:	746883	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	21	1.0	20.00	0	103	70	130			
Chlorobenzene	20	1.0	20.00	0	100	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B57

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID 100ng lcs	SampType: LCS				TestCode: EPA Method 8260B: VOLATILES					
Client ID: LCSW	Batch ID: R25263				RunNo: 25263					
Prep Date:	Analysis Date: 4/2/2015				SeqNo: 746883		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	23	1.0	20.00	0	116	75.6	144			
Trichloroethene (TCE)	19	1.0	20.00	0	95.4	70	130			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.7	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		94.9	70	130			
Surr: Dibromofluoromethane	9.8		10.00		97.5	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID 100ng lcs2	SampType: LCS				TestCode: EPA Method 8260B: VOLATILES					
Client ID: LCSW	Batch ID: R25263				RunNo: 25263					
Prep Date:	Analysis Date: 4/2/2015				SeqNo: 746884		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	70	130			
Toluene	18	1.0	20.00	0	91.2	70	130			
Chlorobenzene	18	1.0	20.00	0	90.3	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	116	75.6	144			
Trichloroethene (TCE)	20	1.0	20.00	0	98.6	70	130			
Surr: 1,2-Dichloroethane-d4	13		10.00		127	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.8	70	130			
Surr: Dibromofluoromethane	12		10.00		122	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID b2	SampType: MBLK				TestCode: EPA Method 8260B: VOLATILES					
Client ID: PBW	Batch ID: R25263				RunNo: 25263					
Prep Date:	Analysis Date: 4/2/2015				SeqNo: 746923		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								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B57

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	b2	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R25263	RunNo:	25263					
Prep Date:		Analysis Date:	4/2/2015	SeqNo:	746923	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
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								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B57

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID b2	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R25263			RunNo: 25263						
Prep Date:	Analysis Date: 4/2/2015			SeqNo: 746923		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	12		10.00		124	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		95.7	70	130			
Surr: Dibromofluoromethane	12		10.00		120	70	130			
Surr: Toluene-d8	9.9		10.00		99.3	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B57

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	mb-18372		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 18372		RunNo: 25175					
Prep Date:	3/27/2015		Analysis Date: 3/30/2015		SeqNo: 743941		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B57

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	mb-18372	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	18372	RunNo:	25175					
Prep Date:	3/27/2015	Analysis Date:	3/30/2015	SeqNo:	743941	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	150		200.0		75.1	17.6	104			
Surr: Phenol-d5	180		200.0		88.0	17.7	89.9			
Surr: 2,4,6-Tribromophenol	190		200.0		93.3	16.3	122			
Surr: Nitrobenzene-d5	86		100.0		85.5	45.3	117			
Surr: 2-Fluorobiphenyl	78		100.0		77.9	43	113			
Surr: 4-Terphenyl-d14	77		100.0		76.8	47.6	122			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B57

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	lcs-18372		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 18372		RunNo: 25175					
Prep Date:	3/27/2015		Analysis Date: 3/30/2015		SeqNo: 743942		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	76	10	100.0	0	76.0	47.8	99.7			
4-Chloro-3-methylphenol	180	10	200.0	0	91.3	58.1	103			
2-Chlorophenol	150	10	200.0	0	77.4	49.5	96.8			
1,4-Dichlorobenzene	76	10	100.0	0	76.3	40.4	89.4			
2,4-Dinitrotoluene	65	10	100.0	0	65.1	38.6	91.3			
N-Nitrosodi-n-propylamine	79	10	100.0	0	78.9	53.9	95.6			
4-Nitrophenol	160	10	200.0	0	79.9	26.4	108			
Pentachlorophenol	150	20	200.0	0	76.2	36.5	86.6			
Phenol	160	10	200.0	0	80.1	29.3	108			
Pyrene	80	10	100.0	0	79.8	45.7	100			
1,2,4-Trichlorobenzene	86	10	100.0	0	85.6	39.3	94.5			
Surr: 2-Fluorophenol	150		200.0		74.5	17.6	104			
Surr: Phenol-d5	170		200.0		84.2	17.7	89.9			
Surr: 2,4,6-Tribromophenol	210		200.0		103	16.3	122			
Surr: Nitrobenzene-d5	81		100.0		80.7	45.3	117			
Surr: 2-Fluorobiphenyl	81		100.0		80.8	43	113			
Surr: 4-Terphenyl-d14	79		100.0		78.8	47.6	122			

Sample ID	lcsd-18372		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 18372		RunNo: 25175					
Prep Date:	3/27/2015		Analysis Date: 3/30/2015		SeqNo: 743943		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	73	10	100.0	0	73.4	47.8	99.7	3.56	28.2	
4-Chloro-3-methylphenol	170	10	200.0	0	86.8	58.1	103	5.11	24.4	
2-Chlorophenol	160	10	200.0	0	79.5	49.5	96.8	2.66	28.1	
1,4-Dichlorobenzene	79	10	100.0	0	78.6	40.4	89.4	2.92	31.2	
2,4-Dinitrotoluene	57	10	100.0	0	57.4	38.6	91.3	12.5	44.4	
N-Nitrosodi-n-propylamine	78	10	100.0	0	77.9	53.9	95.6	1.28	24.2	
4-Nitrophenol	150	10	200.0	0	72.7	26.4	108	9.49	36.6	
Pentachlorophenol	170	20	200.0	0	83.5	36.5	86.6	9.19	29.5	
Phenol	160	10	200.0	0	79.6	29.3	108	0.726	30	
Pyrene	85	10	100.0	0	84.7	45.7	100	6.03	31	
1,2,4-Trichlorobenzene	85	10	100.0	0	85.0	39.3	94.5	0.610	24	
Surr: 2-Fluorophenol	150		200.0		74.7	17.6	104	0	0	
Surr: Phenol-d5	170		200.0		83.5	17.7	89.9	0	0	
Surr: 2,4,6-Tribromophenol	210		200.0		105	16.3	122	0	0	
Surr: Nitrobenzene-d5	81		100.0		81.2	45.3	117	0	0	
Surr: 2-Fluorobiphenyl	78		100.0		77.9	43	113	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B57

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	lcsd-18372		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 18372		RunNo: 25175					
Prep Date:	3/27/2015		Analysis Date: 3/30/2015		SeqNo: 743943		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	77		100.0		77.1	47.6	122	0	0	

Sample ID	mb-18434		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 18434		RunNo: 25228					
Prep Date:	3/31/2015		Analysis Date: 4/1/2015		SeqNo: 745942		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								

Qualifiers:

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E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B57

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	mb-18434		SampType:	MBLK		TestCode:	EPA Method 8270C: Semivolatiles			
Client ID:	PBW		Batch ID:	18434		RunNo:	25228			
Prep Date:	3/31/2015		Analysis Date:	4/1/2015		SeqNo:	745942		Units: µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B57

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	mb-18434		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 18434		RunNo: 25228					
Prep Date:	3/31/2015		Analysis Date: 4/1/2015		SeqNo: 745942		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	160		200.0		81.5	17.6	104			
Surr: Phenol-d5	160		200.0		78.0	17.7	89.9			
Surr: 2,4,6-Tribromophenol	180		200.0		89.2	16.3	122			
Surr: Nitrobenzene-d5	76		100.0		76.4	45.3	117			
Surr: 2-Fluorobiphenyl	72		100.0		72.4	43	113			
Surr: 4-Terphenyl-d14	76		100.0		75.7	47.6	122			

Sample ID	lcs-18434		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 18434		RunNo: 25228					
Prep Date:	3/31/2015		Analysis Date: 4/1/2015		SeqNo: 745943		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	72	10	100.0	0	71.7	47.8	99.7			
4-Chloro-3-methylphenol	150	10	200.0	0	76.1	58.1	103			
2-Chlorophenol	140	10	200.0	0	69.7	49.5	96.8			
1,4-Dichlorobenzene	71	10	100.0	0	70.9	40.4	89.4			
2,4-Dinitrotoluene	61	10	100.0	0	60.8	38.6	91.3			
N-Nitrosodi-n-propylamine	72	10	100.0	0	71.5	53.9	95.6			
4-Nitrophenol	140	10	200.0	0	68.9	26.4	108			
Pentachlorophenol	140	20	200.0	0	69.0	36.5	86.6			
Phenol	140	10	200.0	0	70.7	29.3	108			
Pyrene	69	10	100.0	0	68.9	45.7	100			
1,2,4-Trichlorobenzene	74	10	100.0	0	74.5	39.3	94.5			
Surr: 2-Fluorophenol	150		200.0		72.7	17.6	104			
Surr: Phenol-d5	150		200.0		73.8	17.7	89.9			
Surr: 2,4,6-Tribromophenol	180		200.0		92.4	16.3	122			
Surr: Nitrobenzene-d5	74		100.0		73.6	45.3	117			
Surr: 2-Fluorobiphenyl	73		100.0		73.2	43	113			
Surr: 4-Terphenyl-d14	77		100.0		76.6	47.6	122			

Qualifiers:

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E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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



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: **1503B57**

RcptNo: 1

Received by/date: **AT** **03/25/15**

Logged By: **Ashley Gallegos**

3/25/2015 4:15:00 PM

Completed By: **Ashley Gallegos**

3/25/2015 4:44:54 PM

Reviewed By: **AT** **03/26/15**

Chain of Custody

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

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☒ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(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: **16**
Adjusted? **NO**
Checked by: **AT**

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			



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

May 07, 2015

Cheryl Johnson

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

RE: 2015 Semi-Annual Ponds

OrderNo.: 1503B60

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 10 sample(s) on 3/25/2015 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', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-9

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 8:05:00 AM

Lab ID: 1503B60-001

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	22	10	*	mg/L	100	3/26/2015 2:02:33 PM	R25111
Chloride	30000	2500		mg/L	5E	4/1/2015 2:49:31 AM	R25209
Bromide	12	1.0		mg/L	10	3/26/2015 1:50:08 PM	R25111
Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	3/26/2015 1:50:08 PM	R25111
Sulfate	4500	50		mg/L	100	3/26/2015 2:02:33 PM	R25111
Nitrate+Nitrite as N	ND	20		mg/L	100	4/6/2015 7:33:55 PM	R25320
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.17	0.010		mg/L	5	4/7/2015 5:51:08 PM	R25347
Cadmium	ND	0.010		mg/L	5	4/7/2015 5:51:08 PM	R25347
Calcium	690	50		mg/L	50	4/8/2015 3:12:39 PM	R25371
Chromium	ND	0.030		mg/L	5	4/7/2015 5:51:08 PM	R25347
Copper	ND	0.030		mg/L	5	4/7/2015 5:51:08 PM	R25347
Iron	ND	0.10		mg/L	5	4/7/2015 5:51:08 PM	R25347
Magnesium	620	50		mg/L	50	4/8/2015 3:12:39 PM	R25371
Manganese	0.52	0.010	*	mg/L	5	4/7/2015 5:51:08 PM	R25347
Potassium	730	50		mg/L	50	4/8/2015 3:12:39 PM	R25371
Silver	ND	0.025		mg/L	5	4/7/2015 5:51:08 PM	R25347
Sodium	19000	500		mg/L	500	4/8/2015 3:14:13 PM	R25371
Zinc	0.079	0.050		mg/L	5	4/7/2015 5:51:08 PM	R25347
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.11	0.010		mg/L	5	4/3/2015 4:34:57 PM	18398
Cadmium	ND	0.010		mg/L	5	4/3/2015 4:34:57 PM	18398
Chromium	ND	0.030		mg/L	5	4/3/2015 4:34:57 PM	18398
Copper	ND	0.030		mg/L	5	4/3/2015 4:34:57 PM	18398
Iron	0.12	0.10		mg/L	5	4/3/2015 4:34:57 PM	18398
Manganese	0.50	0.010	*	mg/L	5	4/6/2015 4:38:59 PM	18398
Silver	ND	0.025		mg/L	5	4/3/2015 4:34:57 PM	18398
Zinc	ND	0.050		mg/L	5	4/3/2015 4:34:57 PM	18398
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.20		mg/L	200	4/13/2015 6:09:35 PM	R25474
Lead	ND	0.20		mg/L	200	4/13/2015 6:09:35 PM	R25474
Selenium	ND	0.20		mg/L	200	4/13/2015 6:09:35 PM	R25474
Uranium	ND	0.010		mg/L	10	4/7/2015 7:46:32 PM	R25358
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.20		mg/L	200	4/14/2015 6:46:24 PM	18398
Lead	ND	0.20		mg/L	200	4/14/2015 6:46:24 PM	18398
Selenium	ND	0.20		mg/L	200	4/14/2015 6:46:24 PM	18398

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 1 of 67
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

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Lab Order 1503B60

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CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-9

Project: 2015 Semi-Annual Ponds

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Lab ID: 1503B60-001

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Uranium	ND	0.20		mg/L	200	4/14/2015 6:46:24 PM	18398
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	4/4/2015 2:16:57 PM	18521
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Acenaphthylene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Aniline	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Anthracene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Azobenzene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Benz(a)anthracene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Benzo(a)pyrene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Benzo(b)fluoranthene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Benzo(k)fluoranthene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Benzoic acid	ND	20		µg/L	1	3/30/2015 1:21:32 PM	18372
Benzyl alcohol	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Bis(2-ethylhexyl)phthalate	14	10		µg/L	1	3/30/2015 1:21:32 PM	18372
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Butyl benzyl phthalate	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Carbazole	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
4-Chloroaniline	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
2-Chloronaphthalene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
2-Chlorophenol	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Chrysene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Di-n-butyl phthalate	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Di-n-octyl phthalate	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Dibenzofuran	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
1,2-Dichlorobenzene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
1,3-Dichlorobenzene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
1,4-Dichlorobenzene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Diethyl phthalate	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-9

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 8:05:00 AM

Lab ID: 1503B60-001

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Dimethyl phthalate	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
2,4-Dichlorophenol	ND	20		µg/L	1	3/30/2015 1:21:32 PM	18372
2,4-Dimethylphenol	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/30/2015 1:21:32 PM	18372
2,4-Dinitrophenol	ND	20		µg/L	1	3/30/2015 1:21:32 PM	18372
2,4-Dinitrotoluene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
2,6-Dinitrotoluene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Fluoranthene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Fluorene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Hexachlorobenzene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Hexachlorobutadiene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Hexachloroethane	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Isophorone	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
1-Methylnaphthalene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
2-Methylnaphthalene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
2-Methylphenol	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
3+4-Methylphenol	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
N-Nitrosodimethylamine	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Naphthalene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
2-Nitroaniline	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
3-Nitroaniline	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
4-Nitroaniline	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Nitrobenzene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
2-Nitrophenol	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
4-Nitrophenol	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Pentachlorophenol	ND	20		µg/L	1	3/30/2015 1:21:32 PM	18372
Phenanthrene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Phenol	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Pyrene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Pyridine	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/30/2015 1:21:32 PM	18372
Surr: 2-Fluorophenol	42.3	17.6-104		%REC	1	3/30/2015 1:21:32 PM	18372
Surr: Phenol-d5	50.1	17.7-89.9		%REC	1	3/30/2015 1:21:32 PM	18372

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-9

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 8:05:00 AM

Lab ID: 1503B60-001

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Surr: 2,4,6-Tribromophenol	48.4	16.3-122		%REC	1	3/30/2015 1:21:32 PM	18372
Surr: Nitrobenzene-d5	68.7	45.3-117		%REC	1	3/30/2015 1:21:32 PM	18372
Surr: 2-Fluorobiphenyl	57.3	43-113		%REC	1	3/30/2015 1:21:32 PM	18372
Surr: 4-Terphenyl-d14	43.9	47.6-122	S	%REC	1	3/30/2015 1:21:32 PM	18372
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	5.0		µg/L	10	4/1/2015 11:28:54 AM	R25229
Toluene	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
Ethylbenzene	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
1,2,4-Trimethylbenzene	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
1,3,5-Trimethylbenzene	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
Naphthalene	ND	20		µg/L	10	4/1/2015 11:28:54 AM	R25229
1-Methylnaphthalene	ND	40		µg/L	10	4/1/2015 11:28:54 AM	R25229
2-Methylnaphthalene	ND	40		µg/L	10	4/1/2015 11:28:54 AM	R25229
Acetone	ND	100		µg/L	10	4/1/2015 11:28:54 AM	R25229
Bromobenzene	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
Bromodichloromethane	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
Bromoform	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
Bromomethane	ND	30		µg/L	10	4/1/2015 11:28:54 AM	R25229
2-Butanone	ND	100		µg/L	10	4/1/2015 11:28:54 AM	R25229
Carbon disulfide	ND	100		µg/L	10	4/1/2015 11:28:54 AM	R25229
Carbon Tetrachloride	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
Chlorobenzene	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
Chloroethane	ND	20		µg/L	10	4/1/2015 11:28:54 AM	R25229
Chloroform	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
Chloromethane	ND	30		µg/L	10	4/1/2015 11:28:54 AM	R25229
2-Chlorotoluene	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
4-Chlorotoluene	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
cis-1,2-DCE	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
cis-1,3-Dichloropropene	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	4/1/2015 11:28:54 AM	R25229
Dibromochloromethane	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
Dibromomethane	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
1,2-Dichlorobenzene	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
1,3-Dichlorobenzene	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
1,4-Dichlorobenzene	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
Dichlorodifluoromethane	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229

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EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloroethane	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
1,1-Dichloroethene	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
1,2-Dichloropropane	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
1,3-Dichloropropane	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
2,2-Dichloropropane	ND	20		µg/L	10	4/1/2015 11:28:54 AM	R25229
1,1-Dichloropropene	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
Hexachlorobutadiene	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
2-Hexanone	ND	100		µg/L	10	4/1/2015 11:28:54 AM	R25229
Isopropylbenzene	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
4-Isopropyltoluene	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
4-Methyl-2-pentanone	ND	100		µg/L	10	4/1/2015 11:28:54 AM	R25229
Methylene Chloride	ND	30		µg/L	10	4/1/2015 11:28:54 AM	R25229
n-Butylbenzene	ND	30		µg/L	10	4/1/2015 11:28:54 AM	R25229
n-Propylbenzene	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
sec-Butylbenzene	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
Styrene	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
tert-Butylbenzene	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	4/1/2015 11:28:54 AM	R25229
Tetrachloroethene (PCE)	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
trans-1,2-DCE	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
trans-1,3-Dichloropropene	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
1,2,3-Trichlorobenzene	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
1,2,4-Trichlorobenzene	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
1,1,1-Trichloroethane	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
1,1,2-Trichloroethane	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
Trichloroethene (TCE)	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
Trichlorofluoromethane	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
1,2,3-Trichloropropane	ND	20		µg/L	10	4/1/2015 11:28:54 AM	R25229
Vinyl chloride	ND	10		µg/L	10	4/1/2015 11:28:54 AM	R25229
Xylenes, Total	ND	15		µg/L	10	4/1/2015 11:28:54 AM	R25229
Surr: 1,2-Dichloroethane-d4	94.2	70-130		%REC	10	4/1/2015 11:28:54 AM	R25229
Surr: 4-Bromofluorobenzene	94.1	70-130		%REC	10	4/1/2015 11:28:54 AM	R25229
Surr: Dibromofluoromethane	98.6	70-130		%REC	10	4/1/2015 11:28:54 AM	R25229
Surr: Toluene-d8	90.6	70-130		%REC	10	4/1/2015 11:28:54 AM	R25229

SM2510B: SPECIFIC CONDUCTANCE

Analyst: **JRR**

Conductivity	110000	0.50	µmhos/cm	50	4/1/2015 4:51:28 PM	R25244

SM4500-H+B: PH

Analyst: **JRR**

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1503B60**

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-9

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 8:05:00 AM

Lab ID: 1503B60-001

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM4500-H+B: PH							Analyst: JRR
pH	7.84	1.68	H	pH units	1	3/27/2015 5:13:06 PM	R25116

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 6 of 67
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-7

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 8:40:00 AM

Lab ID: 1503B60-002

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	25	10	*	mg/L	100	3/26/2015 2:27:23 PM	R25111
Chloride	50000	2500		mg/L	5E	4/1/2015 3:01:56 AM	R25209
Bromide	27	10		mg/L	100	3/26/2015 2:27:23 PM	R25111
Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	3/26/2015 2:14:58 PM	R25111
Sulfate	11000	2500		mg/L	5E	4/1/2015 3:01:56 AM	R25209
Nitrate+Nitrite as N	ND	40		mg/L	200	4/6/2015 7:46:19 PM	R25320
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.15	0.010		mg/L	5	4/7/2015 5:54:53 PM	R25347
Cadmium	ND	0.010		mg/L	5	4/7/2015 5:54:53 PM	R25347
Calcium	850	50		mg/L	50	4/8/2015 3:15:46 PM	R25371
Chromium	ND	0.030		mg/L	5	4/7/2015 5:54:53 PM	R25347
Copper	ND	0.030		mg/L	5	4/7/2015 5:54:53 PM	R25347
Iron	ND	0.10		mg/L	5	4/7/2015 5:54:53 PM	R25347
Magnesium	880	50		mg/L	50	4/8/2015 3:15:46 PM	R25371
Manganese	0.53	0.010	*	mg/L	5	4/7/2015 5:54:53 PM	R25347
Potassium	1200	50		mg/L	50	4/8/2015 3:15:46 PM	R25371
Silver	ND	0.025		mg/L	5	4/7/2015 5:54:53 PM	R25347
Sodium	23000	500		mg/L	500	4/8/2015 3:17:20 PM	R25371
Zinc	ND	0.050		mg/L	5	4/7/2015 5:54:53 PM	R25347
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.16	0.010		mg/L	5	4/3/2015 4:36:43 PM	18398
Cadmium	ND	0.010		mg/L	5	4/3/2015 4:36:43 PM	18398
Chromium	ND	0.030		mg/L	5	4/3/2015 4:36:43 PM	18398
Copper	ND	0.030		mg/L	5	4/3/2015 4:36:43 PM	18398
Iron	0.32	0.10	*	mg/L	5	4/3/2015 4:36:43 PM	18398
Manganese	0.77	0.010	*	mg/L	5	4/6/2015 4:40:54 PM	18398
Silver	ND	0.025		mg/L	5	4/3/2015 4:36:43 PM	18398
Zinc	ND	0.050		mg/L	5	4/3/2015 4:36:43 PM	18398
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.20		mg/L	200	4/13/2015 6:18:47 PM	R25474
Lead	ND	0.20		mg/L	200	4/13/2015 6:18:47 PM	R25474
Selenium	ND	0.20		mg/L	200	4/13/2015 6:18:47 PM	R25474
Uranium	ND	0.010		mg/L	10	4/7/2015 7:52:40 PM	R25358
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.20		mg/L	200	4/14/2015 6:49:35 PM	18398
Lead	ND	0.20		mg/L	200	4/14/2015 6:49:35 PM	18398
Selenium	ND	0.20		mg/L	200	4/14/2015 6:49:35 PM	18398

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 7 of 67
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-7

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 8:40:00 AM

Lab ID: 1503B60-002

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Uranium	ND	0.20		mg/L	200	4/14/2015 6:49:35 PM	18398
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	4/4/2015 2:18:48 PM	18521
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Acenaphthylene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Aniline	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Anthracene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Azobenzene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Benz(a)anthracene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Benzo(a)pyrene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Benzo(b)fluoranthene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Benzo(k)fluoranthene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Benzoic acid	ND	20		µg/L	1	3/30/2015 1:50:11 PM	18372
Benzyl alcohol	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Butyl benzyl phthalate	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Carbazole	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
4-Chloroaniline	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
2-Chloronaphthalene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
2-Chlorophenol	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Chrysene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Di-n-butyl phthalate	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Di-n-octyl phthalate	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Dibenzofuran	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
1,2-Dichlorobenzene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
1,3-Dichlorobenzene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
1,4-Dichlorobenzene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Diethyl phthalate	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-7

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 8:40:00 AM

Lab ID: 1503B60-002

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Dimethyl phthalate	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
2,4-Dichlorophenol	ND	20		µg/L	1	3/30/2015 1:50:11 PM	18372
2,4-Dimethylphenol	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/30/2015 1:50:11 PM	18372
2,4-Dinitrophenol	ND	20		µg/L	1	3/30/2015 1:50:11 PM	18372
2,4-Dinitrotoluene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
2,6-Dinitrotoluene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Fluoranthene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Fluorene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Hexachlorobenzene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Hexachlorobutadiene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Hexachloroethane	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Isophorone	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
1-Methylnaphthalene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
2-Methylnaphthalene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
2-Methylphenol	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
3+4-Methylphenol	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
N-Nitrosodimethylamine	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Naphthalene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
2-Nitroaniline	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
3-Nitroaniline	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
4-Nitroaniline	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Nitrobenzene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
2-Nitrophenol	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
4-Nitrophenol	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Pentachlorophenol	ND	20		µg/L	1	3/30/2015 1:50:11 PM	18372
Phenanthrene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Phenol	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Pyrene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Pyridine	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/30/2015 1:50:11 PM	18372
Surr: 2-Fluorophenol	59.4	17.6-104		%REC	1	3/30/2015 1:50:11 PM	18372
Surr: Phenol-d5	59.9	17.7-89.9		%REC	1	3/30/2015 1:50:11 PM	18372

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 9 of 67
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-7

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 8:40:00 AM

Lab ID: 1503B60-002

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Surr: 2,4,6-Tribromophenol	59.5	16.3-122		%REC	1	3/30/2015 1:50:11 PM	18372
Surr: Nitrobenzene-d5	63.3	45.3-117		%REC	1	3/30/2015 1:50:11 PM	18372
Surr: 2-Fluorobiphenyl	49.6	43-113		%REC	1	3/30/2015 1:50:11 PM	18372
Surr: 4-Terphenyl-d14	32.5	47.6-122	S	%REC	1	3/30/2015 1:50:11 PM	18372
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	5.0		µg/L	10	4/1/2015 11:56:21 AM	R25229
Toluene	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
Ethylbenzene	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
1,2,4-Trimethylbenzene	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
1,3,5-Trimethylbenzene	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
Naphthalene	ND	20		µg/L	10	4/1/2015 11:56:21 AM	R25229
1-Methylnaphthalene	ND	40		µg/L	10	4/1/2015 11:56:21 AM	R25229
2-Methylnaphthalene	ND	40		µg/L	10	4/1/2015 11:56:21 AM	R25229
Acetone	ND	100		µg/L	10	4/1/2015 11:56:21 AM	R25229
Bromobenzene	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
Bromodichloromethane	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
Bromoform	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
Bromomethane	ND	30		µg/L	10	4/1/2015 11:56:21 AM	R25229
2-Butanone	ND	100		µg/L	10	4/1/2015 11:56:21 AM	R25229
Carbon disulfide	ND	100		µg/L	10	4/1/2015 11:56:21 AM	R25229
Carbon Tetrachloride	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
Chlorobenzene	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
Chloroethane	ND	20		µg/L	10	4/1/2015 11:56:21 AM	R25229
Chloroform	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
Chloromethane	ND	30		µg/L	10	4/1/2015 11:56:21 AM	R25229
2-Chlorotoluene	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
4-Chlorotoluene	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
cis-1,2-DCE	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
cis-1,3-Dichloropropene	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	4/1/2015 11:56:21 AM	R25229
Dibromochloromethane	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
Dibromomethane	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
1,2-Dichlorobenzene	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
1,3-Dichlorobenzene	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
1,4-Dichlorobenzene	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
Dichlorodifluoromethane	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-7

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 8:40:00 AM

Lab ID: 1503B60-002

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst: DJF		
1,1-Dichloroethane	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
1,1-Dichloroethene	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
1,2-Dichloropropane	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
1,3-Dichloropropane	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
2,2-Dichloropropane	ND	20		µg/L	10	4/1/2015 11:56:21 AM	R25229
1,1-Dichloropropene	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
Hexachlorobutadiene	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
2-Hexanone	ND	100		µg/L	10	4/1/2015 11:56:21 AM	R25229
Isopropylbenzene	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
4-Isopropyltoluene	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
4-Methyl-2-pentanone	ND	100		µg/L	10	4/1/2015 11:56:21 AM	R25229
Methylene Chloride	ND	30		µg/L	10	4/1/2015 11:56:21 AM	R25229
n-Butylbenzene	ND	30		µg/L	10	4/1/2015 11:56:21 AM	R25229
n-Propylbenzene	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
sec-Butylbenzene	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
Styrene	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
tert-Butylbenzene	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	4/1/2015 11:56:21 AM	R25229
Tetrachloroethene (PCE)	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
trans-1,2-DCE	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
trans-1,3-Dichloropropene	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
1,2,3-Trichlorobenzene	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
1,2,4-Trichlorobenzene	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
1,1,1-Trichloroethane	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
1,1,2-Trichloroethane	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
Trichloroethene (TCE)	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
Trichlorofluoromethane	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
1,2,3-Trichloropropane	ND	20		µg/L	10	4/1/2015 11:56:21 AM	R25229
Vinyl chloride	ND	10		µg/L	10	4/1/2015 11:56:21 AM	R25229
Xylenes, Total	ND	15		µg/L	10	4/1/2015 11:56:21 AM	R25229
Surr: 1,2-Dichloroethane-d4	92.7	70-130		%REC	10	4/1/2015 11:56:21 AM	R25229
Surr: 4-Bromofluorobenzene	94.5	70-130		%REC	10	4/1/2015 11:56:21 AM	R25229
Surr: Dibromofluoromethane	101	70-130		%REC	10	4/1/2015 11:56:21 AM	R25229
Surr: Toluene-d8	87.7	70-130		%REC	10	4/1/2015 11:56:21 AM	R25229

SM2510B: SPECIFIC CONDUCTANCE

Analyst: **JRR**

Conductivity	140000	1.0	µmhos/cm	100	4/1/2015 4:55:49 PM	R25244

SM4500-H+B: PH

Analyst: **JRR**

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1503B60**

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-7

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 8:40:00 AM

Lab ID: 1503B60-002

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM4500-H+B: PH							Analyst: JRR
pH	7.96	1.68	H	pH units	1	3/27/2015 5:17:44 PM	R25116

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 12 of 67
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-8

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 9:15:00 AM

Lab ID: 1503B60-003

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	27	10	*	mg/L	100	3/26/2015 2:52:12 PM	R25111
Chloride	65000	2500		mg/L	5E	4/1/2015 3:14:20 AM	R25209
Bromide	29	10		mg/L	100	3/26/2015 2:52:12 PM	R25111
Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	3/26/2015 2:39:47 PM	R25111
Sulfate	14000	2500		mg/L	5E	4/1/2015 3:14:20 AM	R25209
Nitrate+Nitrite as N	ND	40		mg/L	200	4/6/2015 7:58:43 PM	R25320
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.15	0.010		mg/L	5	4/7/2015 5:58:39 PM	R25347
Cadmium	ND	0.010		mg/L	5	4/7/2015 5:58:39 PM	R25347
Calcium	840	50		mg/L	50	4/8/2015 3:23:42 PM	R25371
Chromium	ND	0.030		mg/L	5	4/7/2015 5:58:39 PM	R25347
Copper	ND	0.030		mg/L	5	4/7/2015 5:58:39 PM	R25347
Iron	ND	0.10		mg/L	5	4/7/2015 5:58:39 PM	R25347
Magnesium	880	50		mg/L	50	4/8/2015 3:23:42 PM	R25371
Manganese	0.53	0.010	*	mg/L	5	4/7/2015 5:58:39 PM	R25347
Potassium	1200	50		mg/L	50	4/8/2015 3:23:42 PM	R25371
Silver	ND	0.025		mg/L	5	4/7/2015 5:58:39 PM	R25347
Sodium	23000	500		mg/L	500	4/8/2015 3:25:17 PM	R25371
Zinc	ND	0.050		mg/L	5	4/7/2015 5:58:39 PM	R25347
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.16	0.010		mg/L	5	4/3/2015 4:38:30 PM	18398
Cadmium	ND	0.010		mg/L	5	4/3/2015 4:38:30 PM	18398
Chromium	ND	0.030		mg/L	5	4/3/2015 4:38:30 PM	18398
Copper	ND	0.030		mg/L	5	4/3/2015 4:38:30 PM	18398
Iron	0.34	0.10	*	mg/L	5	4/3/2015 4:38:30 PM	18398
Manganese	0.78	0.010	*	mg/L	5	4/6/2015 4:42:42 PM	18398
Silver	ND	0.025		mg/L	5	4/3/2015 4:38:30 PM	18398
Zinc	ND	0.050		mg/L	5	4/3/2015 4:38:30 PM	18398
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.20		mg/L	200	4/13/2015 6:21:50 PM	R25474
Lead	ND	0.20		mg/L	200	4/13/2015 6:21:50 PM	R25474
Selenium	ND	0.20		mg/L	200	4/13/2015 6:21:50 PM	R25474
Uranium	ND	0.010		mg/L	10	4/7/2015 7:58:49 PM	R25358
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.20		mg/L	200	4/14/2015 6:52:47 PM	18398
Lead	ND	0.20		mg/L	200	4/14/2015 6:52:47 PM	18398
Selenium	ND	0.20		mg/L	200	4/14/2015 6:52:47 PM	18398

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-8

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 9:15:00 AM

Lab ID: 1503B60-003

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Uranium	ND	0.20		mg/L	200	4/14/2015 6:52:47 PM	18398
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	4/4/2015 2:20:39 PM	18521
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Acenaphthylene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Aniline	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Anthracene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Azobenzene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Benz(a)anthracene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Benzo(a)pyrene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Benzo(b)fluoranthene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Benzo(k)fluoranthene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Benzoic acid	ND	20		µg/L	1	3/30/2015 2:19:02 PM	18372
Benzyl alcohol	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Butyl benzyl phthalate	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Carbazole	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
4-Chloroaniline	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
2-Chloronaphthalene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
2-Chlorophenol	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Chrysene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Di-n-butyl phthalate	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Di-n-octyl phthalate	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Dibenzofuran	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
1,2-Dichlorobenzene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
1,3-Dichlorobenzene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
1,4-Dichlorobenzene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Diethyl phthalate	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-8

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 9:15:00 AM

Lab ID: 1503B60-003

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Dimethyl phthalate	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
2,4-Dichlorophenol	ND	20		µg/L	1	3/30/2015 2:19:02 PM	18372
2,4-Dimethylphenol	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/30/2015 2:19:02 PM	18372
2,4-Dinitrophenol	ND	20		µg/L	1	3/30/2015 2:19:02 PM	18372
2,4-Dinitrotoluene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
2,6-Dinitrotoluene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Fluoranthene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Fluorene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Hexachlorobenzene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Hexachlorobutadiene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Hexachloroethane	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Isophorone	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
1-Methylnaphthalene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
2-Methylnaphthalene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
2-Methylphenol	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
3+4-Methylphenol	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
N-Nitrosodimethylamine	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Naphthalene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
2-Nitroaniline	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
3-Nitroaniline	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
4-Nitroaniline	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Nitrobenzene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
2-Nitrophenol	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
4-Nitrophenol	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Pentachlorophenol	ND	20		µg/L	1	3/30/2015 2:19:02 PM	18372
Phenanthrene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Phenol	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Pyrene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Pyridine	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/30/2015 2:19:02 PM	18372
Surr: 2-Fluorophenol	74.4	17.6-104		%REC	1	3/30/2015 2:19:02 PM	18372
Surr: Phenol-d5	73.9	17.7-89.9		%REC	1	3/30/2015 2:19:02 PM	18372

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-8

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 9:15:00 AM

Lab ID: 1503B60-003

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Surr: 2,4,6-Tribromophenol	83.2	16.3-122		%REC	1	3/30/2015 2:19:02 PM	18372
Surr: Nitrobenzene-d5	84.4	45.3-117		%REC	1	3/30/2015 2:19:02 PM	18372
Surr: 2-Fluorobiphenyl	69.1	43-113		%REC	1	3/30/2015 2:19:02 PM	18372
Surr: 4-Terphenyl-d14	55.8	47.6-122		%REC	1	3/30/2015 2:19:02 PM	18372
EPA METHOD 8260B: VOLATILES					Analyst: DJF		
Benzene	ND	5.0		µg/L	10	4/1/2015 12:24:05 PM	R25229
Toluene	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
Ethylbenzene	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
1,2,4-Trimethylbenzene	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
1,3,5-Trimethylbenzene	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
Naphthalene	ND	20		µg/L	10	4/1/2015 12:24:05 PM	R25229
1-Methylnaphthalene	ND	40		µg/L	10	4/1/2015 12:24:05 PM	R25229
2-Methylnaphthalene	ND	40		µg/L	10	4/1/2015 12:24:05 PM	R25229
Acetone	ND	100		µg/L	10	4/1/2015 12:24:05 PM	R25229
Bromobenzene	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
Bromodichloromethane	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
Bromoform	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
Bromomethane	ND	30		µg/L	10	4/1/2015 12:24:05 PM	R25229
2-Butanone	ND	100		µg/L	10	4/1/2015 12:24:05 PM	R25229
Carbon disulfide	ND	100		µg/L	10	4/1/2015 12:24:05 PM	R25229
Carbon Tetrachloride	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
Chlorobenzene	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
Chloroethane	ND	20		µg/L	10	4/1/2015 12:24:05 PM	R25229
Chloroform	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
Chloromethane	ND	30		µg/L	10	4/1/2015 12:24:05 PM	R25229
2-Chlorotoluene	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
4-Chlorotoluene	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
cis-1,2-DCE	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
cis-1,3-Dichloropropene	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	4/1/2015 12:24:05 PM	R25229
Dibromochloromethane	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
Dibromomethane	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
1,2-Dichlorobenzene	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
1,3-Dichlorobenzene	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
1,4-Dichlorobenzene	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
Dichlorodifluoromethane	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-8

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 9:15:00 AM

Lab ID: 1503B60-003

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloroethane	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
1,1-Dichloroethene	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
1,2-Dichloropropane	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
1,3-Dichloropropane	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
2,2-Dichloropropane	ND	20		µg/L	10	4/1/2015 12:24:05 PM	R25229
1,1-Dichloropropene	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
Hexachlorobutadiene	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
2-Hexanone	ND	100		µg/L	10	4/1/2015 12:24:05 PM	R25229
Isopropylbenzene	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
4-Isopropyltoluene	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
4-Methyl-2-pentanone	ND	100		µg/L	10	4/1/2015 12:24:05 PM	R25229
Methylene Chloride	ND	30		µg/L	10	4/1/2015 12:24:05 PM	R25229
n-Butylbenzene	ND	30		µg/L	10	4/1/2015 12:24:05 PM	R25229
n-Propylbenzene	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
sec-Butylbenzene	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
Styrene	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
tert-Butylbenzene	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	4/1/2015 12:24:05 PM	R25229
Tetrachloroethene (PCE)	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
trans-1,2-DCE	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
trans-1,3-Dichloropropene	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
1,2,3-Trichlorobenzene	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
1,2,4-Trichlorobenzene	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
1,1,1-Trichloroethane	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
1,1,2-Trichloroethane	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
Trichloroethene (TCE)	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
Trichlorofluoromethane	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
1,2,3-Trichloropropane	ND	20		µg/L	10	4/1/2015 12:24:05 PM	R25229
Vinyl chloride	ND	10		µg/L	10	4/1/2015 12:24:05 PM	R25229
Xylenes, Total	ND	15		µg/L	10	4/1/2015 12:24:05 PM	R25229
Surr: 1,2-Dichloroethane-d4	85.0	70-130		%REC	10	4/1/2015 12:24:05 PM	R25229
Surr: 4-Bromofluorobenzene	103	70-130		%REC	10	4/1/2015 12:24:05 PM	R25229
Surr: Dibromofluoromethane	94.2	70-130		%REC	10	4/1/2015 12:24:05 PM	R25229
Surr: Toluene-d8	89.5	70-130		%REC	10	4/1/2015 12:24:05 PM	R25229

SM2510B: SPECIFIC CONDUCTANCE

Analyst: **JRR**

Conductivity	130000	1.0	µmhos/cm	100	4/1/2015 5:00:15 PM	R25244

SM4500-H+B: PH

Analyst: **JRR**

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1503B60**

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-8

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 9:15:00 AM

Lab ID: 1503B60-003

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM4500-H+B: PH						Analyst: JRR	
pH	7.96	1.68	H	pH units	1	3/27/2015 5:22:20 PM	R25116

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 18 of 67
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-6

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 9:35:00 AM

Lab ID: 1503B60-004

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	15	1.0	*	mg/L	10	4/3/2015 10:11:38 AM	R25311
Chloride	7900	500		mg/L	1E	4/6/2015 9:25:35 PM	R25320
Bromide	3.4	1.0		mg/L	10	4/3/2015 10:11:38 AM	R25311
Phosphorus, Orthophosphate (As P)	ND	5.0	H	mg/L	10	4/3/2015 10:11:38 AM	R25311
Sulfate	1700	50		mg/L	100	4/3/2015 10:24:03 AM	R25311
Nitrate+Nitrite as N	ND	10		mg/L	50	4/6/2015 8:11:07 PM	R25320
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.12	0.0020		mg/L	1	4/7/2015 6:00:29 PM	R25347
Cadmium	ND	0.0020		mg/L	1	4/7/2015 6:00:29 PM	R25347
Calcium	410	5.0		mg/L	5	4/7/2015 6:02:21 PM	R25347
Chromium	0.0079	0.0060		mg/L	1	4/7/2015 6:00:29 PM	R25347
Copper	ND	0.0060		mg/L	1	4/7/2015 6:00:29 PM	R25347
Iron	0.40	0.020	*	mg/L	1	4/7/2015 6:00:29 PM	R25347
Magnesium	170	5.0		mg/L	5	4/7/2015 6:02:21 PM	R25347
Manganese	0.39	0.0020	*	mg/L	1	4/7/2015 6:00:29 PM	R25347
Potassium	210	5.0		mg/L	5	4/7/2015 6:02:21 PM	R25347
Silver	ND	0.0050		mg/L	1	4/7/2015 6:00:29 PM	R25347
Sodium	4800	100		mg/L	100	4/8/2015 3:26:51 PM	R25371
Zinc	0.011	0.010		mg/L	1	4/7/2015 6:00:29 PM	R25347
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.13	0.0020		mg/L	1	4/3/2015 4:14:30 PM	18398
Cadmium	ND	0.0020		mg/L	1	4/3/2015 4:14:30 PM	18398
Chromium	0.0092	0.0060		mg/L	1	4/3/2015 4:14:30 PM	18398
Copper	ND	0.0060		mg/L	1	4/3/2015 4:14:30 PM	18398
Iron	0.78	0.020	*	mg/L	1	4/3/2015 4:14:30 PM	18398
Manganese	0.43	0.0020	*	mg/L	1	4/6/2015 4:51:34 PM	18398
Silver	ND	0.0050		mg/L	1	4/3/2015 4:14:30 PM	18398
Zinc	0.018	0.010		mg/L	1	4/3/2015 4:14:30 PM	18398
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.20		mg/L	200	4/13/2015 6:24:54 PM	R25474
Lead	ND	0.20		mg/L	200	4/13/2015 6:24:54 PM	R25474
Selenium	ND	0.20		mg/L	200	4/13/2015 6:24:54 PM	R25474
Uranium	ND	0.010		mg/L	10	4/7/2015 8:04:57 PM	R25358
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.023	0.010	*	mg/L	10	4/8/2015 3:49:26 PM	18398
Lead	ND	0.010		mg/L	10	4/8/2015 3:49:26 PM	18398
Selenium	0.026	0.010		mg/L	10	4/8/2015 3:49:26 PM	18398

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-6

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 9:35:00 AM

Lab ID: 1503B60-004

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Uranium	ND	0.010		mg/L	10	4/8/2015 3:49:26 PM	18398
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	4/4/2015 2:22:31 PM	18521
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Acenaphthylene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Aniline	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Anthracene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Azobenzene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Benz(a)anthracene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Benzo(a)pyrene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Benzo(b)fluoranthene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Benzo(g,h,i)perylene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Benzo(k)fluoranthene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Benzoic acid	ND	200		µg/L	1	4/1/2015 5:03:27 PM	18434
Benzyl alcohol	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Bis(2-chloroethoxy)methane	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Bis(2-chloroethyl)ether	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Bis(2-chloroisopropyl)ether	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Bis(2-ethylhexyl)phthalate	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
4-Bromophenyl phenyl ether	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Butyl benzyl phthalate	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Carbazole	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
4-Chloro-3-methylphenol	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
4-Chloroaniline	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
2-Chloronaphthalene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
2-Chlorophenol	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
4-Chlorophenyl phenyl ether	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Chrysene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Di-n-butyl phthalate	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Di-n-octyl phthalate	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Dibenz(a,h)anthracene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Dibenzofuran	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
1,2-Dichlorobenzene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
1,3-Dichlorobenzene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
1,4-Dichlorobenzene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
3,3'-Dichlorobenzidine	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Diethyl phthalate	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-6

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 9:35:00 AM

Lab ID: 1503B60-004

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Dimethyl phthalate	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
2,4-Dichlorophenol	ND	200		µg/L	1	4/1/2015 5:03:27 PM	18434
2,4-Dimethylphenol	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
4,6-Dinitro-2-methylphenol	ND	200		µg/L	1	4/1/2015 5:03:27 PM	18434
2,4-Dinitrophenol	ND	200		µg/L	1	4/1/2015 5:03:27 PM	18434
2,4-Dinitrotoluene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
2,6-Dinitrotoluene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Fluoranthene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Fluorene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Hexachlorobenzene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Hexachlorobutadiene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Hexachlorocyclopentadiene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Hexachloroethane	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Indeno(1,2,3-cd)pyrene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Isophorone	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
1-Methylnaphthalene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
2-Methylnaphthalene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
2-Methylphenol	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
3+4-Methylphenol	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
N-Nitrosodi-n-propylamine	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
N-Nitrosodimethylamine	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
N-Nitrosodiphenylamine	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Naphthalene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
2-Nitroaniline	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
3-Nitroaniline	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
4-Nitroaniline	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Nitrobenzene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
2-Nitrophenol	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
4-Nitrophenol	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Pentachlorophenol	ND	200		µg/L	1	4/1/2015 5:03:27 PM	18434
Phenanthrene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Phenol	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Pyrene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Pyridine	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
1,2,4-Trichlorobenzene	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
2,4,5-Trichlorophenol	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
2,4,6-Trichlorophenol	ND	100		µg/L	1	4/1/2015 5:03:27 PM	18434
Surr: 2-Fluorophenol	45.9	17.6-104		%REC	1	4/1/2015 5:03:27 PM	18434
Surr: Phenol-d5	34.0	17.7-89.9		%REC	1	4/1/2015 5:03:27 PM	18434

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-6

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 9:35:00 AM

Lab ID: 1503B60-004

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Surr: 2,4,6-Tribromophenol	61.2	16.3-122		%REC	1	4/1/2015 5:03:27 PM	18434
Surr: Nitrobenzene-d5	60.9	45.3-117		%REC	1	4/1/2015 5:03:27 PM	18434
Surr: 2-Fluorobiphenyl	56.8	43-113		%REC	1	4/1/2015 5:03:27 PM	18434
Surr: 4-Terphenyl-d14	54.2	47.6-122		%REC	1	4/1/2015 5:03:27 PM	18434
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	5.0		µg/L	10	4/1/2015 1:04:59 PM	R25229
Toluene	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
Ethylbenzene	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
1,2,4-Trimethylbenzene	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
1,3,5-Trimethylbenzene	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
Naphthalene	ND	20		µg/L	10	4/1/2015 1:04:59 PM	R25229
1-Methylnaphthalene	ND	40		µg/L	10	4/1/2015 1:04:59 PM	R25229
2-Methylnaphthalene	ND	40		µg/L	10	4/1/2015 1:04:59 PM	R25229
Acetone	ND	100		µg/L	10	4/1/2015 1:04:59 PM	R25229
Bromobenzene	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
Bromodichloromethane	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
Bromoform	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
Bromomethane	ND	30		µg/L	10	4/1/2015 1:04:59 PM	R25229
2-Butanone	ND	100		µg/L	10	4/1/2015 1:04:59 PM	R25229
Carbon disulfide	ND	100		µg/L	10	4/1/2015 1:04:59 PM	R25229
Carbon Tetrachloride	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
Chlorobenzene	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
Chloroethane	ND	20		µg/L	10	4/1/2015 1:04:59 PM	R25229
Chloroform	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
Chloromethane	ND	30		µg/L	10	4/1/2015 1:04:59 PM	R25229
2-Chlorotoluene	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
4-Chlorotoluene	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
cis-1,2-DCE	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
cis-1,3-Dichloropropene	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	4/1/2015 1:04:59 PM	R25229
Dibromochloromethane	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
Dibromomethane	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
1,2-Dichlorobenzene	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
1,3-Dichlorobenzene	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
1,4-Dichlorobenzene	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
Dichlorodifluoromethane	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-6

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 9:35:00 AM

Lab ID: 1503B60-004

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloroethane	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
1,1-Dichloroethene	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
1,2-Dichloropropane	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
1,3-Dichloropropane	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
2,2-Dichloropropane	ND	20		µg/L	10	4/1/2015 1:04:59 PM	R25229
1,1-Dichloropropene	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
Hexachlorobutadiene	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
2-Hexanone	ND	100		µg/L	10	4/1/2015 1:04:59 PM	R25229
Isopropylbenzene	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
4-Isopropyltoluene	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
4-Methyl-2-pentanone	ND	100		µg/L	10	4/1/2015 1:04:59 PM	R25229
Methylene Chloride	ND	30		µg/L	10	4/1/2015 1:04:59 PM	R25229
n-Butylbenzene	ND	30		µg/L	10	4/1/2015 1:04:59 PM	R25229
n-Propylbenzene	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
sec-Butylbenzene	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
Styrene	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
tert-Butylbenzene	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	4/1/2015 1:04:59 PM	R25229
Tetrachloroethene (PCE)	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
trans-1,2-DCE	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
trans-1,3-Dichloropropene	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
1,2,3-Trichlorobenzene	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
1,2,4-Trichlorobenzene	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
1,1,1-Trichloroethane	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
1,1,2-Trichloroethane	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
Trichloroethene (TCE)	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
Trichlorofluoromethane	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
1,2,3-Trichloropropane	ND	20		µg/L	10	4/1/2015 1:04:59 PM	R25229
Vinyl chloride	ND	10		µg/L	10	4/1/2015 1:04:59 PM	R25229
Xylenes, Total	ND	15		µg/L	10	4/1/2015 1:04:59 PM	R25229
Surr: 1,2-Dichloroethane-d4	92.2	70-130		%REC	10	4/1/2015 1:04:59 PM	R25229
Surr: 4-Bromofluorobenzene	95.0	70-130		%REC	10	4/1/2015 1:04:59 PM	R25229
Surr: Dibromofluoromethane	97.2	70-130		%REC	10	4/1/2015 1:04:59 PM	R25229
Surr: Toluene-d8	89.8	70-130		%REC	10	4/1/2015 1:04:59 PM	R25229

SM2510B: SPECIFIC CONDUCTANCE

Analyst: JRR

Conductivity	30000	0.10		µmhos/cm	10	4/1/2015 5:04:43 PM	R25244

SM4500-H+B: PH

Analyst: JRR

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 23 of 67
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1503B60**

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-6

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 9:35:00 AM

Lab ID: 1503B60-004

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM4500-H+B: PH							Analyst: JRR
pH	7.83	1.68	H	pH units	1	3/27/2015 5:26:55 PM	R25116

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 24 of 67
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-11

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 10:30:00 AM

Lab ID: 1503B60-005

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	34	10	*	mg/L	100	4/3/2015 10:48:52 AM	R25311
Chloride	38000	2500		mg/L	5E	4/6/2015 9:38:00 PM	R25320
Bromide	25	10		mg/L	100	4/3/2015 10:48:52 AM	R25311
Phosphorus, Orthophosphate (As P)	ND	50	H	mg/L	100	4/3/2015 10:48:52 AM	R25311
Sulfate	8200	2500		mg/L	5E	4/6/2015 9:38:00 PM	R25320
Nitrate+Nitrite as N	ND	40		mg/L	200	4/6/2015 9:00:46 PM	R25320
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.15	0.010		mg/L	5	4/7/2015 6:13:21 PM	R25347
Cadmium	ND	0.010		mg/L	5	4/7/2015 6:13:21 PM	R25347
Calcium	830	50		mg/L	50	4/8/2015 3:28:25 PM	R25371
Chromium	ND	0.030		mg/L	5	4/7/2015 6:13:21 PM	R25347
Copper	ND	0.030		mg/L	5	4/7/2015 6:13:21 PM	R25347
Iron	ND	0.10		mg/L	5	4/7/2015 6:13:21 PM	R25347
Magnesium	880	50		mg/L	50	4/8/2015 3:28:25 PM	R25371
Manganese	0.45	0.010	*	mg/L	5	4/7/2015 6:13:21 PM	R25347
Potassium	1200	50		mg/L	50	4/8/2015 3:28:25 PM	R25371
Silver	ND	0.025		mg/L	5	4/7/2015 6:13:21 PM	R25347
Sodium	23000	500		mg/L	500	4/8/2015 3:30:00 PM	R25371
Zinc	ND	0.050		mg/L	5	4/7/2015 6:13:21 PM	R25347
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.13	0.010		mg/L	5	4/3/2015 4:47:28 PM	18398
Cadmium	ND	0.010		mg/L	5	4/3/2015 4:47:28 PM	18398
Chromium	ND	0.030		mg/L	5	4/3/2015 4:47:28 PM	18398
Copper	ND	0.030		mg/L	5	4/3/2015 4:47:28 PM	18398
Iron	0.22	0.10		mg/L	5	4/3/2015 4:47:28 PM	18398
Manganese	0.66	0.010	*	mg/L	5	4/6/2015 4:53:33 PM	18398
Silver	ND	0.025		mg/L	5	4/3/2015 4:47:28 PM	18398
Zinc	ND	0.050		mg/L	5	4/3/2015 4:47:28 PM	18398
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.20		mg/L	200	4/13/2015 6:27:57 PM	R25474
Lead	ND	0.20		mg/L	200	4/13/2015 6:27:57 PM	R25474
Selenium	ND	0.20		mg/L	200	4/13/2015 6:27:57 PM	R25474
Uranium	ND	0.010		mg/L	10	4/7/2015 8:17:15 PM	R25358
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.20		mg/L	200	4/14/2015 6:55:58 PM	18398
Lead	ND	0.20		mg/L	200	4/14/2015 6:55:58 PM	18398
Selenium	ND	0.20		mg/L	200	4/14/2015 6:55:58 PM	18398

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-11

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 10:30:00 AM

Lab ID: 1503B60-005

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Uranium	ND	0.20		mg/L	200	4/14/2015 6:55:58 PM	18398
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	4/4/2015 2:53:07 PM	18522
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Acenaphthylene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Aniline	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Anthracene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Azobenzene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Benz(a)anthracene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Benzo(a)pyrene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Benzo(b)fluoranthene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Benzo(k)fluoranthene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Benzoic acid	ND	20		µg/L	1	3/30/2015 3:16:29 PM	18372
Benzyl alcohol	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Bis(2-ethylhexyl)phthalate	11	10		µg/L	1	3/30/2015 3:16:29 PM	18372
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Butyl benzyl phthalate	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Carbazole	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
4-Chloroaniline	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
2-Chloronaphthalene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
2-Chlorophenol	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Chrysene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Di-n-butyl phthalate	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Di-n-octyl phthalate	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Dibenzofuran	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
1,2-Dichlorobenzene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
1,3-Dichlorobenzene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
1,4-Dichlorobenzene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Diethyl phthalate	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-11

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 10:30:00 AM

Lab ID: 1503B60-005

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Dimethyl phthalate	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
2,4-Dichlorophenol	ND	20		µg/L	1	3/30/2015 3:16:29 PM	18372
2,4-Dimethylphenol	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/30/2015 3:16:29 PM	18372
2,4-Dinitrophenol	ND	20		µg/L	1	3/30/2015 3:16:29 PM	18372
2,4-Dinitrotoluene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
2,6-Dinitrotoluene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Fluoranthene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Fluorene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Hexachlorobenzene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Hexachlorobutadiene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Hexachloroethane	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Isophorone	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
1-Methylnaphthalene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
2-Methylnaphthalene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
2-Methylphenol	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
3+4-Methylphenol	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
N-Nitrosodimethylamine	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Naphthalene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
2-Nitroaniline	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
3-Nitroaniline	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
4-Nitroaniline	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Nitrobenzene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
2-Nitrophenol	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
4-Nitrophenol	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Pentachlorophenol	ND	20		µg/L	1	3/30/2015 3:16:29 PM	18372
Phenanthrene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Phenol	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Pyrene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Pyridine	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/30/2015 3:16:29 PM	18372
Surr: 2-Fluorophenol	61.4	17.6-104		%REC	1	3/30/2015 3:16:29 PM	18372
Surr: Phenol-d5	65.8	17.7-89.9		%REC	1	3/30/2015 3:16:29 PM	18372

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-11

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 10:30:00 AM

Lab ID: 1503B60-005

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Surr: 2,4,6-Tribromophenol	76.5	16.3-122		%REC	1	3/30/2015 3:16:29 PM	18372
Surr: Nitrobenzene-d5	75.3	45.3-117		%REC	1	3/30/2015 3:16:29 PM	18372
Surr: 2-Fluorobiphenyl	64.3	43-113		%REC	1	3/30/2015 3:16:29 PM	18372
Surr: 4-Terphenyl-d14	59.0	47.6-122		%REC	1	3/30/2015 3:16:29 PM	18372
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	5.0		µg/L	10	4/1/2015 1:32:27 PM	R25229
Toluene	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
Ethylbenzene	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
1,2,4-Trimethylbenzene	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
1,3,5-Trimethylbenzene	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
Naphthalene	ND	20		µg/L	10	4/1/2015 1:32:27 PM	R25229
1-Methylnaphthalene	ND	40		µg/L	10	4/1/2015 1:32:27 PM	R25229
2-Methylnaphthalene	ND	40		µg/L	10	4/1/2015 1:32:27 PM	R25229
Acetone	ND	100		µg/L	10	4/1/2015 1:32:27 PM	R25229
Bromobenzene	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
Bromodichloromethane	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
Bromoform	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
Bromomethane	ND	30		µg/L	10	4/1/2015 1:32:27 PM	R25229
2-Butanone	ND	100		µg/L	10	4/1/2015 1:32:27 PM	R25229
Carbon disulfide	ND	100		µg/L	10	4/1/2015 1:32:27 PM	R25229
Carbon Tetrachloride	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
Chlorobenzene	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
Chloroethane	ND	20		µg/L	10	4/1/2015 1:32:27 PM	R25229
Chloroform	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
Chloromethane	ND	30		µg/L	10	4/1/2015 1:32:27 PM	R25229
2-Chlorotoluene	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
4-Chlorotoluene	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
cis-1,2-DCE	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
cis-1,3-Dichloropropene	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	4/1/2015 1:32:27 PM	R25229
Dibromochloromethane	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
Dibromomethane	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
1,2-Dichlorobenzene	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
1,3-Dichlorobenzene	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
1,4-Dichlorobenzene	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
Dichlorodifluoromethane	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-11

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 10:30:00 AM

Lab ID: 1503B60-005

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloroethane	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
1,1-Dichloroethene	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
1,2-Dichloropropane	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
1,3-Dichloropropane	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
2,2-Dichloropropane	ND	20		µg/L	10	4/1/2015 1:32:27 PM	R25229
1,1-Dichloropropene	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
Hexachlorobutadiene	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
2-Hexanone	ND	100		µg/L	10	4/1/2015 1:32:27 PM	R25229
Isopropylbenzene	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
4-Isopropyltoluene	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
4-Methyl-2-pentanone	ND	100		µg/L	10	4/1/2015 1:32:27 PM	R25229
Methylene Chloride	ND	30		µg/L	10	4/1/2015 1:32:27 PM	R25229
n-Butylbenzene	ND	30		µg/L	10	4/1/2015 1:32:27 PM	R25229
n-Propylbenzene	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
sec-Butylbenzene	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
Styrene	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
tert-Butylbenzene	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	4/1/2015 1:32:27 PM	R25229
Tetrachloroethene (PCE)	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
trans-1,2-DCE	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
trans-1,3-Dichloropropene	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
1,2,3-Trichlorobenzene	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
1,2,4-Trichlorobenzene	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
1,1,1-Trichloroethane	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
1,1,2-Trichloroethane	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
Trichloroethene (TCE)	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
Trichlorofluoromethane	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
1,2,3-Trichloropropane	ND	20		µg/L	10	4/1/2015 1:32:27 PM	R25229
Vinyl chloride	ND	10		µg/L	10	4/1/2015 1:32:27 PM	R25229
Xylenes, Total	ND	15		µg/L	10	4/1/2015 1:32:27 PM	R25229
Surr: 1,2-Dichloroethane-d4	92.6	70-130		%REC	10	4/1/2015 1:32:27 PM	R25229
Surr: 4-Bromofluorobenzene	95.0	70-130		%REC	10	4/1/2015 1:32:27 PM	R25229
Surr: Dibromofluoromethane	96.1	70-130		%REC	10	4/1/2015 1:32:27 PM	R25229
Surr: Toluene-d8	91.5	70-130		%REC	10	4/1/2015 1:32:27 PM	R25229

SM2510B: SPECIFIC CONDUCTANCE

Analyst: **JRR**

Conductivity	130000	1.0	µmhos/cm	100	4/1/2015 5:09:05 PM	R25244

SM4500-H+B: PH

Analyst: **JRR**

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1503B60**

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-11

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 10:30:00 AM

Lab ID: 1503B60-005

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM4500-H+B: PH						Analyst: JRR	
pH	7.95	1.68	H	pH units	1	3/27/2015 5:31:05 PM	R25116

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 30 of 67
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-12A

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 10:50:00 AM

Lab ID: 1503B60-006

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	20	1.0	*	mg/L	10	4/3/2015 11:01:17 AM	R25311
Chloride	2500	100		mg/L	200	4/6/2015 9:50:25 PM	R25320
Bromide	3.8	1.0		mg/L	10	4/3/2015 11:01:17 AM	R25311
Phosphorus, Orthophosphate (As P)	ND	5.0	H	mg/L	10	4/3/2015 11:01:17 AM	R25311
Sulfate	1000	50		mg/L	100	4/3/2015 11:13:42 AM	R25311
Nitrate+Nitrite as N	ND	2.0		mg/L	10	4/3/2015 12:40:33 PM	R25311
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.076	0.0020		mg/L	1	4/7/2015 6:15:10 PM	R25347
Cadmium	ND	0.0020		mg/L	1	4/7/2015 6:15:10 PM	R25347
Calcium	160	5.0		mg/L	5	4/7/2015 6:17:12 PM	R25347
Chromium	0.010	0.0060		mg/L	1	4/7/2015 6:15:10 PM	R25347
Copper	ND	0.0060		mg/L	1	4/7/2015 6:15:10 PM	R25347
Iron	0.48	0.020	*	mg/L	1	4/7/2015 6:15:10 PM	R25347
Magnesium	62	1.0		mg/L	1	4/7/2015 6:15:10 PM	R25347
Manganese	0.088	0.0020	*	mg/L	1	4/7/2015 6:15:10 PM	R25347
Potassium	110	5.0		mg/L	5	4/7/2015 6:17:12 PM	R25347
Silver	ND	0.0050		mg/L	1	4/7/2015 6:15:10 PM	R25347
Sodium	1900	50		mg/L	50	4/8/2015 3:31:35 PM	R25371
Zinc	0.010	0.010		mg/L	1	4/7/2015 6:15:10 PM	R25347
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.076	0.0020		mg/L	1	4/3/2015 4:29:59 PM	18398
Cadmium	ND	0.0020		mg/L	1	4/3/2015 4:29:59 PM	18398
Chromium	0.012	0.0060		mg/L	1	4/3/2015 4:29:59 PM	18398
Copper	ND	0.0060		mg/L	1	4/3/2015 4:29:59 PM	18398
Iron	0.60	0.020	*	mg/L	1	4/3/2015 4:29:59 PM	18398
Manganese	0.095	0.0020	*	mg/L	1	4/6/2015 4:55:23 PM	18398
Silver	ND	0.0050		mg/L	1	4/3/2015 4:29:59 PM	18398
Zinc	0.015	0.010		mg/L	1	4/3/2015 4:29:59 PM	18398
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.20		mg/L	200	4/13/2015 6:31:00 PM	R25474
Lead	ND	0.20		mg/L	200	4/13/2015 6:31:00 PM	R25474
Selenium	ND	0.20		mg/L	200	4/13/2015 6:31:00 PM	R25474
Uranium	ND	0.010		mg/L	10	4/7/2015 8:23:23 PM	R25358
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.019	0.010	*	mg/L	10	4/8/2015 3:59:01 PM	18398
Lead	ND	0.010		mg/L	10	4/8/2015 3:59:01 PM	18398
Selenium	ND	0.20		mg/L	200	4/14/2015 6:59:09 PM	18398

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-12A

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 10:50:00 AM

Lab ID: 1503B60-006

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Uranium	ND	0.010		mg/L	10	4/8/2015 3:59:01 PM	18398
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	4/4/2015 2:58:44 PM	18522
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Acenaphthylene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Aniline	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Anthracene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Azobenzene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Benz(a)anthracene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Benzo(a)pyrene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Benzo(b)fluoranthene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Benzo(g,h,i)perylene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Benzo(k)fluoranthene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Benzoic acid	ND	200		µg/L	1	4/1/2015 5:31:43 PM	18434
Benzyl alcohol	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Bis(2-chloroethoxy)methane	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Bis(2-chloroethyl)ether	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Bis(2-chloroisopropyl)ether	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Bis(2-ethylhexyl)phthalate	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
4-Bromophenyl phenyl ether	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Butyl benzyl phthalate	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Carbazole	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
4-Chloro-3-methylphenol	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
4-Chloroaniline	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
2-Chloronaphthalene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
2-Chlorophenol	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
4-Chlorophenyl phenyl ether	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Chrysene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Di-n-butyl phthalate	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Di-n-octyl phthalate	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Dibenz(a,h)anthracene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Dibenzofuran	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
1,2-Dichlorobenzene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
1,3-Dichlorobenzene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
1,4-Dichlorobenzene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
3,3'-Dichlorobenzidine	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Diethyl phthalate	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-12A

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 10:50:00 AM

Lab ID: 1503B60-006

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Dimethyl phthalate	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
2,4-Dichlorophenol	ND	200		µg/L	1	4/1/2015 5:31:43 PM	18434
2,4-Dimethylphenol	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
4,6-Dinitro-2-methylphenol	ND	200		µg/L	1	4/1/2015 5:31:43 PM	18434
2,4-Dinitrophenol	ND	200		µg/L	1	4/1/2015 5:31:43 PM	18434
2,4-Dinitrotoluene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
2,6-Dinitrotoluene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Fluoranthene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Fluorene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Hexachlorobenzene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Hexachlorobutadiene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Hexachlorocyclopentadiene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Hexachloroethane	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Indeno(1,2,3-cd)pyrene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Isophorone	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
1-Methylnaphthalene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
2-Methylnaphthalene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
2-Methylphenol	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
3+4-Methylphenol	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
N-Nitrosodi-n-propylamine	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
N-Nitrosodimethylamine	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
N-Nitrosodiphenylamine	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Naphthalene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
2-Nitroaniline	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
3-Nitroaniline	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
4-Nitroaniline	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Nitrobenzene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
2-Nitrophenol	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
4-Nitrophenol	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Pentachlorophenol	ND	200		µg/L	1	4/1/2015 5:31:43 PM	18434
Phenanthrene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Phenol	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Pyrene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Pyridine	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
1,2,4-Trichlorobenzene	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
2,4,5-Trichlorophenol	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
2,4,6-Trichlorophenol	ND	100		µg/L	1	4/1/2015 5:31:43 PM	18434
Surr: 2-Fluorophenol	47.9	17.6-104		%REC	1	4/1/2015 5:31:43 PM	18434
Surr: Phenol-d5	35.1	17.7-89.9		%REC	1	4/1/2015 5:31:43 PM	18434

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-12A

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 10:50:00 AM

Lab ID: 1503B60-006

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Surr: 2,4,6-Tribromophenol	64.8	16.3-122		%REC	1	4/1/2015 5:31:43 PM	18434
Surr: Nitrobenzene-d5	58.8	45.3-117		%REC	1	4/1/2015 5:31:43 PM	18434
Surr: 2-Fluorobiphenyl	55.6	43-113		%REC	1	4/1/2015 5:31:43 PM	18434
Surr: 4-Terphenyl-d14	58.1	47.6-122		%REC	1	4/1/2015 5:31:43 PM	18434
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	5.0		µg/L	10	4/1/2015 1:59:56 PM	R25229
Toluene	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
Ethylbenzene	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
1,2,4-Trimethylbenzene	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
1,3,5-Trimethylbenzene	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
Naphthalene	ND	20		µg/L	10	4/1/2015 1:59:56 PM	R25229
1-Methylnaphthalene	ND	40		µg/L	10	4/1/2015 1:59:56 PM	R25229
2-Methylnaphthalene	ND	40		µg/L	10	4/1/2015 1:59:56 PM	R25229
Acetone	ND	100		µg/L	10	4/1/2015 1:59:56 PM	R25229
Bromobenzene	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
Bromodichloromethane	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
Bromoform	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
Bromomethane	ND	30		µg/L	10	4/1/2015 1:59:56 PM	R25229
2-Butanone	ND	100		µg/L	10	4/1/2015 1:59:56 PM	R25229
Carbon disulfide	ND	100		µg/L	10	4/1/2015 1:59:56 PM	R25229
Carbon Tetrachloride	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
Chlorobenzene	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
Chloroethane	ND	20		µg/L	10	4/1/2015 1:59:56 PM	R25229
Chloroform	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
Chloromethane	ND	30		µg/L	10	4/1/2015 1:59:56 PM	R25229
2-Chlorotoluene	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
4-Chlorotoluene	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
cis-1,2-DCE	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
cis-1,3-Dichloropropene	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	4/1/2015 1:59:56 PM	R25229
Dibromochloromethane	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
Dibromomethane	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
1,2-Dichlorobenzene	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
1,3-Dichlorobenzene	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
1,4-Dichlorobenzene	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
Dichlorodifluoromethane	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-12A

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 10:50:00 AM

Lab ID: 1503B60-006

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloroethane	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
1,1-Dichloroethene	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
1,2-Dichloropropane	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
1,3-Dichloropropane	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
2,2-Dichloropropane	ND	20		µg/L	10	4/1/2015 1:59:56 PM	R25229
1,1-Dichloropropene	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
Hexachlorobutadiene	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
2-Hexanone	ND	100		µg/L	10	4/1/2015 1:59:56 PM	R25229
Isopropylbenzene	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
4-Isopropyltoluene	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
4-Methyl-2-pentanone	ND	100		µg/L	10	4/1/2015 1:59:56 PM	R25229
Methylene Chloride	ND	30		µg/L	10	4/1/2015 1:59:56 PM	R25229
n-Butylbenzene	ND	30		µg/L	10	4/1/2015 1:59:56 PM	R25229
n-Propylbenzene	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
sec-Butylbenzene	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
Styrene	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
tert-Butylbenzene	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	4/1/2015 1:59:56 PM	R25229
Tetrachloroethene (PCE)	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
trans-1,2-DCE	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
trans-1,3-Dichloropropene	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
1,2,3-Trichlorobenzene	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
1,2,4-Trichlorobenzene	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
1,1,1-Trichloroethane	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
1,1,2-Trichloroethane	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
Trichloroethene (TCE)	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
Trichlorofluoromethane	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
1,2,3-Trichloropropane	ND	20		µg/L	10	4/1/2015 1:59:56 PM	R25229
Vinyl chloride	ND	10		µg/L	10	4/1/2015 1:59:56 PM	R25229
Xylenes, Total	ND	15		µg/L	10	4/1/2015 1:59:56 PM	R25229
Surr: 1,2-Dichloroethane-d4	89.3	70-130		%REC	10	4/1/2015 1:59:56 PM	R25229
Surr: 4-Bromofluorobenzene	97.2	70-130		%REC	10	4/1/2015 1:59:56 PM	R25229
Surr: Dibromofluoromethane	95.6	70-130		%REC	10	4/1/2015 1:59:56 PM	R25229
Surr: Toluene-d8	91.8	70-130		%REC	10	4/1/2015 1:59:56 PM	R25229

SM2510B: SPECIFIC CONDUCTANCE

Analyst: JRR

Conductivity	13000	0.10	µmhos/cm	10	4/1/2015 5:13:42 PM	R25244

SM4500-H+B: PH

Analyst: JRR

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1503B60**

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-12A

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 10:50:00 AM

Lab ID: 1503B60-006

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM4500-H+B: PH							Analyst: JRR
pH	8.02	1.68	H	pH units	1	3/27/2015 5:35:37 PM	R25116

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 36 of 67
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-12B

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 11:20:00 AM

Lab ID: 1503B60-007

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	11	1.0	*	mg/L	10	4/3/2015 11:26:06 AM	R25311
Chloride	2800	100		mg/L	200	4/6/2015 10:02:49 PM	R25320
Bromide	5.5	1.0		mg/L	10	4/3/2015 11:26:06 AM	R25311
Phosphorus, Orthophosphate (As P)	ND	5.0	H	mg/L	10	4/3/2015 11:26:06 AM	R25311
Sulfate	980	50		mg/L	100	4/3/2015 11:38:31 AM	R25311
Nitrate+Nitrite as N	ND	2.0		mg/L	10	4/3/2015 12:52:57 PM	R25311
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.11	0.0020		mg/L	1	4/7/2015 6:19:15 PM	R25347
Cadmium	ND	0.0020		mg/L	1	4/7/2015 6:19:15 PM	R25347
Calcium	240	5.0		mg/L	5	4/7/2015 6:21:08 PM	R25347
Chromium	0.011	0.0060		mg/L	1	4/7/2015 6:19:15 PM	R25347
Copper	ND	0.0060		mg/L	1	4/7/2015 6:19:15 PM	R25347
Iron	1.1	0.10	*	mg/L	5	4/7/2015 6:21:08 PM	R25347
Magnesium	67	1.0		mg/L	1	4/7/2015 6:19:15 PM	R25347
Manganese	0.22	0.0020	*	mg/L	1	4/7/2015 6:19:15 PM	R25347
Potassium	92	1.0		mg/L	1	4/7/2015 6:19:15 PM	R25347
Silver	ND	0.0050		mg/L	1	4/7/2015 6:19:15 PM	R25347
Sodium	1900	50		mg/L	50	4/8/2015 3:33:07 PM	R25371
Zinc	0.016	0.010		mg/L	1	4/7/2015 6:19:15 PM	R25347
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.10	0.0020		mg/L	1	4/3/2015 4:32:01 PM	18398
Cadmium	ND	0.0020		mg/L	1	4/3/2015 4:32:01 PM	18398
Chromium	0.011	0.0060		mg/L	1	4/3/2015 4:32:01 PM	18398
Copper	ND	0.0060		mg/L	1	4/3/2015 4:32:01 PM	18398
Iron	1.1	0.10	*	mg/L	5	4/3/2015 4:49:18 PM	18398
Manganese	0.22	0.0020	*	mg/L	1	4/6/2015 4:57:26 PM	18398
Silver	ND	0.0050		mg/L	1	4/3/2015 4:32:01 PM	18398
Zinc	0.020	0.010		mg/L	1	4/3/2015 4:32:01 PM	18398
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.20		mg/L	200	4/13/2015 6:34:04 PM	R25474
Lead	ND	0.20		mg/L	200	4/13/2015 6:34:04 PM	R25474
Selenium	ND	0.20		mg/L	200	4/13/2015 6:34:04 PM	R25474
Uranium	ND	0.010		mg/L	10	4/7/2015 8:29:32 PM	R25358
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.018	0.010	*	mg/L	10	4/8/2015 4:02:12 PM	18398
Lead	ND	0.010		mg/L	10	4/8/2015 4:02:12 PM	18398
Selenium	ND	0.20		mg/L	200	4/14/2015 7:08:47 PM	18398

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-12B

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 11:20:00 AM

Lab ID: 1503B60-007

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Uranium	ND	0.010		mg/L	10	4/8/2015 4:02:12 PM	18398
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	4/4/2015 3:00:28 PM	18522
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Acenaphthylene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Aniline	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Anthracene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Azobenzene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Benz(a)anthracene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Benzo(a)pyrene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Benzo(b)fluoranthene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Benzo(k)fluoranthene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Benzoic acid	ND	20		µg/L	1	3/30/2015 4:13:34 PM	18372
Benzyl alcohol	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Butyl benzyl phthalate	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Carbazole	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
4-Chloroaniline	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
2-Chloronaphthalene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
2-Chlorophenol	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Chrysene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Di-n-butyl phthalate	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Di-n-octyl phthalate	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Dibenzofuran	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
1,2-Dichlorobenzene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
1,3-Dichlorobenzene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
1,4-Dichlorobenzene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Diethyl phthalate	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-12B

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 11:20:00 AM

Lab ID: 1503B60-007

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Dimethyl phthalate	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
2,4-Dichlorophenol	ND	20		µg/L	1	3/30/2015 4:13:34 PM	18372
2,4-Dimethylphenol	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/30/2015 4:13:34 PM	18372
2,4-Dinitrophenol	ND	20		µg/L	1	3/30/2015 4:13:34 PM	18372
2,4-Dinitrotoluene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
2,6-Dinitrotoluene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Fluoranthene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Fluorene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Hexachlorobenzene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Hexachlorobutadiene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Hexachloroethane	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Isophorone	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
1-Methylnaphthalene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
2-Methylnaphthalene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
2-Methylphenol	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
3+4-Methylphenol	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
N-Nitrosodimethylamine	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Naphthalene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
2-Nitroaniline	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
3-Nitroaniline	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
4-Nitroaniline	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Nitrobenzene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
2-Nitrophenol	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
4-Nitrophenol	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Pentachlorophenol	ND	20		µg/L	1	3/30/2015 4:13:34 PM	18372
Phenanthrene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Phenol	210	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Pyrene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Pyridine	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/30/2015 4:13:34 PM	18372
Surr: 2-Fluorophenol	60.6	17.6-104		%REC	1	3/30/2015 4:13:34 PM	18372
Surr: Phenol-d5	62.7	17.7-89.9		%REC	1	3/30/2015 4:13:34 PM	18372

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-12B

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 11:20:00 AM

Lab ID: 1503B60-007

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Surr: 2,4,6-Tribromophenol	67.1	16.3-122		%REC	1	3/30/2015 4:13:34 PM	18372
Surr: Nitrobenzene-d5	63.9	45.3-117		%REC	1	3/30/2015 4:13:34 PM	18372
Surr: 2-Fluorobiphenyl	43.8	43-113		%REC	1	3/30/2015 4:13:34 PM	18372
Surr: 4-Terphenyl-d14	36.4	47.6-122	S	%REC	1	3/30/2015 4:13:34 PM	18372
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	5.0		µg/L	10	4/1/2015 2:27:23 PM	R25229
Toluene	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
Ethylbenzene	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
1,2,4-Trimethylbenzene	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
1,3,5-Trimethylbenzene	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
Naphthalene	ND	20		µg/L	10	4/1/2015 2:27:23 PM	R25229
1-Methylnaphthalene	ND	40		µg/L	10	4/1/2015 2:27:23 PM	R25229
2-Methylnaphthalene	ND	40		µg/L	10	4/1/2015 2:27:23 PM	R25229
Acetone	130	100		µg/L	10	4/1/2015 2:27:23 PM	R25229
Bromobenzene	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
Bromodichloromethane	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
Bromoform	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
Bromomethane	ND	30		µg/L	10	4/1/2015 2:27:23 PM	R25229
2-Butanone	ND	100		µg/L	10	4/1/2015 2:27:23 PM	R25229
Carbon disulfide	ND	100		µg/L	10	4/1/2015 2:27:23 PM	R25229
Carbon Tetrachloride	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
Chlorobenzene	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
Chloroethane	ND	20		µg/L	10	4/1/2015 2:27:23 PM	R25229
Chloroform	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
Chloromethane	ND	30		µg/L	10	4/1/2015 2:27:23 PM	R25229
2-Chlorotoluene	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
4-Chlorotoluene	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
cis-1,2-DCE	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
cis-1,3-Dichloropropene	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	4/1/2015 2:27:23 PM	R25229
Dibromochloromethane	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
Dibromomethane	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
1,2-Dichlorobenzene	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
1,3-Dichlorobenzene	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
1,4-Dichlorobenzene	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
Dichlorodifluoromethane	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-12B

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 11:20:00 AM

Lab ID: 1503B60-007

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloroethane	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
1,1-Dichloroethene	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
1,2-Dichloropropane	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
1,3-Dichloropropane	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
2,2-Dichloropropane	ND	20		µg/L	10	4/1/2015 2:27:23 PM	R25229
1,1-Dichloropropene	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
Hexachlorobutadiene	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
2-Hexanone	ND	100		µg/L	10	4/1/2015 2:27:23 PM	R25229
Isopropylbenzene	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
4-Isopropyltoluene	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
4-Methyl-2-pentanone	ND	100		µg/L	10	4/1/2015 2:27:23 PM	R25229
Methylene Chloride	ND	30		µg/L	10	4/1/2015 2:27:23 PM	R25229
n-Butylbenzene	ND	30		µg/L	10	4/1/2015 2:27:23 PM	R25229
n-Propylbenzene	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
sec-Butylbenzene	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
Styrene	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
tert-Butylbenzene	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	4/1/2015 2:27:23 PM	R25229
Tetrachloroethene (PCE)	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
trans-1,2-DCE	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
trans-1,3-Dichloropropene	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
1,2,3-Trichlorobenzene	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
1,2,4-Trichlorobenzene	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
1,1,1-Trichloroethane	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
1,1,2-Trichloroethane	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
Trichloroethene (TCE)	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
Trichlorofluoromethane	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
1,2,3-Trichloropropane	ND	20		µg/L	10	4/1/2015 2:27:23 PM	R25229
Vinyl chloride	ND	10		µg/L	10	4/1/2015 2:27:23 PM	R25229
Xylenes, Total	ND	15		µg/L	10	4/1/2015 2:27:23 PM	R25229
Surr: 1,2-Dichloroethane-d4	92.7	70-130		%REC	10	4/1/2015 2:27:23 PM	R25229
Surr: 4-Bromofluorobenzene	93.4	70-130		%REC	10	4/1/2015 2:27:23 PM	R25229
Surr: Dibromofluoromethane	96.5	70-130		%REC	10	4/1/2015 2:27:23 PM	R25229
Surr: Toluene-d8	92.9	70-130		%REC	10	4/1/2015 2:27:23 PM	R25229

SM2510B: SPECIFIC CONDUCTANCE

Analyst: JRR

Conductivity	13000	0.10	µmhos/cm	10	4/1/2015 5:18:00 PM	R25244

SM4500-H+B: PH

Analyst: JRR

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1503B60**

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EP-12B

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015 11:20:00 AM

Lab ID: 1503B60-007

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM4500-H+B: PH						Analyst: JRR	
pH	7.96	1.68	H	pH units	1	3/27/2015 5:39:47 PM	R25116

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 42 of 67
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: 2015 Semi-Annual Ponds

Collection Date:

Lab ID: 1503B60-008

Matrix: TRIP BLANK

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
Toluene	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
Ethylbenzene	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
Naphthalene	ND	2.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
1-Methylnaphthalene	ND	4.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
2-Methylnaphthalene	ND	4.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
Acetone	ND	10		µg/L	1	4/1/2015 2:54:51 PM	R25229
Bromobenzene	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
Bromodichloromethane	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
Bromoform	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
Bromomethane	ND	3.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
2-Butanone	ND	10		µg/L	1	4/1/2015 2:54:51 PM	R25229
Carbon disulfide	ND	10		µg/L	1	4/1/2015 2:54:51 PM	R25229
Carbon Tetrachloride	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
Chlorobenzene	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
Chloroethane	ND	2.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
Chloroform	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
Chloromethane	ND	3.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
2-Chlorotoluene	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
4-Chlorotoluene	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
cis-1,2-DCE	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
Dibromochloromethane	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
Dibromomethane	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
1,1-Dichloroethane	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
1,1-Dichloroethene	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
1,2-Dichloropropane	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
1,3-Dichloropropane	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
2,2-Dichloropropane	ND	2.0		µg/L	1	4/1/2015 2:54:51 PM	R25229

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: 2015 Semi-Annual Ponds

Collection Date:

Lab ID: 1503B60-008

Matrix: TRIP BLANK

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloropropene	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
Hexachlorobutadiene	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
2-Hexanone	ND	10		µg/L	1	4/1/2015 2:54:51 PM	R25229
Isopropylbenzene	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
4-Isopropyltoluene	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
4-Methyl-2-pentanone	ND	10		µg/L	1	4/1/2015 2:54:51 PM	R25229
Methylene Chloride	ND	3.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
n-Butylbenzene	ND	3.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
n-Propylbenzene	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
sec-Butylbenzene	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
Styrene	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
tert-Butylbenzene	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
trans-1,2-DCE	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
Trichlorofluoromethane	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
Vinyl chloride	ND	1.0		µg/L	1	4/1/2015 2:54:51 PM	R25229
Xylenes, Total	ND	1.5		µg/L	1	4/1/2015 2:54:51 PM	R25229
Surr: 1,2-Dichloroethane-d4	94.9	70-130		%REC	1	4/1/2015 2:54:51 PM	R25229
Surr: 4-Bromofluorobenzene	97.9	70-130		%REC	1	4/1/2015 2:54:51 PM	R25229
Surr: Dibromofluoromethane	101	70-130		%REC	1	4/1/2015 2:54:51 PM	R25229
Surr: Toluene-d8	90.8	70-130		%REC	1	4/1/2015 2:54:51 PM	R25229

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015

Lab ID: 1503B60-009

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
Benzene	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
Toluene	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
Ethylbenzene	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
Naphthalene	ND	2.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
1-Methylnaphthalene	ND	4.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
2-Methylnaphthalene	ND	4.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
Acetone	ND	10		µg/L	1	4/1/2015 3:22:19 PM	R25229
Bromobenzene	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
Bromodichloromethane	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
Bromoform	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
Bromomethane	ND	3.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
2-Butanone	ND	10		µg/L	1	4/1/2015 3:22:19 PM	R25229
Carbon disulfide	ND	10		µg/L	1	4/1/2015 3:22:19 PM	R25229
Carbon Tetrachloride	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
Chlorobenzene	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
Chloroethane	ND	2.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
Chloroform	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
Chloromethane	ND	3.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
2-Chlorotoluene	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
4-Chlorotoluene	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
cis-1,2-DCE	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
Dibromochloromethane	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
Dibromomethane	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
1,1-Dichloroethane	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
1,1-Dichloroethene	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
1,2-Dichloropropane	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
1,3-Dichloropropane	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
2,2-Dichloropropane	ND	2.0		µg/L	1	4/1/2015 3:22:19 PM	R25229

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015

Lab ID: 1503B60-009

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloropropene	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
Hexachlorobutadiene	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
2-Hexanone	ND	10		µg/L	1	4/1/2015 3:22:19 PM	R25229
Isopropylbenzene	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
4-Isopropyltoluene	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
4-Methyl-2-pentanone	ND	10		µg/L	1	4/1/2015 3:22:19 PM	R25229
Methylene Chloride	ND	3.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
n-Butylbenzene	ND	3.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
n-Propylbenzene	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
sec-Butylbenzene	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
Styrene	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
tert-Butylbenzene	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
trans-1,2-DCE	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
Trichlorofluoromethane	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
Vinyl chloride	ND	1.0		µg/L	1	4/1/2015 3:22:19 PM	R25229
Xylenes, Total	ND	1.5		µg/L	1	4/1/2015 3:22:19 PM	R25229
Surr: 1,2-Dichloroethane-d4	95.5	70-130		%REC	1	4/1/2015 3:22:19 PM	R25229
Surr: 4-Bromofluorobenzene	95.6	70-130		%REC	1	4/1/2015 3:22:19 PM	R25229
Surr: Dibromofluoromethane	92.9	70-130		%REC	1	4/1/2015 3:22:19 PM	R25229
Surr: Toluene-d8	90.9	70-130		%REC	1	4/1/2015 3:22:19 PM	R25229

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Blind Duplicate

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015

Lab ID: 1503B60-010

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Acenaphthylene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Aniline	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Anthracene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Azobenzene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Benz(a)anthracene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Benzo(a)pyrene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Benzo(b)fluoranthene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Benzo(k)fluoranthene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Benzoic acid	ND	20		µg/L	1	3/30/2015 4:42:11 PM	18372
Benzyl alcohol	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Bis(2-ethylhexyl)phthalate	10	10		µg/L	1	3/30/2015 4:42:11 PM	18372
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Butyl benzyl phthalate	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Carbazole	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
4-Chloroaniline	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
2-Chloronaphthalene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
2-Chlorophenol	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Chrysene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Di-n-butyl phthalate	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Di-n-octyl phthalate	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Dibenzofuran	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
1,2-Dichlorobenzene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
1,3-Dichlorobenzene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
1,4-Dichlorobenzene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Diethyl phthalate	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Dimethyl phthalate	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
2,4-Dichlorophenol	ND	20		µg/L	1	3/30/2015 4:42:11 PM	18372
2,4-Dimethylphenol	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/30/2015 4:42:11 PM	18372
2,4-Dinitrophenol	ND	20		µg/L	1	3/30/2015 4:42:11 PM	18372

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B60

Date Reported: 5/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Blind Duplicate

Project: 2015 Semi-Annual Ponds

Collection Date: 3/25/2015

Lab ID: 1503B60-010

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
2,6-Dinitrotoluene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Fluoranthene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Fluorene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Hexachlorobenzene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Hexachlorobutadiene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Hexachloroethane	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Isophorone	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
1-Methylnaphthalene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
2-Methylnaphthalene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
2-Methylphenol	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
3+4-Methylphenol	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
N-Nitrosodimethylamine	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Naphthalene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
2-Nitroaniline	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
3-Nitroaniline	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
4-Nitroaniline	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Nitrobenzene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
2-Nitrophenol	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
4-Nitrophenol	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Pentachlorophenol	ND	20		µg/L	1	3/30/2015 4:42:11 PM	18372
Phenanthrene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Phenol	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Pyrene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Pyridine	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/30/2015 4:42:11 PM	18372
Surr: 2-Fluorophenol	75.8	17.6-104		%REC	1	3/30/2015 4:42:11 PM	18372
Surr: Phenol-d5	74.7	17.7-89.9		%REC	1	3/30/2015 4:42:11 PM	18372
Surr: 2,4,6-Tribromophenol	77.9	16.3-122		%REC	1	3/30/2015 4:42:11 PM	18372
Surr: Nitrobenzene-d5	80.7	45.3-117		%REC	1	3/30/2015 4:42:11 PM	18372
Surr: 2-Fluorobiphenyl	59.0	43-113		%REC	1	3/30/2015 4:42:11 PM	18372
Surr: 4-Terphenyl-d14	42.0	47.6-122	S	%REC	1	3/30/2015 4:42:11 PM	18372

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

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



Wet Chemistry by Method 410.4

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
COD	509		100	10	03/30/2015 14:20	WG778750

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Wet Chemistry by Method 410.4

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
COD	668		100	10	03/30/2015 14:23	WG778750

- Cp
- ²Tc
- ³Ss
- ⁴Cn
- ⁵Sr
- ⁶Qc
- ⁷Gl
- ⁸Al
- ⁹Sc



Wet Chemistry by Method 410.4

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
COD	600		100	10	03/30/2015 14:24	WG778750

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc



Wet Chemistry by Method 410.4

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
COD	978		10.0	1	03/30/2015 14:24	WG778750

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Wet Chemistry by Method 410.4

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
COD	692		100	10	03/30/2015 14:25	WG778750

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc



Wet Chemistry by Method 410.4

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
COD	403		10.0	1	04/01/2015 03:51	WG778998

- Cp
- ²Tc
- ³Ss
- ⁴Cn
- ⁵Sr
- ⁶Qc
- ⁷Gl
- ⁸Al
- ⁹Sc



Wet Chemistry by Method 410.4

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
COD	647		10.0	1	04/01/2015 03:51	WG778998

Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) 03/30/15 13:51

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
COD	ND		10.0

L756046-01 Original Sample (OS) • Duplicate (DUP)

(OS) 03/30/15 13:54 • (DUP) 03/30/15 13:55

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
COD	59	62	1	5.0		5

L756129-05 Original Sample (OS) • Duplicate (DUP)

(OS) 03/30/15 13:57 • (DUP) 03/30/15 13:57

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
COD	ND	ND	1	0.00		5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 03/30/15 13:51 • (LCSD) 03/30/15 13:51

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
COD	183	182	187	99.5	102	90.0-110			2.71	5

L756129-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 03/30/15 13:56 • (MS) 03/30/15 13:56 • (MSD) 03/30/15 13:56

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
COD	400	16.1	411	416	98.8	100	1	90.0-110			1.21	5

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

Method Blank (MB)

(MB) 04/01/15 03:44

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
COD	ND		10.0

L755698-06 Original Sample (OS) • Duplicate (DUP)

(OS) 04/01/15 03:49 • (DUP) 04/01/15 03:49

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
COD	130	130	1	0.00		5

L756210-05 Original Sample (OS) • Duplicate (DUP)

(OS) 04/01/15 03:52 • (DUP) 04/01/15 03:52

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
COD	13	12	1	8.0	P1	5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/01/15 03:45 • (LCSD) 04/01/15 03:45

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCSD Qualifier	RPD %	RPD Limits %
COD	183	181	182	98.9	99.5	90.0-110		0.551	5

L756203-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/01/15 03:52 • (MS) 04/01/15 03:52 • (MSD) 04/01/15 03:52

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
COD	400	147	410	410	103	103	1	90.0-110			0.000	5

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B60

07-May-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID MB	SampType: MBLK		TestCode: EPA Method 200.7: Dissolved Metals							
Client ID: PBW	Batch ID: R25347		RunNo: 25347							
Prep Date:	Analysis Date: 4/7/2015		SeqNo: 750124		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	SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals							
Client ID: LCSW	Batch ID: R25347		RunNo: 25347							
Prep Date:	Analysis Date: 4/7/2015		SeqNo: 750125		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	95.2	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.5	85	115			
Calcium	49	1.0	50.00	0	97.8	85	115			
Chromium	0.48	0.0060	0.5000	0	96.0	85	115			
Copper	0.47	0.0060	0.5000	0	93.3	85	115			
Iron	0.47	0.020	0.5000	0	94.5	85	115			
Magnesium	50	1.0	50.00	0	99.3	85	115			
Manganese	0.46	0.0020	0.5000	0	92.2	85	115			
Potassium	47	1.0	50.00	0	94.3	85	115			
Silver	0.10	0.0050	0.1000	0	103	85	115			
Zinc	0.48	0.010	0.5000	0	95.8	85	115			

Sample ID MB	SampType: MBLK		TestCode: EPA Method 200.7: Dissolved Metals							
Client ID: PBW	Batch ID: R25347		RunNo: 25347							
Prep Date:	Analysis Date: 4/7/2015		SeqNo: 750126		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								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B60

07-May-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID MB	SampType: MBLK		TestCode: EPA Method 200.7: Dissolved Metals							
Client ID: PBW	Batch ID: R25347		RunNo: 25347							
Prep Date:	Analysis Date: 4/7/2015		SeqNo: 750126		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID LCS	SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals							
Client ID: LCSW	Batch ID: R25347		RunNo: 25347							
Prep Date:	Analysis Date: 4/7/2015		SeqNo: 750127		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.7	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.8	85	115			
Calcium	50	1.0	50.00	0	99.9	85	115			
Chromium	0.49	0.0060	0.5000	0	97.4	85	115			
Copper	0.48	0.0060	0.5000	0	95.3	85	115			
Iron	0.48	0.020	0.5000	0	96.0	85	115			
Magnesium	49	1.0	50.00	0	99.0	85	115			
Manganese	0.47	0.0020	0.5000	0	93.8	85	115			
Potassium	47	1.0	50.00	0	94.8	85	115			
Silver	0.11	0.0050	0.1000	0	105	85	115			
Zinc	0.49	0.010	0.5000	0	97.6	85	115			

Sample ID MB	SampType: MBLK		TestCode: EPA Method 200.7: Dissolved Metals							
Client ID: PBW	Batch ID: R25371		RunNo: 25371							
Prep Date:	Analysis Date: 4/8/2015		SeqNo: 750783		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	ND	1.0								
Magnesium	ND	1.0								
Potassium	ND	1.0								
Sodium	ND	1.0								

Sample ID LCS	SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals							
Client ID: LCSW	Batch ID: R25371		RunNo: 25371							
Prep Date:	Analysis Date: 4/8/2015		SeqNo: 750784		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	49	1.0	50.00	0	98.8	85	115			
Magnesium	50	1.0	50.00	0	99.9	85	115			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B60

07-May-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	LCS	SampType: LCS			TestCode: EPA Method 200.7: Dissolved Metals						
Client ID:	LCSW	Batch ID: R25371			RunNo: 25371						
Prep Date:		Analysis Date: 4/8/2015			SeqNo: 750784		Units: mg/L				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium		48	1.0	50.00	0	96.3	85	115			
Sodium		49	1.0	50.00	0	98.2	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B60

07-May-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	MB-18398		SampType: MBLK		TestCode: EPA Method 200.7: Total Metals					
Client ID:	PBW		Batch ID: 18398		RunNo: 25227					
Prep Date:	3/28/2015		Analysis Date: 4/1/2015		SeqNo: 745953		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-18398		SampType: LCS		TestCode: EPA Method 200.7: Total Metals					
Client ID:	LCSW		Batch ID: 18398		RunNo: 25227					
Prep Date:	3/28/2015		Analysis Date: 4/1/2015		SeqNo: 745954		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.51	0.0020	0.5000	0	102	85	115			
Cadmium	0.51	0.0020	0.5000	0	103	85	115			
Chromium	0.52	0.0060	0.5000	0	104	85	115			
Copper	0.51	0.0060	0.5000	0	103	85	115			
Iron	0.50	0.020	0.5000	0	101	85	115			
Manganese	0.49	0.0020	0.5000	0	98.5	85	115			
Silver	0.10	0.0050	0.1000	0	99.9	85	115			
Zinc	0.50	0.010	0.5000	0	99.2	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B60

07-May-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	LCS			SampType:	LCS			TestCode:	EPA 200.8: Dissolved Metals		
Client ID:	LCSW			Batch ID:	R25358			RunNo:	25358		
Prep Date:				Analysis Date:	4/7/2015			SeqNo:	750641		
								Units:	mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Uranium	0.025	0.0010	0.02500	0	100	85	115				

Sample ID	LCS			SampType:	LCS			TestCode:	EPA 200.8: Dissolved Metals		
Client ID:	LCSW			Batch ID:	R25358			RunNo:	25358		
Prep Date:				Analysis Date:	4/7/2015			SeqNo:	750642		
								Units:	mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Uranium	0.021	0.0010	0.02500	0	85.9	85	115				

Sample ID	MB			SampType:	MBLK			TestCode:	EPA 200.8: Dissolved Metals		
Client ID:	PBW			Batch ID:	R25358			RunNo:	25358		
Prep Date:				Analysis Date:	4/7/2015			SeqNo:	750643		
								Units:	mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Uranium	ND	0.0010									

Sample ID	MB			SampType:	MBLK			TestCode:	EPA 200.8: Dissolved Metals		
Client ID:	PBW			Batch ID:	R25358			RunNo:	25358		
Prep Date:				Analysis Date:	4/7/2015			SeqNo:	750644		
								Units:	mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Uranium	ND	0.0010									

Sample ID	LCS			SampType:	LCS			TestCode:	EPA 200.8: Dissolved Metals		
Client ID:	LCSW			Batch ID:	R25474			RunNo:	25474		
Prep Date:				Analysis Date:	4/13/2015			SeqNo:	754635		
								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	93.2	85	115				
Lead	0.023	0.0010	0.02500	0	93.9	85	115				
Selenium	0.023	0.0010	0.02500	0	92.1	85	115				

Sample ID	LCS			SampType:	LCS			TestCode:	EPA 200.8: Dissolved Metals		
Client ID:	LCSW			Batch ID:	R25474			RunNo:	25474		
Prep Date:				Analysis Date:	4/13/2015			SeqNo:	754636		
								Units:	mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Arsenic	0.022	0.0010	0.02500	0	89.6	85	115				
Lead	0.023	0.0010	0.02500	0	90.8	85	115				
Selenium	0.021	0.0010	0.02500	0	85.6	85	115				

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B60

07-May-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	MB	SampType:	MBLK	TestCode:	EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID:	R25474	RunNo:	25474					
Prep Date:		Analysis Date:	4/13/2015	SeqNo:	754638	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID	MB	SampType:	MBLK	TestCode:	EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID:	R25474	RunNo:	25474					
Prep Date:		Analysis Date:	4/13/2015	SeqNo:	754639	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B60

07-May-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	LLLCS-18398		SampType: LCSLL		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	BatchQC		Batch ID: 18398		RunNo: 25382					
Prep Date:	3/28/2015		Analysis Date: 4/8/2015		SeqNo: 751311		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.026	0.0010	0.02500	0	102	85	115			
Lead	0.027	0.0010	0.02500	0	107	85	115			
Selenium	0.025	0.0010	0.02500	0	98.4	85	115			
Uranium	0.027	0.0010	0.02500	0	108	85	115			

Sample ID	MB-18398		SampType: MBLK		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	PBW		Batch ID: 18398		RunNo: 25382					
Prep Date:	3/28/2015		Analysis Date: 4/8/2015		SeqNo: 751316		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B60

07-May-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	MB-18521		SampType: MBLK		TestCode: EPA Method 245.1: Mercury					
Client ID:	PBW		Batch ID: 18521		RunNo: 25306					
Prep Date:	4/3/2015		Analysis Date: 4/4/2015		SeqNo: 748550		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	LCS-18521		SampType: LCS		TestCode: EPA Method 245.1: Mercury					
Client ID:	LCSW		Batch ID: 18521		RunNo: 25306					
Prep Date:	4/3/2015		Analysis Date: 4/4/2015		SeqNo: 748551		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0051	0.00020	0.005000	0	102	80	120			

Sample ID	MB-18522		SampType: MBLK		TestCode: EPA Method 245.1: Mercury					
Client ID:	PBW		Batch ID: 18522		RunNo: 25306					
Prep Date:	4/3/2015		Analysis Date: 4/4/2015		SeqNo: 748578		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	LCS-18522		SampType: LCS		TestCode: EPA Method 245.1: Mercury					
Client ID:	LCSW		Batch ID: 18522		RunNo: 25306					
Prep Date:	4/3/2015		Analysis Date: 4/4/2015		SeqNo: 748579		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	96.8	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B60

07-May-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID MB	SampType: MBLK		TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch ID: R25111		RunNo: 25111							
Prep Date:	Analysis Date: 3/26/2015		SeqNo: 741670		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								

Sample ID LCS	SampType: LCS		TestCode: EPA Method 300.0: Anions							
Client ID: LCSW	Batch ID: R25111		RunNo: 25111							
Prep Date:	Analysis Date: 3/26/2015		SeqNo: 741673		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.53	0.10	0.5000	0	107	90	110			
Bromide	2.6	0.10	2.500	0	103	90	110			
Phosphorus, Orthophosphate (As P	5.6	0.50	5.000	0	112	90	110			S
Sulfate	10	0.50	10.00	0	104	90	110			

Sample ID MB	SampType: MBLK		TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch ID: R25209		RunNo: 25209							
Prep Date:	Analysis Date: 3/31/2015		SeqNo: 745213		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: R25209		RunNo: 25209							
Prep Date:	Analysis Date: 3/31/2015		SeqNo: 745214		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.9	0.50	5.000	0	97.2	90	110			
Sulfate	9.9	0.50	10.00	0	98.8	90	110			

Sample ID MB	SampType: MBLK		TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch ID: R25311		RunNo: 25311							
Prep Date:	Analysis Date: 4/3/2015		SeqNo: 748762		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B60

07-May-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R25311	RunNo:	25311					
Prep Date:		Analysis Date:	4/3/2015	SeqNo:	748762	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:	R25311	RunNo:	25311					
Prep Date:		Analysis Date:	4/3/2015	SeqNo:	748763	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			
Bromide	2.6	0.10	2.500	0	104	90	110			
Phosphorus, Orthophosphate (As P	5.2	0.50	5.000	0	104	90	110			
Sulfate	10	0.50	10.00	0	103	90	110			
Nitrate+Nitrite as N	3.7	0.20	3.500	0	105	90	110			

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R25320	RunNo:	25320					
Prep Date:		Analysis Date:	4/6/2015	SeqNo:	749600	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Sulfate	ND	0.50								
Nitrate+Nitrite as N	ND	0.20								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSW	Batch ID:	R25320	RunNo:	25320					
Prep Date:		Analysis Date:	4/6/2015	SeqNo:	749601	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	95.9	90	110			
Sulfate	9.8	0.50	10.00	0	97.8	90	110			
Nitrate+Nitrite as N	3.4	0.20	3.500	0	98.2	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B60

07-May-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R25229			RunNo: 25229					
Prep Date:		Analysis Date: 4/1/2015			SeqNo: 745957		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B60

07-May-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R25229			RunNo: 25229					
Prep Date:		Analysis Date: 4/1/2015			SeqNo: 745957		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.0		10.00		90.4	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		92.3	70	130			
Surr: Dibromofluoromethane	9.2		10.00		92.1	70	130			
Surr: Toluene-d8	8.6		10.00		86.5	70	130			

Sample ID	100nglcs,200anxstd			SampType:	LCS		TestCode:	EPA Method 8260B: VOLATILES		
Client ID:	LCSW		Batch ID:	R25229		RunNo:	25229			
Prep Date:			Analysis Date:	4/1/2015		SeqNo:	745959		Units:	µg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	70	130			
Toluene	21	1.0	20.00	0	106	70	130			
Chlorobenzene	20	1.0	20.00	0	100	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B60

07-May-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	100nglcs,200anxstd	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID:	R25229	RunNo:	25229					
Prep Date:		Analysis Date:	4/1/2015	SeqNo:	745959	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	23	1.0	20.00	0	113	75.6	144			
Trichloroethene (TCE)	20	1.0	20.00	0	101	70	130			
Surr: 1,2-Dichloroethane-d4	9.1		10.00		90.8	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		93.7	70	130			
Surr: Dibromofluoromethane	9.8		10.00		97.8	70	130			
Surr: Toluene-d8	9.1		10.00		91.1	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B60

07-May-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	mb-18372		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 18372		RunNo: 25175					
Prep Date:	3/27/2015		Analysis Date: 3/30/2015		SeqNo: 743941		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B60

07-May-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	mb-18372		SampType: MBLK			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	PBW		Batch ID: 18372			RunNo: 25175				
Prep Date:	3/27/2015		Analysis Date: 3/30/2015			SeqNo: 743941		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	150		200.0		75.1	17.6	104			
Surr: Phenol-d5	180		200.0		88.0	17.7	89.9			
Surr: 2,4,6-Tribromophenol	190		200.0		93.3	16.3	122			
Surr: Nitrobenzene-d5	86		100.0		85.5	45.3	117			
Surr: 2-Fluorobiphenyl	78		100.0		77.9	43	113			
Surr: 4-Terphenyl-d14	77		100.0		76.8	47.6	122			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B60

07-May-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	lcs-18372		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 18372		RunNo: 25175					
Prep Date:	3/27/2015		Analysis Date: 3/30/2015		SeqNo: 743942		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	76	10	100.0	0	76.0	47.8	99.7			
4-Chloro-3-methylphenol	180	10	200.0	0	91.3	58.1	103			
2-Chlorophenol	150	10	200.0	0	77.4	49.5	96.8			
1,4-Dichlorobenzene	76	10	100.0	0	76.3	40.4	89.4			
2,4-Dinitrotoluene	65	10	100.0	0	65.1	38.6	91.3			
N-Nitrosodi-n-propylamine	79	10	100.0	0	78.9	53.9	95.6			
4-Nitrophenol	160	10	200.0	0	79.9	26.4	108			
Pentachlorophenol	150	20	200.0	0	76.2	36.5	86.6			
Phenol	160	10	200.0	0	80.1	29.3	108			
Pyrene	80	10	100.0	0	79.8	45.7	100			
1,2,4-Trichlorobenzene	86	10	100.0	0	85.6	39.3	94.5			
Surr: 2-Fluorophenol	150		200.0		74.5	17.6	104			
Surr: Phenol-d5	170		200.0		84.2	17.7	89.9			
Surr: 2,4,6-Tribromophenol	210		200.0		103	16.3	122			
Surr: Nitrobenzene-d5	81		100.0		80.7	45.3	117			
Surr: 2-Fluorobiphenyl	81		100.0		80.8	43	113			
Surr: 4-Terphenyl-d14	79		100.0		78.8	47.6	122			

Sample ID	lcsd-18372		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 18372		RunNo: 25175					
Prep Date:	3/27/2015		Analysis Date: 3/30/2015		SeqNo: 743943		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	73	10	100.0	0	73.4	47.8	99.7	3.56	28.2	
4-Chloro-3-methylphenol	170	10	200.0	0	86.8	58.1	103	5.11	24.4	
2-Chlorophenol	160	10	200.0	0	79.5	49.5	96.8	2.66	28.1	
1,4-Dichlorobenzene	79	10	100.0	0	78.6	40.4	89.4	2.92	31.2	
2,4-Dinitrotoluene	57	10	100.0	0	57.4	38.6	91.3	12.5	44.4	
N-Nitrosodi-n-propylamine	78	10	100.0	0	77.9	53.9	95.6	1.28	24.2	
4-Nitrophenol	150	10	200.0	0	72.7	26.4	108	9.49	36.6	
Pentachlorophenol	170	20	200.0	0	83.5	36.5	86.6	9.19	29.5	
Phenol	160	10	200.0	0	79.6	29.3	108	0.726	30	
Pyrene	85	10	100.0	0	84.7	45.7	100	6.03	31	
1,2,4-Trichlorobenzene	85	10	100.0	0	85.0	39.3	94.5	0.610	24	
Surr: 2-Fluorophenol	150		200.0		74.7	17.6	104	0	0	
Surr: Phenol-d5	170		200.0		83.5	17.7	89.9	0	0	
Surr: 2,4,6-Tribromophenol	210		200.0		105	16.3	122	0	0	
Surr: Nitrobenzene-d5	81		100.0		81.2	45.3	117	0	0	
Surr: 2-Fluorobiphenyl	78		100.0		77.9	43	113	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B60

07-May-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	Icsd-18372		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 18372		RunNo: 25175					
Prep Date:	3/27/2015		Analysis Date: 3/30/2015		SeqNo: 743943		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	77		100.0		77.1	47.6	122	0	0	

Sample ID	mb-18434		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 18434		RunNo: 25228					
Prep Date:	3/31/2015		Analysis Date: 4/1/2015		SeqNo: 745942		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B60

07-May-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	mb-18434		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 18434		RunNo: 25228					
Prep Date:	3/31/2015		Analysis Date: 4/1/2015		SeqNo: 745942		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B60

07-May-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi-Annual Ponds

Sample ID	mb-18434		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 18434		RunNo: 25228					
Prep Date:	3/31/2015		Analysis Date: 4/1/2015		SeqNo: 745942		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	160		200.0		81.5	17.6	104			
Surr: Phenol-d5	160		200.0		78.0	17.7	89.9			
Surr: 2,4,6-Tribromophenol	180		200.0		89.2	16.3	122			
Surr: Nitrobenzene-d5	76		100.0		76.4	45.3	117			
Surr: 2-Fluorobiphenyl	72		100.0		72.4	43	113			
Surr: 4-Terphenyl-d14	76		100.0		75.7	47.6	122			

Sample ID	lcs-18434		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 18434		RunNo: 25228					
Prep Date:	3/31/2015		Analysis Date: 4/1/2015		SeqNo: 745943		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	72	10	100.0	0	71.7	47.8	99.7			
4-Chloro-3-methylphenol	150	10	200.0	0	76.1	58.1	103			
2-Chlorophenol	140	10	200.0	0	69.7	49.5	96.8			
1,4-Dichlorobenzene	71	10	100.0	0	70.9	40.4	89.4			
2,4-Dinitrotoluene	61	10	100.0	0	60.8	38.6	91.3			
N-Nitrosodi-n-propylamine	72	10	100.0	0	71.5	53.9	95.6			
4-Nitrophenol	140	10	200.0	0	68.9	26.4	108			
Pentachlorophenol	140	20	200.0	0	69.0	36.5	86.6			
Phenol	140	10	200.0	0	70.7	29.3	108			
Pyrene	69	10	100.0	0	68.9	45.7	100			
1,2,4-Trichlorobenzene	74	10	100.0	0	74.5	39.3	94.5			
Surr: 2-Fluorophenol	150		200.0		72.7	17.6	104			
Surr: Phenol-d5	150		200.0		73.8	17.7	89.9			
Surr: 2,4,6-Tribromophenol	180		200.0		92.4	16.3	122			
Surr: Nitrobenzene-d5	74		100.0		73.6	45.3	117			
Surr: 2-Fluorobiphenyl	73		100.0		73.2	43	113			
Surr: 4-Terphenyl-d14	77		100.0		76.6	47.6	122			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

Sample Log-In Check List

Client Name: **Western Refining Gallup**

Work Order Number: **1503B60**

RcptNo: 1

Received by/date: **AT**

03/25/15

Logged By: **Ashley Gallegos**

3/25/2015 4:15:00 PM

Completed By: **Ashley Gallegos**

3/25/2015 5:06:04 PM

Reviewed By: **KMS / AG**

3/26/15

Chain of Custody

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

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☒ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(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: **28**
(<2 or >12 unless noted)
Adjusted? **no**
Checked by: **KMS**

Special Handling (if applicable)

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

Person Notified:

Date:

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Chain-of-Custody Record			
Client: Western Refining Company			
Gallup Refinery			
Mailing Address:			
92 GIANT CROSSING RD, GALLUP, NM 87301			
Phone #: 505-722-3833			
Email or Fax#: 505-863-0930			
2A/QC Package:			
☐ Standard ☐ Level 4 (Full Validation)			
Accreditation:			
☐ NELAP ☐ Other			
☐ EDD (Type)			
Date	Time	Matrix	Sample Request ID
3/25/2015	805	Aqueous	EP-9
3/25/2015	840	Aqueous	EP-7
3/25/2015	915	Aqueous	EP-8
3/25/2015	935	Aqueous	EP-6
3/25/2015	1030	Aqueous	EP-11
3/25/2015	1050	Aqueous	EP-12A
3/25/2015	1120	Aqueous	EP-12B
3/25/2015		Aqueous	TRIP BLANK
3/25/2015		Aqueous	FIELD BLANK
3/25/2015		Aqueous	BLIND DUPLICATE
Date:	Time:	Relinquished by:	Received by:
3/25/2015	1245	[Signature]	[Signature]
Date:	Time:	Relinquished by:	Received by:
3/25/15	1415	[Signature]	[Signature]

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



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

April 10, 2015

Cheryl Johnson

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

RE: 2015 Semi Annual Ponds

OrderNo.: 1503B62

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 3 sample(s) on 3/25/2015 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', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B62

Date Reported: 4/10/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: BW to EP-2

Project: 2015 Semi Annual Ponds

Collection Date: 3/23/2015 2:45:00 PM

Lab ID: 1503B62-001

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	0.59	0.10		mg/L	1	3/27/2015 11:19:16 PM	R25138
Chloride	81	10		mg/L	20	3/27/2015 11:56:30 PM	R25138
Bromide	0.28	0.10		mg/L	1	3/27/2015 11:19:16 PM	R25138
Phosphorus, Orthophosphate (As P)	ND	10	H	mg/L	20	3/27/2015 11:56:30 PM	R25138
Sulfate	2000	50		mg/L	100	4/1/2015 12:45:25 AM	R25209
Nitrate+Nitrite as N	ND	1.0		mg/L	5	3/28/2015 12:08:54 AM	R25138
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Calcium	5.4	1.0		mg/L	1	4/6/2015 2:56:58 PM	18398
Magnesium	1.0	1.0		mg/L	1	4/6/2015 2:56:58 PM	18398
Potassium	13	1.0		mg/L	1	4/6/2015 2:56:58 PM	18398
Sodium	1400	50		mg/L	50	4/6/2015 3:03:09 PM	18398

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 1 of 13
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B62

Date Reported: 4/10/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015 Semi Annual Ponds

Collection Date:

Lab ID: 1503B62-002

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
Toluene	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
Ethylbenzene	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
Naphthalene	ND	2.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
1-Methylnaphthalene	ND	4.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
2-Methylnaphthalene	ND	4.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
Acetone	ND	10		µg/L	1	3/30/2015 11:34:15 PM	R25171
Bromobenzene	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
Bromodichloromethane	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
Bromoform	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
Bromomethane	ND	3.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
2-Butanone	ND	10		µg/L	1	3/30/2015 11:34:15 PM	R25171
Carbon disulfide	ND	10		µg/L	1	3/30/2015 11:34:15 PM	R25171
Carbon Tetrachloride	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
Chlorobenzene	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
Chloroethane	ND	2.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
Chloroform	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
Chloromethane	ND	3.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
2-Chlorotoluene	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
4-Chlorotoluene	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
cis-1,2-DCE	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
Dibromochloromethane	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
Dibromomethane	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
1,1-Dichloroethane	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
1,1-Dichloroethene	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
1,2-Dichloropropane	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
1,3-Dichloropropane	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
2,2-Dichloropropane	ND	2.0		µg/L	1	3/30/2015 11:34:15 PM	R25171

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B62

Date Reported: 4/10/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015 Semi Annual Ponds

Collection Date:

Lab ID: 1503B62-002

Matrix: AQUEOUS

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloropropene	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
Hexachlorobutadiene	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
2-Hexanone	ND	10		µg/L	1	3/30/2015 11:34:15 PM	R25171
Isopropylbenzene	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
4-Isopropyltoluene	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
4-Methyl-2-pentanone	ND	10		µg/L	1	3/30/2015 11:34:15 PM	R25171
Methylene Chloride	ND	3.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
n-Butylbenzene	ND	3.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
n-Propylbenzene	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
sec-Butylbenzene	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
Styrene	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
tert-Butylbenzene	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
trans-1,2-DCE	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
Trichlorofluoromethane	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
Vinyl chloride	ND	1.0		µg/L	1	3/30/2015 11:34:15 PM	R25171
Xylenes, Total	ND	1.5		µg/L	1	3/30/2015 11:34:15 PM	R25171
Surr: 1,2-Dichloroethane-d4	92.6	70-130		%REC	1	3/30/2015 11:34:15 PM	R25171
Surr: 4-Bromofluorobenzene	97.8	70-130		%REC	1	3/30/2015 11:34:15 PM	R25171
Surr: Dibromofluoromethane	94.9	70-130		%REC	1	3/30/2015 11:34:15 PM	R25171
Surr: Toluene-d8	89.2	70-130		%REC	1	3/30/2015 11:34:15 PM	R25171

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 3 of 13
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B62

Date Reported: 4/10/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: 2015 Semi Annual Ponds

Collection Date:

Lab ID: 1503B62-003

Matrix: TRIP BLANK

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
Toluene	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
Ethylbenzene	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
Naphthalene	ND	2.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
1-Methylnaphthalene	ND	4.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
2-Methylnaphthalene	ND	4.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
Acetone	ND	10		µg/L	1	3/31/2015 12:01:33 AM	R25171
Bromobenzene	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
Bromodichloromethane	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
Bromoform	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
Bromomethane	ND	3.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
2-Butanone	ND	10		µg/L	1	3/31/2015 12:01:33 AM	R25171
Carbon disulfide	ND	10		µg/L	1	3/31/2015 12:01:33 AM	R25171
Carbon Tetrachloride	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
Chlorobenzene	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
Chloroethane	ND	2.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
Chloroform	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
Chloromethane	ND	3.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
2-Chlorotoluene	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
4-Chlorotoluene	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
cis-1,2-DCE	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
Dibromochloromethane	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
Dibromomethane	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
1,1-Dichloroethane	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
1,1-Dichloroethene	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
1,2-Dichloropropane	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
1,3-Dichloropropane	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
2,2-Dichloropropane	ND	2.0		µg/L	1	3/31/2015 12:01:33 AM	R25171

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B62

Date Reported: 4/10/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: 2015 Semi Annual Ponds

Collection Date:

Lab ID: 1503B62-003

Matrix: TRIP BLANK

Received Date: 3/25/2015 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloropropene	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
Hexachlorobutadiene	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
2-Hexanone	ND	10		µg/L	1	3/31/2015 12:01:33 AM	R25171
Isopropylbenzene	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
4-Isopropyltoluene	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
4-Methyl-2-pentanone	ND	10		µg/L	1	3/31/2015 12:01:33 AM	R25171
Methylene Chloride	ND	3.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
n-Butylbenzene	ND	3.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
n-Propylbenzene	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
sec-Butylbenzene	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
Styrene	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
tert-Butylbenzene	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
trans-1,2-DCE	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
Trichlorofluoromethane	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
Vinyl chloride	ND	1.0		µg/L	1	3/31/2015 12:01:33 AM	R25171
Xylenes, Total	ND	1.5		µg/L	1	3/31/2015 12:01:33 AM	R25171
Surr: 1,2-Dichloroethane-d4	89.5	70-130		%REC	1	3/31/2015 12:01:33 AM	R25171
Surr: 4-Bromofluorobenzene	93.7	70-130		%REC	1	3/31/2015 12:01:33 AM	R25171
Surr: Dibromofluoromethane	102	70-130		%REC	1	3/31/2015 12:01:33 AM	R25171
Surr: Toluene-d8	88.0	70-130		%REC	1	3/31/2015 12:01:33 AM	R25171

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B62

10-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi Annual Ponds

Sample ID	MB-18398	SampType:	MBLK		TestCode:	EPA Method 200.7: Total Metals				
Client ID:	PBW	Batch ID:	18398		RunNo:	25227				
Prep Date:	3/28/2015	Analysis Date:	4/1/2015		SeqNo:	745953		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	ND	1.0								
Magnesium	ND	1.0								
Potassium	ND	1.0								
Sodium	ND	1.0								

Sample ID	LCS-18398		SampType: LCS		TestCode: EPA Method 200.7: Total Metals					
Client ID:	LCSW		Batch ID: 18398		RunNo: 25227					
Prep Date:	3/28/2015		Analysis Date: 4/1/2015		SeqNo: 745954		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	51	1.0	50.00	0	102	85	115			
Magnesium	51	1.0	50.00	0	103	85	115			
Potassium	52	1.0	50.00	0	103	85	115			
Sodium	52	1.0	50.00	0	104	85	115			

Sample ID	1503B62-001BMS	SampType: MS			TestCode: EPA Method 200.7: Total Metals					
Client ID:	BW to EP-2	Batch ID: 18398			RunNo: 25328					
Prep Date:	3/28/2015	Analysis Date: 4/6/2015			SeqNo: 749345		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	58	1.0	50.00	5.364	106	70	130			
Magnesium	54	1.0	50.00	1.008	106	70	130			
Potassium	67	1.0	50.00	12.57	108	70	130			

Sample ID	1503B62-001BMSD		SampType: MSD		TestCode: EPA Method 200.7: Total Metals					
Client ID:	BW to EP-2		Batch ID: 18398		RunNo: 25328					
Prep Date:	3/28/2015		Analysis Date: 4/6/2015		SeqNo: 749346		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	57	1.0	50.00	5.364	104	70	130	2.02	20	
Magnesium	53	1.0	50.00	1.008	105	70	130	1.27	20	
Potassium	66	1.0	50.00	12.57	107	70	130	1.15	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B62

10-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi Annual Ponds

Sample ID MB	SampType: MBLK		TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch ID: R25138		RunNo: 25138							
Prep Date:	Analysis Date: 3/27/2015		SeqNo: 742255		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								
Nitrate+Nitrite as N	ND	0.20								

Sample ID LCS	SampType: LCS		TestCode: EPA Method 300.0: Anions							
Client ID: LCSW	Batch ID: R25138		RunNo: 25138							
Prep Date:	Analysis Date: 3/27/2015		SeqNo: 742256		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.51	0.10	0.5000	0	101	90	110			
Chloride	5.0	0.50	5.000	0	99.1	90	110			
Bromide	2.5	0.10	2.500	0	101	90	110			
Phosphorus, Orthophosphate (As P	5.5	0.50	5.000	0	110	90	110			
Nitrate+Nitrite as N	3.5	0.20	3.500	0	101	90	110			

Sample ID MB	SampType: MBLK		TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch ID: R25138		RunNo: 25138							
Prep Date:	Analysis Date: 3/27/2015		SeqNo: 742283		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								
Nitrate+Nitrite as N	ND	0.20								

Sample ID LCS	SampType: LCS		TestCode: EPA Method 300.0: Anions							
Client ID: LCSW	Batch ID: R25138		RunNo: 25138							
Prep Date:	Analysis Date: 3/27/2015		SeqNo: 742284		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.53	0.10	0.5000	0	106	90	110			
Chloride	5.0	0.50	5.000	0	99.5	90	110			
Bromide	2.5	0.10	2.500	0	102	90	110			
Phosphorus, Orthophosphate (As P	5.6	0.50	5.000	0	113	90	110			S
Nitrate+Nitrite as N	3.6	0.20	3.500	0	102	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B62

10-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi Annual Ponds

Sample ID	1503B62-001AMS		SampType: MS			TestCode: EPA Method 300.0: Anions				
Client ID:	BW to EP-2		Batch ID: R25138			RunNo: 25138				
Prep Date:			Analysis Date: 3/27/2015			SeqNo: 742312		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.99	0.10	0.5000	0.5880	81.2	66.1	113			
Bromide	2.3	0.10	2.500	0.2770	81.4	82.5	103			S

Sample ID	1503B62-001AMSD		SampType: MSD			TestCode: EPA Method 300.0: Anions				
Client ID:	BW to EP-2		Batch ID: R25138			RunNo: 25138				
Prep Date:			Analysis Date: 3/27/2015			SeqNo: 742313		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.97	0.10	0.5000	0.5880	75.8	66.1	113	2.75	20	
Bromide	2.3	0.10	2.500	0.2770	80.2	82.5	103	1.31	20	S

Sample ID	MB		SampType: MBLK			TestCode: EPA Method 300.0: Anions				
Client ID:	PBW		Batch ID: R25209			RunNo: 25209				
Prep Date:			Analysis Date: 3/31/2015			SeqNo: 745213		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	ND	0.50								

Sample ID	LCS		SampType: LCS			TestCode: EPA Method 300.0: Anions				
Client ID:	LCSW		Batch ID: R25209			RunNo: 25209				
Prep Date:			Analysis Date: 3/31/2015			SeqNo: 745214		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	9.9	0.50	10.00	0	98.8	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B62

10-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi Annual Ponds

Sample ID	5ml rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R25171	RunNo:	25171					
Prep Date:		Analysis Date:	3/30/2015	SeqNo:	743760	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B62

10-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi Annual Ponds

Sample ID	5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R25171			RunNo: 25171					
Prep Date:		Analysis Date: 3/30/2015			SeqNo: 743760		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.3		10.00		93.2	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		91.6	70	130			
Surr: Dibromofluoromethane	9.9		10.00		98.8	70	130			
Surr: Toluene-d8	8.9		10.00		89.1	70	130			

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R25171			RunNo: 25171					
Prep Date:		Analysis Date: 3/30/2015			SeqNo: 743763		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	109	70	130			
Toluene	21	1.0	20.00	0	105	70	130			
Chlorobenzene	20	1.0	20.00	0	99.6	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B62

10-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi Annual Ponds

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R25171			RunNo: 25171					
Prep Date:		Analysis Date: 3/30/2015			SeqNo: 743763		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	24	1.0	20.00	0	122	75.6	144			
Trichloroethene (TCE)	21	1.0	20.00	0	106	70	130			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.6	70	130			
Surr: 4-Bromofluorobenzene	9.1		10.00		90.8	70	130			
Surr: Dibromofluoromethane	9.7		10.00		96.8	70	130			
Surr: Toluene-d8	8.9		10.00		89.4	70	130			

Sample ID	b4	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R25171			RunNo: 25171					
Prep Date:		Analysis Date: 3/30/2015			SeqNo: 743825		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B62

10-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi Annual Ponds

Sample ID b4	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R25171			RunNo: 25171						
Prep Date:	Analysis Date: 3/30/2015			SeqNo: 743825		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.9	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B62

10-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 Semi Annual Ponds

Sample ID b4	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R25171			RunNo: 25171						
Prep Date:	Analysis Date: 3/30/2015			SeqNo: 743825		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	9.3		10.00		93.2	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	8.7		10.00		87.0	70	130			

Sample ID 100ng lcs2	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSW	Batch ID: R25171			RunNo: 25171						
Prep Date:	Analysis Date: 3/30/2015			SeqNo: 743831		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	110	70	130			
Toluene	21	1.0	20.00	0	107	70	130			
Chlorobenzene	20	1.0	20.00	0	99.3	70	130			
1,1-Dichloroethene	24	1.0	20.00	0	121	75.6	144			
Trichloroethene (TCE)	21	1.0	20.00	0	106	70	130			
Surr: 1,2-Dichloroethane-d4	8.8		10.00		88.1	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		93.7	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	8.9		10.00		89.0	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

Sample Log-In Check List

Client Name: **Western Refining Gallup**

Work Order Number: **1503B62**

RcptNo: 1

Received by/date: *AT* *03/25/15*

Logged By: **Ashley Gallegos** **3/25/2015 4:15:00 PM**

Completed By: **Ashley Gallegos** **3/25/2015 5:34:24 PM**

Reviewed By: *[Signature]* *03/25/15*

Chain of Custody

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

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☒ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(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: *02*
(<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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

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

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

Analysis Request

Chain-of-Custody Record							
Client: Western Refining Company		Turn-Around Time: ☒ Standard ☐ Rush					
Gallup Refinery		Project Name:					
Mailing Address:		2015 SEMI-ANNUAL PONDS					
92 GIANT CROSSING RD, GALLUP, NM 87301		Project #: PO # 20825207					
Phone #: 505-722-3833		BW TO EP-2					
email or Fax#: 505-863-0930		Project Manager:					
QA/QC Package:		C. JOHNSON (cheryl.johnson@wnr.com)					
☐ Standard ☐ Level 4 (Full Validation)		Sampler: C. JOHNSON					
Accreditation:		On Ice: ☒ Yes ☐ No					
☐ NELAP		Sample Temperature: 0					
☐ EDD (Type)		HEAL No. 1503B102					
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	
3/23/2015	1445	Aqueous	BW to EP-2	MISC	MISC	-001	
3/23/2015		Aqueous	FIELD BLANK	3-40ml VOAs	HCL	-002	
3/23/2015		Aqueous	TRIP BLANK	3-40ml VOAs	HCL	-003	
Date:	Time:	Relinquished by:		Received by:		Date	Time
3-25-15	1245					3/25/15	1245
Date:	Time:	Relinquished by:		Received by:		Date	Time
3-25-15	1415					3/25/15	1415

This serves as notice of this possibility. Any sub-contradicted data will be clearly noted on the analytical report. This serves as notice of this possibility. Any sub-contradicted data will be clearly noted on the analytical report.



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

April 08, 2015

Cheryl Johnson

Western Refining Company

Rt. 3 Box 7

Gallup, NM 87301

TEL: (505) 722-0231

FAX

RE: 2015 SEMI ANNUAL PONDS

OrderNo.: 1503C24

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 13 sample(s) on 3/26/2015 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', is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503C24

Date Reported: 4/8/2015

CLIENT: Western Refining Company

Client Sample ID: EP-2

Project: 2015 SEMI ANNUAL PONDS

Collection Date: 3/26/2015 7:30:00 AM

Lab ID: 1503C24-001

Matrix: AQUEOUS

Received Date: 3/26/2015 12:03:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM5210B: BOD							Analyst: SMS
Biochemical Oxygen Demand	330	2.0		mg/L	1	3/31/2015 4:08:00 PM	18347
SM 9223B FECAL INDICATOR: E. COLI MPN							Analyst: MRA
E. Coli	>24196	10.00		CFU/100ml	10	3/27/2015 3:15:00 PM	18360

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 1 of 23
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503C24

Date Reported: 4/8/2015

CLIENT: Western Refining Company

Client Sample ID: EP-3

Project: 2015 SEMI ANNUAL PONDS

Collection Date: 3/26/2015 7:35:00 AM

Lab ID: 1503C24-002

Matrix: AQUEOUS

Received Date: 3/26/2015 12:03:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM5210B: BOD							Analyst: SMS
Biochemical Oxygen Demand	230	2.0		mg/L	1	3/31/2015 4:08:00 PM	18347
SM 9223B FECAL INDICATOR: E. COLI MPN							Analyst: MRA
E. Coli	24196	10.00		CFU/100ml	10	3/27/2015 3:15:00 PM	18360

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 2 of 23
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503C24

Date Reported: 4/8/2015

CLIENT: Western Refining Company

Client Sample ID: EP-4

Project: 2015 SEMI ANNUAL PONDS

Collection Date: 3/26/2015 7:40:00 AM

Lab ID: 1503C24-003

Matrix: AQUEOUS

Received Date: 3/26/2015 12:03:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM5210B: BOD							Analyst: SMS
Biochemical Oxygen Demand	110	2.0		mg/L	1	3/31/2015 4:08:00 PM	18347
SM 9223B FECAL INDICATOR: E. COLI MPN							Analyst: MRA
E. Coli	5475	10.00		CFU/100ml	10	3/27/2015 3:15:00 PM	18360

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 3 of 23
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503C24

Date Reported: 4/8/2015

CLIENT: Western Refining Company

Client Sample ID: EP-5

Project: 2015 SEMI ANNUAL PONDS

Collection Date: 3/26/2015 7:45:00 AM

Lab ID: 1503C24-004

Matrix: AQUEOUS

Received Date: 3/26/2015 12:03:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM5210B: BOD							Analyst: SMS
Biochemical Oxygen Demand	47	2.0		mg/L	1	3/31/2015 4:08:00 PM	18347
SM 9223B FECAL INDICATOR: E. COLI MPN							Analyst: MRA
E. Coli	135	10.00		CFU/100ml	10	3/27/2015 3:15:00 PM	18360

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 4 of 23
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503C24

Date Reported: 4/8/2015

CLIENT: Western Refining Company

Client Sample ID: EP-6

Project: 2015 SEMI ANNUAL PONDS

Collection Date: 3/26/2015 7:50:00 AM

Lab ID: 1503C24-005

Matrix: AQUEOUS

Received Date: 3/26/2015 12:03:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM5210B: BOD							Analyst: SMS
Biochemical Oxygen Demand	47	2.0		mg/L	1	3/31/2015 4:08:00 PM	18347
SM 9223B FECAL INDICATOR: E. COLI MPN							Analyst: MRA
E. Coli	63	10.00		CFU/100ml	10	3/27/2015 3:15:00 PM	18360

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 5 of 23
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503C24

Date Reported: 4/8/2015

CLIENT: Western Refining Company

Client Sample ID: EP-7

Project: 2015 SEMI ANNUAL PONDS

Collection Date: 3/26/2015 8:05:00 AM

Lab ID: 1503C24-006

Matrix: AQUEOUS

Received Date: 3/26/2015 12:03:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM5210B: BOD							Analyst: SMS
Biochemical Oxygen Demand	11	2.0		mg/L	1	3/31/2015 4:08:00 PM	18347
SM 9223B FECAL INDICATOR: E. COLI MPN							Analyst: MRA
E. Coli	<10	10.00		CFU/100ml	10	3/27/2015 3:15:00 PM	18360

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 6 of 23
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503C24

Date Reported: 4/8/2015

CLIENT: Western Refining Company

Client Sample ID: EP-8

Project: 2015 SEMI ANNUAL PONDS

Collection Date: 3/26/2015 8:10:00 AM

Lab ID: 1503C24-007

Matrix: AQUEOUS

Received Date: 3/26/2015 12:03:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM5210B: BOD							Analyst: SMS
Biochemical Oxygen Demand	12	2.0		mg/L	1	3/31/2015 4:08:00 PM	18347
SM 9223B FECAL INDICATOR: E. COLI MPN							Analyst: MRA
E. Coli	<1	1.000		CFU/100ml	1	3/27/2015 3:15:00 PM	18360

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 7 of 23
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503C24

Date Reported: 4/8/2015

CLIENT: Western Refining Company

Client Sample ID: EP-9

Project: 2015 SEMI ANNUAL PONDS

Collection Date: 3/26/2015 8:35:00 AM

Lab ID: 1503C24-008

Matrix: AQUEOUS

Received Date: 3/26/2015 12:03:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM5210B: BOD							Analyst: SMS
Biochemical Oxygen Demand	11	2.0		mg/L	1	4/1/2015 2:28:00 PM	18382
SM 9223B FECAL INDICATOR: E. COLI MPN							Analyst: MRA
E. Coli	<10	10.00		CFU/100ml	10	3/27/2015 3:15:00 PM	18360

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 8 of 23
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503C24

Date Reported: 4/8/2015

CLIENT: Western Refining Company

Client Sample ID: EP-11

Project: 2015 SEMI ANNUAL PONDS

Collection Date: 3/26/2015 8:15:00 AM

Lab ID: 1503C24-009

Matrix: AQUEOUS

Received Date: 3/26/2015 12:03:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM5210B: BOD							Analyst: SMS
Biochemical Oxygen Demand	16	2.0		mg/L	1	4/1/2015 2:28:00 PM	18382
SM 9223B FECAL INDICATOR: E. COLI MPN							Analyst: MRA
E. Coli	10	10.00		CFU/100ml	10	3/27/2015 3:15:00 PM	18360

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 9 of 23
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503C24

Date Reported: 4/8/2015

CLIENT: Western Refining Company

Client Sample ID: EP-12A

Project: 2015 SEMI ANNUAL PONDS

Collection Date: 3/26/2015 8:20:00 AM

Lab ID: 1503C24-010

Matrix: AQUEOUS

Received Date: 3/26/2015 12:03:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM5210B: BOD							Analyst: SMS
Biochemical Oxygen Demand	170	2.0		mg/L	1	4/1/2015 2:28:00 PM	18382
SM 9223B FECAL INDICATOR: E. COLI MPN							Analyst: MRA
E. Coli	12033	10.00		CFU/100ml	10	3/27/2015 3:15:00 PM	18360

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 10 of 23
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503C24

Date Reported: 4/8/2015

CLIENT: Western Refining Company

Client Sample ID: EP-12B

Project: 2015 SEMI ANNUAL PONDS

Collection Date: 3/26/2015 8:25:00 AM

Lab ID: 1503C24-011

Matrix: AQUEOUS

Received Date: 3/26/2015 12:03:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM5210B: BOD							Analyst: SMS
Biochemical Oxygen Demand	270	2.0		mg/L	1	4/1/2015 2:28:00 PM	18382
SM 9223B FECAL INDICATOR: E. COLI MPN							Analyst: MRA
E. Coli	17329	10.00		CFU/100ml	10	3/27/2015 3:15:00 PM	18360

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 11 of 23
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503C24

Date Reported: 4/8/2015

CLIENT: Western Refining Company

Client Sample ID: Trip Blank

Project: 2015 SEMI ANNUAL PONDS

Collection Date:

Lab ID: 1503C24-012

Matrix: TRIP BLANK

Received Date: 3/26/2015 12:03:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
Toluene	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
Ethylbenzene	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
Naphthalene	ND	2.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
1-Methylnaphthalene	ND	4.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
2-Methylnaphthalene	ND	4.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
Acetone	ND	10		µg/L	1	3/31/2015 12:28:50 AM	R25171
Bromobenzene	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
Bromodichloromethane	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
Bromoform	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
Bromomethane	ND	3.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
2-Butanone	ND	10		µg/L	1	3/31/2015 12:28:50 AM	R25171
Carbon disulfide	ND	10		µg/L	1	3/31/2015 12:28:50 AM	R25171
Carbon Tetrachloride	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
Chlorobenzene	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
Chloroethane	ND	2.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
Chloroform	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
Chloromethane	ND	3.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
2-Chlorotoluene	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
4-Chlorotoluene	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
cis-1,2-DCE	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
Dibromochloromethane	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
Dibromomethane	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
1,1-Dichloroethane	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
1,1-Dichloroethene	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
1,2-Dichloropropane	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
1,3-Dichloropropane	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
2,2-Dichloropropane	ND	2.0		µg/L	1	3/31/2015 12:28:50 AM	R25171

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503C24

Date Reported: 4/8/2015

CLIENT: Western Refining Company

Client Sample ID: Trip Blank

Project: 2015 SEMI ANNUAL PONDS

Collection Date:

Lab ID: 1503C24-012

Matrix: TRIP BLANK

Received Date: 3/26/2015 12:03:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloropropene	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
Hexachlorobutadiene	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
2-Hexanone	ND	10		µg/L	1	3/31/2015 12:28:50 AM	R25171
Isopropylbenzene	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
4-Isopropyltoluene	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
4-Methyl-2-pentanone	ND	10		µg/L	1	3/31/2015 12:28:50 AM	R25171
Methylene Chloride	ND	3.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
n-Butylbenzene	ND	3.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
n-Propylbenzene	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
sec-Butylbenzene	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
Styrene	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
tert-Butylbenzene	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
trans-1,2-DCE	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
Trichlorofluoromethane	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
Vinyl chloride	ND	1.0		µg/L	1	3/31/2015 12:28:50 AM	R25171
Xylenes, Total	ND	1.5		µg/L	1	3/31/2015 12:28:50 AM	R25171
Surr: 1,2-Dichloroethane-d4	88.5	70-130		%REC	1	3/31/2015 12:28:50 AM	R25171
Surr: 4-Bromofluorobenzene	95.1	70-130		%REC	1	3/31/2015 12:28:50 AM	R25171
Surr: Dibromofluoromethane	100	70-130		%REC	1	3/31/2015 12:28:50 AM	R25171
Surr: Toluene-d8	87.4	70-130		%REC	1	3/31/2015 12:28:50 AM	R25171

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 13 of 23
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503C24

Date Reported: 4/8/2015

CLIENT: Western Refining Company

Client Sample ID: Field Blank

Project: 2015 SEMI ANNUAL PONDS

Collection Date: 3/26/2015 7:00:00 AM

Lab ID: 1503C24-013

Matrix: AQUEOUS

Received Date: 3/26/2015 12:03:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
Toluene	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
Ethylbenzene	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
Naphthalene	ND	2.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
1-Methylnaphthalene	ND	4.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
2-Methylnaphthalene	ND	4.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
Acetone	ND	10		µg/L	1	3/31/2015 12:56:10 AM	R25171
Bromobenzene	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
Bromodichloromethane	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
Bromoform	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
Bromomethane	ND	3.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
2-Butanone	ND	10		µg/L	1	3/31/2015 12:56:10 AM	R25171
Carbon disulfide	ND	10		µg/L	1	3/31/2015 12:56:10 AM	R25171
Carbon Tetrachloride	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
Chlorobenzene	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
Chloroethane	ND	2.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
Chloroform	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
Chloromethane	ND	3.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
2-Chlorotoluene	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
4-Chlorotoluene	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
cis-1,2-DCE	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
Dibromochloromethane	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
Dibromomethane	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
1,1-Dichloroethane	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
1,1-Dichloroethene	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
1,2-Dichloropropane	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
1,3-Dichloropropane	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
2,2-Dichloropropane	ND	2.0		µg/L	1	3/31/2015 12:56:10 AM	R25171

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503C24

Date Reported: 4/8/2015

CLIENT: Western Refining Company

Client Sample ID: Field Blank

Project: 2015 SEMI ANNUAL PONDS

Collection Date: 3/26/2015 7:00:00 AM

Lab ID: 1503C24-013

Matrix: AQUEOUS

Received Date: 3/26/2015 12:03:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloropropene	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
Hexachlorobutadiene	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
2-Hexanone	ND	10		µg/L	1	3/31/2015 12:56:10 AM	R25171
Isopropylbenzene	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
4-Isopropyltoluene	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
4-Methyl-2-pentanone	ND	10		µg/L	1	3/31/2015 12:56:10 AM	R25171
Methylene Chloride	ND	3.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
n-Butylbenzene	ND	3.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
n-Propylbenzene	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
sec-Butylbenzene	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
Styrene	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
tert-Butylbenzene	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
trans-1,2-DCE	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
Trichlorofluoromethane	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
Vinyl chloride	ND	1.0		µg/L	1	3/31/2015 12:56:10 AM	R25171
Xylenes, Total	ND	1.5		µg/L	1	3/31/2015 12:56:10 AM	R25171
Surr: 1,2-Dichloroethane-d4	99.4	70-130		%REC	1	3/31/2015 12:56:10 AM	R25171
Surr: 4-Bromofluorobenzene	96.0	70-130		%REC	1	3/31/2015 12:56:10 AM	R25171
Surr: Dibromofluoromethane	101	70-130		%REC	1	3/31/2015 12:56:10 AM	R25171
Surr: Toluene-d8	87.3	70-130		%REC	1	3/31/2015 12:56:10 AM	R25171

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 15 of 23
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503C24

08-Apr-15

Client: Western Refining Company
Project: 2015 SEMI ANNUAL PONDS

Sample ID	5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R25171			RunNo: 25171					
Prep Date:		Analysis Date: 3/30/2015			SeqNo: 743760		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503C24

08-Apr-15

Client: Western Refining Company
Project: 2015 SEMI ANNUAL PONDS

Sample ID	5ml rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R25171	RunNo:	25171					
Prep Date:		Analysis Date:	3/30/2015	SeqNo:	743760	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.3		10.00		93.2	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		91.6	70	130			
Surr: Dibromofluoromethane	9.9		10.00		98.8	70	130			
Surr: Toluene-d8	8.9		10.00		89.1	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID:	R25171	RunNo:	25171					
Prep Date:		Analysis Date:	3/30/2015	SeqNo:	743763	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	109	70	130			
Toluene	21	1.0	20.00	0	105	70	130			
Chlorobenzene	20	1.0	20.00	0	99.6	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503C24

08-Apr-15

Client: Western Refining Company
Project: 2015 SEMI ANNUAL PONDS

Sample ID 100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSW	Batch ID: R25171			RunNo: 25171						
Prep Date:	Analysis Date: 3/30/2015			SeqNo: 743763		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	24	1.0	20.00	0	122	75.6	144			
Trichloroethene (TCE)	21	1.0	20.00	0	106	70	130			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.6	70	130			
Surr: 4-Bromofluorobenzene	9.1		10.00		90.8	70	130			
Surr: Dibromofluoromethane	9.7		10.00		96.8	70	130			
Surr: Toluene-d8	8.9		10.00		89.4	70	130			

Sample ID b4	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R25171			RunNo: 25171						
Prep Date:	Analysis Date: 3/30/2015			SeqNo: 743825		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503C24

08-Apr-15

Client: Western Refining Company
Project: 2015 SEMI ANNUAL PONDS

Sample ID b4	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R25171			RunNo: 25171						
Prep Date:	Analysis Date: 3/30/2015			SeqNo: 743825		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.9	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503C24

08-Apr-15

Client: Western Refining Company
Project: 2015 SEMI ANNUAL PONDS

Sample ID b4	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R25171			RunNo: 25171						
Prep Date:	Analysis Date: 3/30/2015			SeqNo: 743825		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	9.3		10.00		93.2	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	8.7		10.00		87.0	70	130			

Sample ID 100ng lcs2	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSW	Batch ID: R25171			RunNo: 25171						
Prep Date:	Analysis Date: 3/30/2015			SeqNo: 743831		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	110	70	130			
Toluene	21	1.0	20.00	0	107	70	130			
Chlorobenzene	20	1.0	20.00	0	99.3	70	130			
1,1-Dichloroethene	24	1.0	20.00	0	121	75.6	144			
Trichloroethene (TCE)	21	1.0	20.00	0	106	70	130			
Surr: 1,2-Dichloroethane-d4	8.8		10.00		88.1	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		93.7	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	8.9		10.00		89.0	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503C24

08-Apr-15

Client: Western Refining Company
Project: 2015 SEMI ANNUAL PONDS

Sample ID	MB-18347		SampType:	MBLK		TestCode:	SM5210B: BOD			
Client ID:	PBW		Batch ID:	18347		RunNo:	25256			
Prep Date:	3/26/2015		Analysis Date:	3/31/2015		SeqNo:	746763		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	ND	2.0								H

Sample ID	MB--18347		SampType:	MBLK		TestCode:	SM5210B: BOD			
Client ID:	PBW		Batch ID:	18347		RunNo:	25256			
Prep Date:	3/26/2015		Analysis Date:	3/31/2015		SeqNo:	746764		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	ND	2.0								H

Sample ID	LCS-18347		SampType:	LCS		TestCode:	SM5210B: BOD			
Client ID:	LCSW		Batch ID:	18347		RunNo:	25256			
Prep Date:	3/26/2015		Analysis Date:	3/31/2015		SeqNo:	746765		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	230	2.0	198.0	0	116	77.3	139			

Sample ID	LCSD-18347		SampType:	LCSD		TestCode:	SM5210B: BOD			
Client ID:	LCSS02		Batch ID:	18347		RunNo:	25256			
Prep Date:	3/26/2015		Analysis Date:	3/31/2015		SeqNo:	746766		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	250	2.0	198.0	0	125	77.3	139	7.36	20	

Sample ID	MB-18382		SampType:	MBLK		TestCode:	SM5210B: BOD			
Client ID:	PBW		Batch ID:	18382		RunNo:	25258			
Prep Date:	3/27/2015		Analysis Date:	4/1/2015		SeqNo:	746812		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--18382		SampType:	MBLK		TestCode:	SM5210B: BOD			
Client ID:	PBW		Batch ID:	18382		RunNo:	25258			
Prep Date:	3/27/2015		Analysis Date:	4/1/2015		SeqNo:	746813		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	ND	2.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
 E Value above quantitation range
 J Analyte detected below quantitation limits
 O RSD is greater than RSDlimit
 R RPD outside accepted recovery limits
 S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503C24

08-Apr-15

Client: Western Refining Company
Project: 2015 SEMI ANNUAL PONDS

Sample ID	LCS-18382		SampType: LCS		TestCode: SM5210B: BOD					
Client ID:	LCSW		Batch ID: 18382		RunNo: 25258					
Prep Date:	3/27/2015		Analysis Date: 4/1/2015		SeqNo: 746814		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	230	2.0	198.0	0	115	77.3	139			

Sample ID	LCSD-18382		SampType: LCSD		TestCode: SM5210B: BOD					
Client ID:	LCSS02		Batch ID: 18382		RunNo: 25258					
Prep Date:	3/27/2015		Analysis Date: 4/1/2015		SeqNo: 746815		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	220	2.0	198.0	0	112	77.3	139	2.66	20	

Sample ID	1503C24-008BDUP		SampType: DUP		TestCode: SM5210B: BOD					
Client ID:	EP-9		Batch ID: 18382		RunNo: 25258					
Prep Date:	3/27/2015		Analysis Date: 4/1/2015		SeqNo: 746817		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	11	2.0						1.20	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503C24

08-Apr-15

Client: Western Refining Company
Project: 2015 SEMI ANNUAL PONDS

Sample ID	MB-18360	SampType:	MBLK	TestCode:	SM 9223B	Fecal Indicator:	E. coli	MPN		
Client ID:	PBW	Batch ID:	18360	RunNo:	25154					
Prep Date:	3/26/2015	Analysis Date:	3/27/2015	SeqNo:	743187	Units:	CFU/100ml			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
E. Coli	<1	1.000								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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



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: 1503C24

RcptNo: 1

Received by/date:

AT

03/26/15

Logged By:

Lindsay Mangin

3/26/2015 12:03:00 PM

Lindsay Mangin

Completed By:

Lindsay Mangin

3/26/2015 12:12:53 PM

Lindsay Mangin

Reviewed By:

AT

03/26/15

@

1232

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: _____
(<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.3	Good	Yes			

Chain-of-Custody Record

Client: Western Refining Company

Gallup Refinery

Mailing Address:

92 GIANT CROSSING RD, GALLUP, NM 87301

Phone #: 505-722-3833

email or Fax#: 505-863-0930

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:

X Standard ☐ Rush

Project Name:

2015 SEMI-ANNUAL - PONDS

Project #: PO # 20825207

EP-2 THRU 12B

Project Manager:

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

Sampler: C. JOHNSON

On Ice: ☒ Yes ☐ No

Sample Temperature: 33

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BOD	F-COL	8260	Air Bubbles (Y or N)
3/26/2015	730	Aqueous	EP-2	MISC	MISC	-001	X	X		
3/26/2015	735	Aqueous	EP-3	MISC	MISC	-002	X	X		
3/26/2015	740	Aqueous	EP-4	MISC	MISC	-003	X	X		
3/26/2015	745	Aqueous	EP-5	MISC	MISC	-004	X	X		
3/26/2015	750	Aqueous	EP-6	MISC	MISC	-005	X	X		
3/26/2015	805	Aqueous	EP-7	MISC	MISC	-006	X	X		
3/26/2015	810	Aqueous	EP-8	MISC	MISC	-007	X	X		
3/26/2015	835	Aqueous	EP-9	MISC	MISC	-008	X	X		
3/26/2015	815	Aqueous	EP-11	MISC	MISC	-009	X	X		
3/26/2015	820	Aqueous	EP-12A	MISC	MISC	-010	X	X		
3/26/2015	825	Aqueous	EP-12B	MISC	MISC	-011	X	X		
		Aqueous	TRIP BLANK	3-40ML VOAs	HCL	-012			X	
		Aqueous	FIELD BLANK	3-40ML VOAs	HCL	-013			X	
Relinquished by: [Signature]							Remarks:			
Relinquished by: [Signature]							Remarks:			

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



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

March 18, 2015

Cheryl Johnson

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

RE: 1st Qtr - Outfalls

OrderNo.: 1503242

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/5/2015 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', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503242

Date Reported: 3/18/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Outfall 2

Project: 1st Qtr - Outfalls

Collection Date: 3/5/2015 11:00:00 AM

Lab ID: 1503242-001

Matrix: AQUEOUS

Received Date: 3/5/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/6/2015 12:57:36 PM	18021
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/6/2015 12:57:36 PM	18021
Surr: DNOP	95.1	76.5-150		%REC	1	3/6/2015 12:57:36 PM	18021
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/6/2015 11:24:51 AM	R24685
Surr: BFB	85.2	80-120		%REC	1	3/6/2015 11:24:51 AM	R24685
EPA METHOD 300.0: ANIONS							Analyst: LGT
Nitrogen, Nitrite (As N)	ND	0.50		mg/L	5	3/6/2015 12:40:47 PM	R24692
Nitrogen, Nitrate (As N)	3.6	0.50		mg/L	5	3/6/2015 12:40:47 PM	R24692
SM5210B: BOD							Analyst: SMS
Biochemical Oxygen Demand	11	2.0		mg/L	1	3/11/2015 3:31:00 PM	18022
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Acenaphthylene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Aniline	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Anthracene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Azobenzene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Benz(a)anthracene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Benzo(a)pyrene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Benzo(b)fluoranthene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Benzo(k)fluoranthene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Benzoic acid	ND	20		µg/L	1	3/11/2015 4:18:27 PM	18033
Benzyl alcohol	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Butyl benzyl phthalate	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Carbazole	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
4-Chloroaniline	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
2-Chloronaphthalene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
2-Chlorophenol	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Chrysene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503242

Date Reported: 3/18/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Outfall 2

Project: 1st Qtr - Outfalls

Collection Date: 3/5/2015 11:00:00 AM

Lab ID: 1503242-001

Matrix: AQUEOUS

Received Date: 3/5/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Di-n-butyl phthalate	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Di-n-octyl phthalate	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Dibenzofuran	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
1,2-Dichlorobenzene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
1,3-Dichlorobenzene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
1,4-Dichlorobenzene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Diethyl phthalate	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Dimethyl phthalate	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
2,4-Dichlorophenol	ND	20		µg/L	1	3/11/2015 4:18:27 PM	18033
2,4-Dimethylphenol	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/11/2015 4:18:27 PM	18033
2,4-Dinitrophenol	ND	20		µg/L	1	3/11/2015 4:18:27 PM	18033
2,4-Dinitrotoluene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
2,6-Dinitrotoluene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Fluoranthene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Fluorene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Hexachlorobenzene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Hexachlorobutadiene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Hexachloroethane	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Isophorone	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
1-Methylnaphthalene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
2-Methylnaphthalene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
2-Methylphenol	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
3+4-Methylphenol	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
N-Nitrosodimethylamine	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Naphthalene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
2-Nitroaniline	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
3-Nitroaniline	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
4-Nitroaniline	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Nitrobenzene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
2-Nitrophenol	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
4-Nitrophenol	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Pentachlorophenol	ND	20		µg/L	1	3/11/2015 4:18:27 PM	18033

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503242

Date Reported: 3/18/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Outfall 2

Project: 1st Qtr - Outfalls

Collection Date: 3/5/2015 11:00:00 AM

Lab ID: 1503242-001

Matrix: AQUEOUS

Received Date: 3/5/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Phenanthrene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Phenol	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Pyrene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Pyridine	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/11/2015 4:18:27 PM	18033
Surr: 2-Fluorophenol	78.3	17.6-104		%REC	1	3/11/2015 4:18:27 PM	18033
Surr: Phenol-d5	63.8	17.7-89.9		%REC	1	3/11/2015 4:18:27 PM	18033
Surr: 2,4,6-Tribromophenol	99.9	16.3-122		%REC	1	3/11/2015 4:18:27 PM	18033
Surr: Nitrobenzene-d5	83.4	45.3-117		%REC	1	3/11/2015 4:18:27 PM	18033
Surr: 2-Fluorobiphenyl	95.3	43-113		%REC	1	3/11/2015 4:18:27 PM	18033
Surr: 4-Terphenyl-d14	77.7	47.6-122		%REC	1	3/11/2015 4:18:27 PM	18033
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	400	20.0		mg/L	1	3/10/2015 3:27:00 PM	18019
SM 4500 NORG C: TKN							Analyst: JML
Nitrogen, Kjeldahl, Total	2.0	1.0		mg/L	1	3/12/2015 11:40:00 AM	18061
SM 2540D: TSS							Analyst: KS
Suspended Solids	20	4.0		mg/L	1	3/9/2015 11:50:00 AM	18020

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 3 of 17
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503242

Date Reported: 3/18/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Outfall 1

Project: 1st Qtr - Outfalls

Collection Date: 3/5/2015 10:30:00 AM

Lab ID: 1503242-002

Matrix: AQUEOUS

Received Date: 3/5/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/6/2015 2:31:49 PM	18021
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/6/2015 2:31:49 PM	18021
Surr: DNOP	87.1	76.5-150		%REC	1	3/6/2015 2:31:49 PM	18021
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/6/2015 11:54:08 AM	R24685
Surr: BFB	88.4	80-120		%REC	1	3/6/2015 11:54:08 AM	R24685
EPA METHOD 300.0: ANIONS							Analyst: LGT
Nitrate+Nitrite as N	ND	10		mg/L	50	3/17/2015 3:05:57 AM	R24875
SM5210B: BOD							Analyst: SMS
Biochemical Oxygen Demand	2.8	2.0		mg/L	1	3/11/2015 3:31:00 PM	18022
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Acenaphthylene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Aniline	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Anthracene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Azobenzene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Benz(a)anthracene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Benzo(a)pyrene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Benzo(b)fluoranthene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Benzo(k)fluoranthene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Benzoic acid	ND	20		µg/L	1	3/16/2015 7:59:11 PM	18033
Benzyl alcohol	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Butyl benzyl phthalate	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Carbazole	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
4-Chloroaniline	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
2-Chloronaphthalene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
2-Chlorophenol	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Chrysene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Di-n-butyl phthalate	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503242

Date Reported: 3/18/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Outfall 1

Project: 1st Qtr - Outfalls

Collection Date: 3/5/2015 10:30:00 AM

Lab ID: 1503242-002

Matrix: AQUEOUS

Received Date: 3/5/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Di-n-octyl phthalate	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Dibenzofuran	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
1,2-Dichlorobenzene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
1,3-Dichlorobenzene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
1,4-Dichlorobenzene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Diethyl phthalate	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Dimethyl phthalate	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
2,4-Dichlorophenol	ND	20		µg/L	1	3/16/2015 7:59:11 PM	18033
2,4-Dimethylphenol	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/16/2015 7:59:11 PM	18033
2,4-Dinitrophenol	ND	20		µg/L	1	3/16/2015 7:59:11 PM	18033
2,4-Dinitrotoluene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
2,6-Dinitrotoluene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Fluoranthene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Fluorene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Hexachlorobenzene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Hexachlorobutadiene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Hexachloroethane	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Isophorone	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
1-Methylnaphthalene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
2-Methylnaphthalene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
2-Methylphenol	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
3+4-Methylphenol	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
N-Nitrosodimethylamine	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Naphthalene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
2-Nitroaniline	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
3-Nitroaniline	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
4-Nitroaniline	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Nitrobenzene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
2-Nitrophenol	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
4-Nitrophenol	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Pentachlorophenol	ND	20		µg/L	1	3/16/2015 7:59:11 PM	18033
Phenanthrene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503242

Date Reported: 3/18/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Outfall 1

Project: 1st Qtr - Outfalls

Collection Date: 3/5/2015 10:30:00 AM

Lab ID: 1503242-002

Matrix: AQUEOUS

Received Date: 3/5/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Phenol	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Pyrene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Pyridine	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/16/2015 7:59:11 PM	18033
Surr: 2-Fluorophenol	6.36	17.6-104	S	%REC	1	3/16/2015 7:59:11 PM	18033
Surr: Phenol-d5	10.2	17.7-89.9	S	%REC	1	3/16/2015 7:59:11 PM	18033
Surr: 2,4,6-Tribromophenol	13.5	16.3-122	S	%REC	1	3/16/2015 7:59:11 PM	18033
Surr: Nitrobenzene-d5	76.6	45.3-117		%REC	1	3/16/2015 7:59:11 PM	18033
Surr: 2-Fluorobiphenyl	82.8	43-113		%REC	1	3/16/2015 7:59:11 PM	18033
Surr: 4-Terphenyl-d14	143	47.6-122	S	%REC	1	3/16/2015 7:59:11 PM	18033
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	16200	200	*	mg/L	1	3/11/2015 5:44:00 PM	18071
SM 4500 NORG C: TKN							Analyst: JML
Nitrogen, Kjeldahl, Total	3.9	1.0		mg/L	1	3/12/2015 11:40:00 AM	18061
SM 2540D: TSS							Analyst: KS
Suspended Solids	30	4.0		mg/L	1	3/9/2015 11:50:00 AM	18020

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 6 of 17
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			



Wet Chemistry by Method 410.4

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
COD	41.0		10.0	1	03/13/2015 15:29	WG775558

1 Cl

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

5 Al

9 Sc



Wet Chemistry by Method 365.4

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Phosphorus, Total	ND		0.100	1	03/16/2015 09:47	WG775358

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Wet Chemistry by Method 410.4

	Result	<u>Qualifier</u>	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l		date / time	
COD	994		10.0	1	03/14/2015 15:17	<u>WG775690</u>



²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁵Al

⁹Sc



Wet Chemistry by Method 365.4

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Phosphorus,Total	ND		0.100	1	03/16/2015 09:48	WG775358



Method Blank (MB)

(MB) 03/16/15 09:22

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Phosphorus,Total	ND		0.100

L752415-02 Original Sample (OS) • Duplicate (DUP)

(OS) 03/16/15 09:54 • (DUP) 03/16/15 09:55

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Phosphorus,Total	0.51	0.56	1	9.3		20

L752332-11 Original Sample (OS) • Duplicate (DUP)

(OS) 03/16/15 10:00 • (DUP) 03/16/15 10:01

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Phosphorus,Total	ND	ND	1	0.00		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 03/16/15 09:24 • (LCSD) 03/16/15 09:26

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCSD Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Phosphorus,Total	1.00	0.901	0.923	90.1	92.3	90.0-110			2.41	20

L752369-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 03/16/15 10:07 • (MS) 03/16/15 10:08 • (MSD) 03/16/15 10:10

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Phosphorus,Total	2.50	0.0543	2.43	2.44	97.2	97.6	1	90.0-110			0.411	20

Method Blank (MB)

(MB) 03/13/15 15:22

	MB Result	MB Qualifier	MB RDL
Analyte	mg/l		mg/l
COD	ND		10.0

L752370-23 Original Sample (OS) • Duplicate (DUP)

(OS) 03/13/15 15:28 • (DUP) 03/13/15 15:29

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
COD	89	86	1	3.4		5

L751637-02 Original Sample (OS) • Duplicate (DUP)

(OS) 03/13/15 15:24 • (DUP) 03/13/15 15:24

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
COD	1500	1500	5	0.00		5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 03/13/15 15:22 • (LCSD) 03/13/15 15:22

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%		%	%
COD	183	181	182	98.9	99.5	90.0-110		0.551	5

L752370-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 03/13/15 15:26 • (MS) 03/13/15 15:26 • (MSD) 03/13/15 15:26

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
COD	400	45.3	445	449	100	101	1	90.0-110			0.895	5

Method Blank (MB)

(MB) 03/14/15 15:09

Analyte	MB Result	MB Qualifier	MB RDL
COD	ND		10.0

L752288-02 Original Sample (OS) • Duplicate (DUP)

(OS) 03/14/15 15:14 • (DUP) 03/14/15 15:15

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
COD	74	73	1	1.4		5

L752453-01 Original Sample (OS) • Duplicate (DUP)

(OS) 03/14/15 15:19 • (DUP) 03/14/15 15:20

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
COD	21	21	1	0.00		5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 03/14/15 15:10 • (LCSD) 03/14/15 15:10

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
COD	183	182	179	99.5	97.8	90.0-110			1.66	5

L752404-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 03/14/15 15:18 • (MS) 03/14/15 15:18 • (MSD) 03/14/15 15:18

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
COD	400	11.7	414	415	101	101	1	90.0-110			0.241	5

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503242

18-Mar-15

Client: Western Refining Southwest, Gallup

Project: 1st Qtr - Outfalls

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R24692	RunNo:	24692					
Prep Date:		Analysis Date:	3/6/2015	SeqNo:	727579	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSW	Batch ID:	R24692	RunNo:	24692					
Prep Date:		Analysis Date:	3/6/2015	SeqNo:	727580	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrite (As N)	0.94	0.10	1.000	0	94.0	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	100	90	110			

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R24692	RunNo:	24692					
Prep Date:		Analysis Date:	3/6/2015	SeqNo:	727643	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrate (As N)	ND	0.10								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSW	Batch ID:	R24692	RunNo:	24692					
Prep Date:		Analysis Date:	3/6/2015	SeqNo:	727644	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrate (As N)	2.3	0.10	2.500	0	91.1	90	110			

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R24875	RunNo:	24875					
Prep Date:		Analysis Date:	3/16/2015	SeqNo:	732784	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:	R24875	RunNo:	24875					
Prep Date:		Analysis Date:	3/16/2015	SeqNo:	732785	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	99.6	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503242

18-Mar-15

Client: Western Refining Southwest, Gallup

Project: 1st Qtr - Outfalls

Sample ID	LCS-18021		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	LCSW		Batch ID: 18021		RunNo: 24671					
Prep Date:	3/6/2015		Analysis Date: 3/6/2015		SeqNo: 727259		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.8	1.0	5.000	0	95.6	60.1	156			
Surr: DNOP	0.52		0.5000		105	76.5	150			

Sample ID	MB-18021		SampType: MBLK		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	PBW		Batch ID: 18021		RunNo: 24671					
Prep Date:	3/6/2015		Analysis Date: 3/6/2015		SeqNo: 727301		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	76.5	150			

Sample ID	1503242-001DMS		SampType: MS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	Outfall 2		Batch ID: 18021		RunNo: 24671					
Prep Date:	3/6/2015		Analysis Date: 3/6/2015		SeqNo: 727730		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	3.8	1.0	5.000	0	75.2	75.9	164			S
Surr: DNOP	0.41		0.5000		82.8	76.5	150			

Sample ID	1503242-001DMSD		SampType: MSD		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	Outfall 2		Batch ID: 18021		RunNo: 24671					
Prep Date:	3/6/2015		Analysis Date: 3/6/2015		SeqNo: 727731		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.1	1.0	5.000	0	81.1	75.9	164	7.48	22.1	
Surr: DNOP	0.43		0.5000		86.1	76.5	150	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503242

18-Mar-15

Client: Western Refining Southwest, Gallup

Project: 1st Qtr - Outfalls

Sample ID	5ML RB		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBW		Batch ID: R24685		RunNo: 24685					
Prep Date:			Analysis Date: 3/6/2015		SeqNo: 727395		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		87.4	80	120			

Sample ID	2.5UG GRO LCS	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID: R24685			RunNo: 24685					
Prep Date:		Analysis Date: 3/6/2015			SeqNo: 727398		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.44	0.050	0.5000	0	88.9	80	120			
Surr: BFB	19		20.00		96.8	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503242

18-Mar-15

Client: Western Refining Southwest, Gallup

Project: 1st Qtr - Outfalls

Sample ID	mb-18033		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 18033		RunNo: 24764					
Prep Date:	3/9/2015		Analysis Date: 3/11/2015		SeqNo: 729466		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503242

18-Mar-15

Client: Western Refining Southwest, Gallup

Project: 1st Qtr - Outfalls

Sample ID	mb-18033	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	18033	RunNo:	24764					
Prep Date:	3/9/2015	Analysis Date:	3/11/2015	SeqNo:	729466	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	120		200.0		61.9	17.6	104			
Surr: Phenol-d5	130		200.0		66.3	17.7	89.9			
Surr: 2,4,6-Tribromophenol	160		200.0		80.6	16.3	122			
Surr: Nitrobenzene-d5	64		100.0		63.8	45.3	117			
Surr: 2-Fluorobiphenyl	74		100.0		74.2	43	113			
Surr: 4-Terphenyl-d14	82		100.0		82.0	47.6	122			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503242

18-Mar-15

Client: Western Refining Southwest, Gallup

Project: 1st Qtr - Outfalls

Sample ID	lcs-18033		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 18033		RunNo: 24764					
Prep Date:	3/9/2015		Analysis Date: 3/11/2015		SeqNo: 729467		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	75	10	100.0	0	74.6	47.9	114			
4-Chloro-3-methylphenol	150	10	200.0	0	76.0	51.7	122			
2-Chlorophenol	130	10	200.0	0	63.8	40.7	113			
1,4-Dichlorobenzene	63	10	100.0	0	63.2	39.6	99.9			
2,4-Dinitrotoluene	71	10	100.0	0	71.0	40.8	113			
N-Nitrosodi-n-propylamine	74	10	100.0	0	74.3	51.2	111			
4-Nitrophenol	150	10	200.0	0	75.0	15.7	86.9			
Pentachlorophenol	130	20	200.0	0	64.5	21.6	104			
Phenol	140	10	200.0	0	72.2	28.6	71.7			S
Pyrene	71	10	100.0	0	71.4	54.2	128			
1,2,4-Trichlorobenzene	72	10	100.0	0	72.3	40.9	101			
Surr: 2-Fluorophenol	130		200.0		65.8	17.6	104			
Surr: Phenol-d5	140		200.0		72.0	17.7	89.9			
Surr: 2,4,6-Tribromophenol	180		200.0		88.7	16.3	122			
Surr: Nitrobenzene-d5	68		100.0		68.0	45.3	117			
Surr: 2-Fluorobiphenyl	80		100.0		80.2	43	113			
Surr: 4-Terphenyl-d14	91		100.0		90.7	47.6	122			

Sample ID	lcsd-18033		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 18033		RunNo: 24764					
Prep Date:	3/9/2015		Analysis Date: 3/11/2015		SeqNo: 729468		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	90	10	100.0	0	90.0	47.9	114	18.7	27.2	
4-Chloro-3-methylphenol	170	10	200.0	0	84.0	51.7	122	10.1	25.9	
2-Chlorophenol	150	10	200.0	0	73.5	40.7	113	14.2	22.5	
1,4-Dichlorobenzene	68	10	100.0	0	68.2	39.6	99.9	7.61	24.6	
2,4-Dinitrotoluene	86	10	100.0	0	85.8	40.8	113	18.9	25.3	
N-Nitrosodi-n-propylamine	80	10	100.0	0	80.5	51.2	111	7.93	23.6	
4-Nitrophenol	190	10	200.0	0	95.5	15.7	86.9	24.0	34.7	S
Pentachlorophenol	140	20	200.0	0	69.7	21.6	104	7.66	32.8	
Phenol	150	10	200.0	0	75.1	28.6	71.7	3.86	25.5	S
Pyrene	79	10	100.0	0	79.4	54.2	128	10.6	31.4	
1,2,4-Trichlorobenzene	79	10	100.0	0	79.1	40.9	101	8.98	25.9	
Surr: 2-Fluorophenol	140		200.0		72.0	17.6	104	0	0	
Surr: Phenol-d5	150		200.0		76.2	17.7	89.9	0	0	
Surr: 2,4,6-Tribromophenol	190		200.0		94.3	16.3	122	0	0	
Surr: Nitrobenzene-d5	75		100.0		74.5	45.3	117	0	0	
Surr: 2-Fluorobiphenyl	90		100.0		89.7	43	113	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503242

18-Mar-15

Client: Western Refining Southwest, Gallup**Project:** 1st Qtr - Outfalls

Sample ID	lcsd-18033		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 18033		RunNo: 24764					
Prep Date:	3/9/2015		Analysis Date: 3/11/2015		SeqNo: 729468		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	87		100.0		86.5	47.6	122	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503242

18-Mar-15

Client: Western Refining Southwest, Gallup

Project: 1st Qtr - Outfalls

Sample ID	MB-18022		SampType: MBLK		TestCode: SM5210B: BOD					
Client ID:	PBW		Batch ID: 18022		RunNo: 24868					
Prep Date:	3/6/2015		Analysis Date: 3/11/2015		SeqNo: 732686		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--18022		SampType: MBLK		TestCode: SM5210B: BOD					
Client ID:	PBW		Batch ID: 18022		RunNo: 24868					
Prep Date:	3/6/2015		Analysis Date: 3/11/2015		SeqNo: 732687		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-18022		SampType: LCS		TestCode: SM5210B: BOD					
Client ID:	LCSW		Batch ID: 18022		RunNo: 24868					
Prep Date:	3/6/2015		Analysis Date: 3/11/2015		SeqNo: 732688		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	240	2.0	198.0	0	119	77.3	139			

Sample ID	LCSD-18022		SampType: LCSD		TestCode: SM5210B: BOD					
Client ID:	LCSS02		Batch ID: 18022		RunNo: 24868					
Prep Date:	3/6/2015		Analysis Date: 3/11/2015		SeqNo: 732689		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	220	2.0	198.0	0	111	77.3	139	6.80	20	

Sample ID	1503242-001ADUP		SampType: DUP		TestCode: SM5210B: BOD					
Client ID:	Outfall 2		Batch ID: 18022		RunNo: 24868					
Prep Date:	3/6/2015		Analysis Date: 3/11/2015		SeqNo: 732691		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	12	2.0						4.13	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
 E Value above quantitation range
 J Analyte detected below quantitation limits
 O RSD is greater than RSDlimit
 R RPD outside accepted recovery limits
 S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503242

18-Mar-15

Client: Western Refining Southwest, Gallup

Project: 1st Qtr - Outfalls

Sample ID	MB-18019		SampType: MBLK		TestCode: SM2540C MOD: Total Dissolved Solids					
Client ID:	PBW		Batch ID: 18019		RunNo: 24734					
Prep Date:	3/6/2015		Analysis Date: 3/10/2015		SeqNo: 728629		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-18019		SampType: LCS		TestCode: SM2540C MOD: Total Dissolved Solids					
Client ID:	LCSW		Batch ID: 18019		RunNo: 24734					
Prep Date:	3/6/2015		Analysis Date: 3/10/2015		SeqNo: 728630		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1020	20.0	1000	0	103	80	120			

Sample ID	MB-18071		SampType: MBLK		TestCode: SM2540C MOD: Total Dissolved Solids					
Client ID:	PBW		Batch ID: 18071		RunNo: 24766					
Prep Date:	3/10/2015		Analysis Date: 3/11/2015		SeqNo: 729489		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-18071		SampType: LCS		TestCode: SM2540C MOD: Total Dissolved Solids					
Client ID:	LCSW		Batch ID: 18071		RunNo: 24766					
Prep Date:	3/10/2015		Analysis Date: 3/11/2015		SeqNo: 729490		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503242

18-Mar-15

Client: Western Refining Southwest, Gallup

Project: 1st Qtr - Outfalls

Sample ID	MB-18061		SampType: MBLK		TestCode: SM 4500 Norg C: TKN					
Client ID:	PBW		Batch ID: 18061		RunNo: 24787					
Prep Date:	3/10/2015		Analysis Date: 3/12/2015		SeqNo: 730176		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID	LCS-18061		SampType: LCS		TestCode: SM 4500 Norg C: TKN					
Client ID:	LCSW		Batch ID: 18061		RunNo: 24787					
Prep Date:	3/10/2015		Analysis Date: 3/12/2015		SeqNo: 730177		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	9.8	1.0	10.00	0	98.0	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503242

18-Mar-15

Client: Western Refining Southwest, Gallup

Project: 1st Qtr - Outfalls

Sample ID	MB-18020		SampType: MBLK		TestCode: SM 2540D: TSS					
Client ID:	PBW		Batch ID: 18020		RunNo: 24733					
Prep Date:	3/6/2015		Analysis Date: 3/9/2015		SeqNo: 728568		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suspended Solids	ND	4.0								

Sample ID	LCS-18020		SampType: LCS		TestCode: SM 2540D: TSS					
Client ID:	LCSW		Batch ID: 18020		RunNo: 24733					
Prep Date:	3/6/2015		Analysis Date: 3/9/2015		SeqNo: 728569		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suspended Solids	100	4.0	91.80	0	109	83.99	119.83			

Sample ID	1503242-001BDUP		SampType: DUP		TestCode: SM 2540D: TSS					
Client ID:	Outfall 2		Batch ID: 18020		RunNo: 24733					
Prep Date:	3/6/2015		Analysis Date: 3/9/2015		SeqNo: 728585		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suspended Solids	21	4.0						4.88	15	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4197
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Western Refining Gallup

Work Order Number: 1503242

RcptNo: 1

Received by/date:

CS 03/05/15

Logged By: Celina Sessa

3/5/2015 4:00:00 PM

Celina Sessa

Completed By: Celina Sessa

3/5/2015 4:10:33 PM

Celina Sessa

Reviewed By:

CS

03/06/15

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: 6
(≤ 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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenviro.com

4901 Hawkins NE - Albuquerque, NM 87109

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

[illegible]

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



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

April 01, 2015

Cheryl Johnson

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

RE: 2015 1st Quarter-OW Wells

OrderNo.: 1503425

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 8 sample(s) on 3/10/2015 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', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503425

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015 1st Quarter-OW Wells

Collection Date: 3/9/2015 8:00:00 AM

Lab ID: 1503425-001

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Toluene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Ethylbenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Naphthalene	ND	2.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
2-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Acetone	ND	10		µg/L	1	3/12/2015 1:21:56 AM	R24770
Bromobenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Bromodichloromethane	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Bromoform	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Bromomethane	ND	3.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
2-Butanone	ND	10		µg/L	1	3/12/2015 1:21:56 AM	R24770
Carbon disulfide	ND	10		µg/L	1	3/12/2015 1:21:56 AM	R24770
Carbon Tetrachloride	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Chlorobenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Chloroethane	ND	2.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Chloroform	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Chloromethane	ND	3.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
2-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
4-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
cis-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Dibromochloromethane	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Dibromomethane	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,1-Dichloroethane	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,1-Dichloroethene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,2-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,3-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
2,2-Dichloropropane	ND	2.0		µg/L	1	3/12/2015 1:21:56 AM	R24770

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 1 of 40
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503425

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015 1st Quarter-OW Wells

Collection Date: 3/9/2015 8:00:00 AM

Lab ID: 1503425-001

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
1,1-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Hexachlorobutadiene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
2-Hexanone	ND	10		µg/L	1	3/12/2015 1:21:56 AM	R24770
Isopropylbenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
4-Isopropyltoluene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
4-Methyl-2-pentanone	ND	10		µg/L	1	3/12/2015 1:21:56 AM	R24770
Methylene Chloride	ND	3.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
n-Butylbenzene	ND	3.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
n-Propylbenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
sec-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Styrene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
tert-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
trans-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Trichlorofluoromethane	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Vinyl chloride	ND	1.0		µg/L	1	3/12/2015 1:21:56 AM	R24770
Xylenes, Total	ND	1.5		µg/L	1	3/12/2015 1:21:56 AM	R24770
Surr: 1,2-Dichloroethane-d4	91.6	70-130		%REC	1	3/12/2015 1:21:56 AM	R24770
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	3/12/2015 1:21:56 AM	R24770
Surr: Dibromofluoromethane	97.7	70-130		%REC	1	3/12/2015 1:21:56 AM	R24770
Surr: Toluene-d8	92.9	70-130		%REC	1	3/12/2015 1:21:56 AM	R24770

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 2 of 40
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503425

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-29

Project: 2015 1st Quarter-OW Wells

Collection Date: 3/9/2015 9:15:00 AM

Lab ID: 1503425-002

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.063	0.0020		mg/L	1	3/12/2015 4:20:33 PM	R24791
Cadmium	ND	0.0020		mg/L	1	3/12/2015 4:20:33 PM	R24791
Chromium	ND	0.0060		mg/L	1	3/12/2015 4:20:33 PM	R24791
Copper	ND	0.0060		mg/L	1	3/12/2015 4:20:33 PM	R24791
Iron	0.31	0.020	*	mg/L	1	3/12/2015 4:20:33 PM	R24791
Manganese	0.31	0.0020	*	mg/L	1	3/12/2015 4:20:33 PM	R24791
Silver	ND	0.0050		mg/L	1	3/12/2015 4:20:33 PM	R24791
Zinc	ND	0.010		mg/L	1	3/12/2015 4:20:33 PM	R24791
EPA METHOD 200.7: TOTAL METALS							Analyst: ELS
Barium	0.063	0.0020		mg/L	1	3/18/2015 6:47:20 PM	18191
Cadmium	ND	0.0020		mg/L	1	3/18/2015 6:47:20 PM	18191
Chromium	ND	0.0060		mg/L	1	3/18/2015 6:47:20 PM	18191
Copper	ND	0.0060		mg/L	1	3/18/2015 6:47:20 PM	18191
Iron	0.41	0.020	*	mg/L	1	3/18/2015 6:47:20 PM	18191
Manganese	0.30	0.0020	*	mg/L	1	3/18/2015 6:47:20 PM	18191
Silver	ND	0.0050		mg/L	1	3/18/2015 6:47:20 PM	18191
Zinc	ND	0.010		mg/L	1	3/18/2015 6:47:20 PM	18191
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.0010		mg/L	1	3/20/2015 4:49:13 PM	R24987
Lead	ND	0.0010		mg/L	1	3/20/2015 4:49:13 PM	R24987
Selenium	ND	0.010		mg/L	10	3/24/2015 6:05:27 PM	R25045
Uranium	0.053	0.0050	*	mg/L	5	3/23/2015 2:55:04 PM	R25015
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	3/24/2015 3:42:23 PM	18191
Lead	ND	0.0010		mg/L	1	3/20/2015 12:00:48 PM	18191
Selenium	ND	0.0050		mg/L	5	3/24/2015 3:42:23 PM	18191
Uranium	0.061	0.0050	*	mg/L	5	3/24/2015 1:08:51 PM	18191
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/17/2015 9:35:55 AM	18157
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Toluene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Ethylbenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Methyl tert-butyl ether (MTBE)	3200	50		µg/L	50	3/12/2015 11:01:33 AM	R24800
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503425

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-29

Project: 2015 1st Quarter-OW Wells

Collection Date: 3/9/2015 9:15:00 AM

Lab ID: 1503425-002

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Naphthalene	ND	2.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
2-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Acetone	ND	10		µg/L	1	3/12/2015 1:50:30 AM	R24770
Bromobenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Bromodichloromethane	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Bromoform	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Bromomethane	ND	3.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
2-Butanone	ND	10		µg/L	1	3/12/2015 1:50:30 AM	R24770
Carbon disulfide	ND	10		µg/L	1	3/12/2015 1:50:30 AM	R24770
Carbon Tetrachloride	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Chlorobenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Chloroethane	ND	2.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Chloroform	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Chloromethane	ND	3.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
2-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
4-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
cis-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Dibromochloromethane	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Dibromomethane	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,1-Dichloroethane	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,1-Dichloroethene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,2-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,3-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
2,2-Dichloropropane	ND	2.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,1-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Hexachlorobutadiene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
2-Hexanone	ND	10		µg/L	1	3/12/2015 1:50:30 AM	R24770
Isopropylbenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
4-Isopropyltoluene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
4-Methyl-2-pentanone	ND	10		µg/L	1	3/12/2015 1:50:30 AM	R24770
Methylene Chloride	ND	3.0		µg/L	1	3/12/2015 1:50:30 AM	R24770

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 4 of 40
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503425

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-29

Project: 2015 1st Quarter-OW Wells

Collection Date: 3/9/2015 9:15:00 AM

Lab ID: 1503425-002

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
n-Butylbenzene	ND	3.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
n-Propylbenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
sec-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Styrene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
tert-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
trans-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Trichlorofluoromethane	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Vinyl chloride	ND	1.0		µg/L	1	3/12/2015 1:50:30 AM	R24770
Xylenes, Total	ND	1.5		µg/L	1	3/12/2015 1:50:30 AM	R24770
Surr: 1,2-Dichloroethane-d4	92.1	70-130		%REC	1	3/12/2015 1:50:30 AM	R24770
Surr: 4-Bromofluorobenzene	98.1	70-130		%REC	1	3/12/2015 1:50:30 AM	R24770
Surr: Dibromofluoromethane	94.5	70-130		%REC	1	3/12/2015 1:50:30 AM	R24770
Surr: Toluene-d8	92.2	70-130		%REC	1	3/12/2015 1:50:30 AM	R24770

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503425

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-14

Project: 2015 1st Quarter-OW Wells

Collection Date: 3/9/2015 9:58:00 AM

Lab ID: 1503425-003

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	1.9	0.010		mg/L	5	3/12/2015 4:50:59 PM	R24791
Cadmium	ND	0.0020		mg/L	1	3/12/2015 4:22:32 PM	R24791
Chromium	ND	0.0060		mg/L	1	3/12/2015 4:22:32 PM	R24791
Copper	ND	0.0060		mg/L	1	3/12/2015 4:22:32 PM	R24791
Iron	4.7	0.10	*	mg/L	5	3/12/2015 4:50:59 PM	R24791
Manganese	2.2	0.010	*	mg/L	5	3/12/2015 4:50:59 PM	R24791
Silver	ND	0.0050		mg/L	1	3/12/2015 4:22:32 PM	R24791
Zinc	ND	0.010		mg/L	1	3/12/2015 4:22:32 PM	R24791
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	1.8	0.010		mg/L	5	3/19/2015 6:41:24 PM	18191
Cadmium	ND	0.0020		mg/L	1	3/18/2015 6:49:14 PM	18191
Chromium	ND	0.0060		mg/L	1	3/18/2015 6:49:14 PM	18191
Copper	ND	0.0060		mg/L	1	3/18/2015 6:49:14 PM	18191
Iron	4.5	0.10	*	mg/L	5	3/19/2015 6:41:24 PM	18191
Manganese	2.1	0.010	*	mg/L	5	3/19/2015 6:41:24 PM	18191
Silver	ND	0.0050		mg/L	1	3/18/2015 6:49:14 PM	18191
Zinc	ND	0.010		mg/L	1	3/18/2015 6:49:14 PM	18191
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.020	*	mg/L	20	3/24/2015 6:08:30 PM	R25045
Lead	ND	0.0010		mg/L	1	3/20/2015 4:52:17 PM	R24987
Selenium	ND	0.020		mg/L	20	3/24/2015 6:08:30 PM	R25045
Uranium	0.0067	0.0010		mg/L	1	3/20/2015 4:52:17 PM	R24987
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.020	*	mg/L	20	3/25/2015 2:26:41 PM	18191
Lead	ND	0.0010		mg/L	1	3/20/2015 12:07:10 PM	18191
Selenium	ND	0.020		mg/L	20	3/25/2015 2:26:41 PM	18191
Uranium	0.0065	0.0010		mg/L	1	3/20/2015 12:07:10 PM	18191
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/17/2015 9:37:42 AM	18157
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	3900	200		µg/L	200	3/12/2015 3:45:26 AM	R24770
Toluene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Ethylbenzene	160	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Methyl tert-butyl ether (MTBE)	760	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,2,4-Trimethylbenzene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,3,5-Trimethylbenzene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,2-Dichloroethane (EDC)	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503425

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-14

Project: 2015 1st Quarter-OW Wells

Collection Date: 3/9/2015 9:58:00 AM

Lab ID: 1503425-003

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: cadg	
1,2-Dibromoethane (EDB)	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Naphthalene	ND	40		µg/L	20	3/12/2015 4:14:10 AM	R24770
1-Methylnaphthalene	ND	80		µg/L	20	3/12/2015 4:14:10 AM	R24770
2-Methylnaphthalene	ND	80		µg/L	20	3/12/2015 4:14:10 AM	R24770
Acetone	ND	200		µg/L	20	3/12/2015 4:14:10 AM	R24770
Bromobenzene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Bromodichloromethane	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Bromoform	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Bromomethane	ND	60		µg/L	20	3/12/2015 4:14:10 AM	R24770
2-Butanone	ND	200		µg/L	20	3/12/2015 4:14:10 AM	R24770
Carbon disulfide	ND	200		µg/L	20	3/12/2015 4:14:10 AM	R24770
Carbon Tetrachloride	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Chlorobenzene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Chloroethane	ND	40		µg/L	20	3/12/2015 4:14:10 AM	R24770
Chloroform	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Chloromethane	ND	60		µg/L	20	3/12/2015 4:14:10 AM	R24770
2-Chlorotoluene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
4-Chlorotoluene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
cis-1,2-DCE	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
cis-1,3-Dichloropropene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,2-Dibromo-3-chloropropane	ND	40		µg/L	20	3/12/2015 4:14:10 AM	R24770
Dibromochloromethane	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Dibromomethane	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,2-Dichlorobenzene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,3-Dichlorobenzene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,4-Dichlorobenzene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Dichlorodifluoromethane	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,1-Dichloroethane	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,1-Dichloroethene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,2-Dichloropropane	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,3-Dichloropropane	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
2,2-Dichloropropane	ND	40		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,1-Dichloropropene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Hexachlorobutadiene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
2-Hexanone	ND	200		µg/L	20	3/12/2015 4:14:10 AM	R24770
Isopropylbenzene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
4-Isopropyltoluene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
4-Methyl-2-pentanone	ND	200		µg/L	20	3/12/2015 4:14:10 AM	R24770
Methylene Chloride	ND	60		µg/L	20	3/12/2015 4:14:10 AM	R24770

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 7 of 40
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503425

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-14

Project: 2015 1st Quarter-OW Wells

Collection Date: 3/9/2015 9:58:00 AM

Lab ID: 1503425-003

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
n-Butylbenzene	ND	60		µg/L	20	3/12/2015 4:14:10 AM	R24770
n-Propylbenzene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
sec-Butylbenzene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Styrene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
tert-Butylbenzene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,1,1,2-Tetrachloroethane	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,1,2,2-Tetrachloroethane	ND	40		µg/L	20	3/12/2015 4:14:10 AM	R24770
Tetrachloroethene (PCE)	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
trans-1,2-DCE	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
trans-1,3-Dichloropropene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,2,3-Trichlorobenzene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,2,4-Trichlorobenzene	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,1,1-Trichloroethane	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,1,2-Trichloroethane	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Trichloroethene (TCE)	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Trichlorofluoromethane	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
1,2,3-Trichloropropane	ND	40		µg/L	20	3/12/2015 4:14:10 AM	R24770
Vinyl chloride	ND	20		µg/L	20	3/12/2015 4:14:10 AM	R24770
Xylenes, Total	ND	30		µg/L	20	3/12/2015 4:14:10 AM	R24770
Surr: 1,2-Dichloroethane-d4	91.0	70-130		%REC	20	3/12/2015 4:14:10 AM	R24770
Surr: 4-Bromofluorobenzene	92.8	70-130		%REC	20	3/12/2015 4:14:10 AM	R24770
Surr: Dibromofluoromethane	92.4	70-130		%REC	20	3/12/2015 4:14:10 AM	R24770
Surr: Toluene-d8	92.1	70-130		%REC	20	3/12/2015 4:14:10 AM	R24770

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 8 of 40
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503425

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-13

Project: 2015 1st Quarter-OW Wells

Collection Date: 3/9/2015 11:45:00 AM

Lab ID: 1503425-004

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.020	0.0020		mg/L	1	3/12/2015 4:24:14 PM	R24791
Cadmium	ND	0.0020		mg/L	1	3/12/2015 4:24:14 PM	R24791
Chromium	ND	0.0060		mg/L	1	3/12/2015 4:24:14 PM	R24791
Copper	ND	0.0060		mg/L	1	3/12/2015 4:24:14 PM	R24791
Iron	ND	0.020		mg/L	1	3/12/2015 4:24:14 PM	R24791
Manganese	0.022	0.0020		mg/L	1	3/12/2015 4:24:14 PM	R24791
Silver	ND	0.0050		mg/L	1	3/12/2015 4:24:14 PM	R24791
Zinc	ND	0.010		mg/L	1	3/12/2015 4:24:14 PM	R24791
EPA METHOD 200.7: TOTAL METALS							Analyst: ELS
Barium	0.020	0.0020		mg/L	1	3/18/2015 6:51:02 PM	18191
Cadmium	ND	0.0020		mg/L	1	3/18/2015 6:51:02 PM	18191
Chromium	ND	0.0060		mg/L	1	3/18/2015 6:51:02 PM	18191
Copper	ND	0.0060		mg/L	1	3/18/2015 6:51:02 PM	18191
Iron	ND	0.020		mg/L	1	3/18/2015 6:51:02 PM	18191
Manganese	0.021	0.0020		mg/L	1	3/18/2015 6:51:02 PM	18191
Silver	ND	0.0050		mg/L	1	3/18/2015 6:51:02 PM	18191
Zinc	ND	0.010		mg/L	1	3/18/2015 6:51:02 PM	18191
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	3/23/2015 5:30:27 PM	R25015
Lead	ND	0.0010		mg/L	1	3/20/2015 4:55:20 PM	R24987
Selenium	ND	0.0050		mg/L	5	3/23/2015 5:30:27 PM	R25015
Uranium	0.017	0.0010		mg/L	1	3/20/2015 4:55:20 PM	R24987
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	3/24/2015 3:48:46 PM	18191
Lead	ND	0.0010		mg/L	1	3/20/2015 12:16:48 PM	18191
Selenium	ND	0.0050		mg/L	5	3/24/2015 3:48:46 PM	18191
Uranium	0.017	0.0010		mg/L	1	3/20/2015 12:16:48 PM	18191
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/17/2015 9:44:18 AM	18157
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Toluene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Ethylbenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Methyl tert-butyl ether (MTBE)	26	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503425

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-13

Project: 2015 1st Quarter-OW Wells

Collection Date: 3/9/2015 11:45:00 AM

Lab ID: 1503425-004

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Naphthalene	ND	2.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
2-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Acetone	ND	10		µg/L	1	3/12/2015 5:11:41 AM	R24770
Bromobenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Bromodichloromethane	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Bromoform	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Bromomethane	ND	3.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
2-Butanone	ND	10		µg/L	1	3/12/2015 5:11:41 AM	R24770
Carbon disulfide	ND	10		µg/L	1	3/12/2015 5:11:41 AM	R24770
Carbon Tetrachloride	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Chlorobenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Chloroethane	ND	2.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Chloroform	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Chloromethane	ND	3.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
2-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
4-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
cis-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Dibromochloromethane	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Dibromomethane	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,1-Dichloroethane	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,1-Dichloroethene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,2-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,3-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
2,2-Dichloropropane	ND	2.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,1-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Hexachlorobutadiene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
2-Hexanone	ND	10		µg/L	1	3/12/2015 5:11:41 AM	R24770
Isopropylbenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
4-Isopropyltoluene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
4-Methyl-2-pentanone	ND	10		µg/L	1	3/12/2015 5:11:41 AM	R24770
Methylene Chloride	ND	3.0		µg/L	1	3/12/2015 5:11:41 AM	R24770

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503425

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-13

Project: 2015 1st Quarter-OW Wells

Collection Date: 3/9/2015 11:45:00 AM

Lab ID: 1503425-004

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
n-Butylbenzene	ND	3.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
n-Propylbenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
sec-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Styrene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
tert-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
trans-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Trichlorofluoromethane	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Vinyl chloride	ND	1.0		µg/L	1	3/12/2015 5:11:41 AM	R24770
Xylenes, Total	ND	1.5		µg/L	1	3/12/2015 5:11:41 AM	R24770
Surr: 1,2-Dichloroethane-d4	90.9	70-130		%REC	1	3/12/2015 5:11:41 AM	R24770
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	3/12/2015 5:11:41 AM	R24770
Surr: Dibromofluoromethane	92.4	70-130		%REC	1	3/12/2015 5:11:41 AM	R24770
Surr: Toluene-d8	92.5	70-130		%REC	1	3/12/2015 5:11:41 AM	R24770

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503425

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-30

Project: 2015 1st Quarter-OW Wells

Collection Date: 3/9/2015 12:30:00 PM

Lab ID: 1503425-005

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.090	0.0020		mg/L	1	3/12/2015 4:26:17 PM	R24791
Cadmium	ND	0.0020		mg/L	1	3/12/2015 4:26:17 PM	R24791
Chromium	ND	0.0060		mg/L	1	3/12/2015 4:26:17 PM	R24791
Copper	ND	0.0060		mg/L	1	3/12/2015 4:26:17 PM	R24791
Iron	0.064	0.020		mg/L	1	3/12/2015 4:26:17 PM	R24791
Manganese	0.037	0.0020		mg/L	1	3/12/2015 4:26:17 PM	R24791
Silver	ND	0.0050		mg/L	1	3/12/2015 4:26:17 PM	R24791
Zinc	0.015	0.010		mg/L	1	3/12/2015 4:26:17 PM	R24791
EPA METHOD 200.7: TOTAL METALS							Analyst: ELS
Barium	0.090	0.0020		mg/L	1	3/18/2015 6:53:07 PM	18191
Cadmium	ND	0.0020		mg/L	1	3/18/2015 6:53:07 PM	18191
Chromium	ND	0.0060		mg/L	1	3/18/2015 6:53:07 PM	18191
Copper	ND	0.0060		mg/L	1	3/18/2015 6:53:07 PM	18191
Iron	0.089	0.020		mg/L	1	3/18/2015 6:53:07 PM	18191
Manganese	0.037	0.0020		mg/L	1	3/18/2015 6:53:07 PM	18191
Silver	ND	0.0050		mg/L	1	3/18/2015 6:53:07 PM	18191
Zinc	ND	0.010		mg/L	1	3/18/2015 6:53:07 PM	18191
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/24/2015 6:11:33 PM	R25045
Lead	ND	0.0010		mg/L	1	3/20/2015 4:58:23 PM	R24987
Selenium	ND	0.010		mg/L	10	3/24/2015 6:11:33 PM	R25045
Uranium	0.048	0.0010	*	mg/L	1	3/20/2015 4:58:23 PM	R24987
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/25/2015 2:29:52 PM	18191
Lead	ND	0.0010		mg/L	1	3/20/2015 12:19:59 PM	18191
Selenium	ND	0.010		mg/L	10	3/25/2015 2:29:52 PM	18191
Uranium	0.056	0.0050	*	mg/L	5	3/24/2015 1:21:36 PM	18191
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/17/2015 9:46:06 AM	18157
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Toluene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Ethylbenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Methyl tert-butyl ether (MTBE)	4000	50		µg/L	50	3/12/2015 11:30:19 AM	R24800
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503425

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-30

Project: 2015 1st Quarter-OW Wells

Collection Date: 3/9/2015 12:30:00 PM

Lab ID: 1503425-005

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Naphthalene	ND	2.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
2-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Acetone	ND	10		µg/L	1	3/12/2015 5:40:24 AM	R24770
Bromobenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Bromodichloromethane	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Bromoform	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Bromomethane	ND	3.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
2-Butanone	ND	10		µg/L	1	3/12/2015 5:40:24 AM	R24770
Carbon disulfide	ND	10		µg/L	1	3/12/2015 5:40:24 AM	R24770
Carbon Tetrachloride	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Chlorobenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Chloroethane	ND	2.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Chloroform	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Chloromethane	ND	3.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
2-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
4-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
cis-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Dibromochloromethane	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Dibromomethane	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,1-Dichloroethane	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,1-Dichloroethene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,2-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,3-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
2,2-Dichloropropane	ND	2.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,1-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Hexachlorobutadiene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
2-Hexanone	ND	10		µg/L	1	3/12/2015 5:40:24 AM	R24770
Isopropylbenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
4-Isopropyltoluene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
4-Methyl-2-pentanone	ND	10		µg/L	1	3/12/2015 5:40:24 AM	R24770
Methylene Chloride	ND	3.0		µg/L	1	3/12/2015 5:40:24 AM	R24770

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503425

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-30

Project: 2015 1st Quarter-OW Wells

Collection Date: 3/9/2015 12:30:00 PM

Lab ID: 1503425-005

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
n-Butylbenzene	ND	3.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
n-Propylbenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
sec-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Styrene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
tert-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
trans-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Trichlorofluoromethane	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Vinyl chloride	ND	1.0		µg/L	1	3/12/2015 5:40:24 AM	R24770
Xylenes, Total	ND	1.5		µg/L	1	3/12/2015 5:40:24 AM	R24770
Surr: 1,2-Dichloroethane-d4	89.4	70-130		%REC	1	3/12/2015 5:40:24 AM	R24770
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	3/12/2015 5:40:24 AM	R24770
Surr: Dibromofluoromethane	102	70-130		%REC	1	3/12/2015 5:40:24 AM	R24770
Surr: Toluene-d8	94.2	70-130		%REC	1	3/12/2015 5:40:24 AM	R24770

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503425

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-10

Project: 2015 1st Quarter-OW Wells

Collection Date: 3/9/2015 2:45:00 PM

Lab ID: 1503425-006

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/13/2015 10:04:14 AM	18082
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/13/2015 10:04:14 AM	18082
Surr: DNOP	123	76.5-150		%REC	1	3/13/2015 10:04:14 AM	18082
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/11/2015 10:41:29 AM	R24768
Surr: BFB	87.8	80-120		%REC	1	3/11/2015 10:41:29 AM	R24768
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	0.22	0.10		mg/L	1	3/11/2015 11:42:25 PM	R24785
Chloride	840	50		mg/L	100	3/17/2015 3:38:14 AM	R24864
Bromide	1.1	0.10		mg/L	1	3/11/2015 11:42:25 PM	R24785
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	3/11/2015 11:42:25 PM	R24785
Sulfate	200	10		mg/L	20	3/11/2015 11:54:49 PM	R24785
Nitrate+Nitrite as N	ND	1.0		mg/L	5	3/19/2015 4:19:39 AM	R24918
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.076	0.0020		mg/L	1	3/12/2015 4:33:51 PM	R24791
Cadmium	ND	0.0020		mg/L	1	3/12/2015 4:33:51 PM	R24791
Calcium	130	10		mg/L	10	3/12/2015 4:58:38 PM	R24791
Chromium	ND	0.0060		mg/L	1	3/12/2015 4:33:51 PM	R24791
Copper	ND	0.0060		mg/L	1	3/12/2015 4:33:51 PM	R24791
Iron	ND	0.020		mg/L	1	3/12/2015 4:33:51 PM	R24791
Magnesium	20	1.0		mg/L	1	3/12/2015 4:33:51 PM	R24791
Manganese	0.11	0.0020	*	mg/L	1	3/12/2015 4:33:51 PM	R24791
Potassium	3.2	1.0		mg/L	1	3/12/2015 4:33:51 PM	R24791
Silver	ND	0.0050		mg/L	1	3/12/2015 4:33:51 PM	R24791
Sodium	730	10		mg/L	10	3/12/2015 4:58:38 PM	R24791
Zinc	ND	0.010		mg/L	1	3/12/2015 4:33:51 PM	R24791
EPA METHOD 200.7: TOTAL METALS							Analyst: ELS
Barium	0.067	0.0020		mg/L	1	3/18/2015 7:04:55 PM	18191
Cadmium	ND	0.0020		mg/L	1	3/18/2015 7:04:55 PM	18191
Chromium	ND	0.0060		mg/L	1	3/18/2015 7:04:55 PM	18191
Copper	ND	0.0060		mg/L	1	3/18/2015 7:04:55 PM	18191
Iron	ND	0.020		mg/L	1	3/18/2015 7:04:55 PM	18191
Manganese	0.087	0.0020	*	mg/L	1	3/18/2015 7:04:55 PM	18191
Silver	ND	0.0050		mg/L	1	3/18/2015 7:04:55 PM	18191
Zinc	ND	0.010		mg/L	1	3/18/2015 7:04:55 PM	18191
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	3/23/2015 3:07:16 PM	R25015

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503425

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-10

Project: 2015 1st Quarter-OW Wells

Collection Date: 3/9/2015 2:45:00 PM

Lab ID: 1503425-006

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Lead	ND	0.0010		mg/L	1	3/20/2015 5:01:26 PM	R24987
Selenium	ND	0.050		mg/L	5	3/23/2015 3:07:16 PM	R25015
Uranium	0.057	0.0050	*	mg/L	5	3/23/2015 3:07:16 PM	R25015
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	3/24/2015 3:51:58 PM	18191
Lead	ND	0.0010		mg/L	1	3/20/2015 12:23:11 PM	18191
Selenium	0.012	0.0050		mg/L	5	3/24/2015 3:51:58 PM	18191
Uranium	0.061	0.0050	*	mg/L	5	3/24/2015 1:24:47 PM	18191
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/17/2015 9:47:55 AM	18157
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Toluene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Ethylbenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Methyl tert-butyl ether (MTBE)	61	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Naphthalene	ND	2.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
2-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Acetone	ND	10		µg/L	1	3/12/2015 6:37:52 AM	R24770
Bromobenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Bromodichloromethane	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Bromoform	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Bromomethane	ND	3.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
2-Butanone	ND	10		µg/L	1	3/12/2015 6:37:52 AM	R24770
Carbon disulfide	ND	10		µg/L	1	3/12/2015 6:37:52 AM	R24770
Carbon Tetrachloride	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Chlorobenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Chloroethane	ND	2.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Chloroform	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Chloromethane	ND	3.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
2-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
4-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
cis-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503425

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-10

Project: 2015 1st Quarter-OW Wells

Collection Date: 3/9/2015 2:45:00 PM

Lab ID: 1503425-006

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Dibromochloromethane	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Dibromomethane	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,1-Dichloroethane	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,1-Dichloroethene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,2-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,3-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
2,2-Dichloropropane	ND	2.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,1-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Hexachlorobutadiene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
2-Hexanone	ND	10		µg/L	1	3/12/2015 6:37:52 AM	R24770
Isopropylbenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
4-Isopropyltoluene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
4-Methyl-2-pentanone	ND	10		µg/L	1	3/12/2015 6:37:52 AM	R24770
Methylene Chloride	ND	3.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
n-Butylbenzene	ND	3.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
n-Propylbenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
sec-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Styrene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
tert-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
trans-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Trichlorofluoromethane	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Vinyl chloride	ND	1.0		µg/L	1	3/12/2015 6:37:52 AM	R24770
Xylenes, Total	ND	1.5		µg/L	1	3/12/2015 6:37:52 AM	R24770
Surr: 1,2-Dichloroethane-d4	94.3	70-130		%REC	1	3/12/2015 6:37:52 AM	R24770

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503425

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-10

Project: 2015 1st Quarter-OW Wells

Collection Date: 3/9/2015 2:45:00 PM

Lab ID: 1503425-006

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: cadg	
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	3/12/2015 6:37:52 AM	R24770
Surr: Dibromofluoromethane	94.4	70-130		%REC	1	3/12/2015 6:37:52 AM	R24770
Surr: Toluene-d8	98.8	70-130		%REC	1	3/12/2015 6:37:52 AM	R24770

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 18 of 40
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503425

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-01

Project: 2015 1st Quarter-OW Wells

Collection Date: 3/9/2015 4:15:00 PM

Lab ID: 1503425-007

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/12/2015 11:03:30 AM	18082
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/12/2015 11:03:30 AM	18082
Surr: DNOP	120	76.5-150		%REC	1	3/12/2015 11:03:30 AM	18082
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/11/2015 11:10:45 AM	R24768
Surr: BFB	84.8	80-120		%REC	1	3/11/2015 11:10:45 AM	R24768
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	0.23	0.10		mg/L	1	3/12/2015 12:32:04 AM	R24785
Chloride	67	10		mg/L	20	3/12/2015 12:44:28 AM	R24785
Bromide	0.28	0.10		mg/L	1	3/12/2015 12:32:04 AM	R24785
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	3/12/2015 12:32:04 AM	R24785
Sulfate	170	10		mg/L	20	3/12/2015 12:44:28 AM	R24785
Nitrate+Nitrite as N	ND	1.0		mg/L	5	3/19/2015 4:32:04 AM	R24918
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.034	0.0020		mg/L	1	3/12/2015 4:35:50 PM	R24791
Cadmium	ND	0.0020		mg/L	1	3/12/2015 4:35:50 PM	R24791
Calcium	2.2	1.0		mg/L	1	3/12/2015 4:35:50 PM	R24791
Chromium	ND	0.0060		mg/L	1	3/12/2015 4:35:50 PM	R24791
Copper	ND	0.0060		mg/L	1	3/12/2015 4:35:50 PM	R24791
Iron	ND	0.020		mg/L	1	3/12/2015 4:35:50 PM	R24791
Magnesium	ND	1.0		mg/L	1	3/12/2015 4:35:50 PM	R24791
Manganese	0.0055	0.0020		mg/L	1	3/12/2015 4:35:50 PM	R24791
Potassium	1.7	1.0		mg/L	1	3/12/2015 4:35:50 PM	R24791
Silver	ND	0.0050		mg/L	1	3/12/2015 4:35:50 PM	R24791
Sodium	310	5.0		mg/L	5	3/12/2015 5:00:41 PM	R24791
Zinc	ND	0.010		mg/L	1	3/12/2015 4:35:50 PM	R24791
EPA METHOD 200.7: TOTAL METALS							Analyst: ELS
Barium	0.040	0.0020		mg/L	1	3/18/2015 7:06:53 PM	18191
Cadmium	ND	0.0020		mg/L	1	3/18/2015 7:06:53 PM	18191
Chromium	ND	0.0060		mg/L	1	3/18/2015 7:06:53 PM	18191
Copper	ND	0.0060		mg/L	1	3/18/2015 7:06:53 PM	18191
Iron	0.54	0.020	*	mg/L	1	3/18/2015 7:06:53 PM	18191
Manganese	0.024	0.0020		mg/L	1	3/18/2015 7:06:53 PM	18191
Silver	ND	0.0050		mg/L	1	3/18/2015 7:06:53 PM	18191
Zinc	ND	0.010		mg/L	1	3/18/2015 7:06:53 PM	18191
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.0010		mg/L	1	3/20/2015 5:04:29 PM	R24987

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503425

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-01

Project: 2015 1st Quarter-OW Wells

Collection Date: 3/9/2015 4:15:00 PM

Lab ID: 1503425-007

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Lead	ND	0.0010		mg/L	1	3/20/2015 5:04:29 PM	R24987
Selenium	0.0047	0.0010		mg/L	1	3/23/2015 3:10:20 PM	R25015
Uranium	0.039	0.0010	*	mg/L	1	3/20/2015 5:04:29 PM	R24987
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	3/24/2015 3:55:09 PM	18191
Lead	ND	0.0010		mg/L	1	3/20/2015 12:26:22 PM	18191
Selenium	ND	0.0050		mg/L	5	3/24/2015 3:55:09 PM	18191
Uranium	0.042	0.0010	*	mg/L	1	3/20/2015 12:26:22 PM	18191
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/17/2015 9:49:44 AM	18157
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Toluene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Ethylbenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Naphthalene	ND	2.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
2-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Acetone	ND	10		µg/L	1	3/12/2015 7:06:35 AM	R24770
Bromobenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Bromodichloromethane	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Bromoform	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Bromomethane	ND	3.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
2-Butanone	ND	10		µg/L	1	3/12/2015 7:06:35 AM	R24770
Carbon disulfide	ND	10		µg/L	1	3/12/2015 7:06:35 AM	R24770
Carbon Tetrachloride	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Chlorobenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Chloroethane	ND	2.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Chloroform	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Chloromethane	ND	3.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
2-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
4-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
cis-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503425

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-01

Project: 2015 1st Quarter-OW Wells

Collection Date: 3/9/2015 4:15:00 PM

Lab ID: 1503425-007

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Dibromochloromethane	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Dibromomethane	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,1-Dichloroethane	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,1-Dichloroethene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,2-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,3-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
2,2-Dichloropropane	ND	2.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,1-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Hexachlorobutadiene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
2-Hexanone	ND	10		µg/L	1	3/12/2015 7:06:35 AM	R24770
Isopropylbenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
4-Isopropyltoluene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
4-Methyl-2-pentanone	ND	10		µg/L	1	3/12/2015 7:06:35 AM	R24770
Methylene Chloride	ND	3.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
n-Butylbenzene	ND	3.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
n-Propylbenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
sec-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Styrene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
tert-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
trans-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Trichlorofluoromethane	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Vinyl chloride	ND	1.0		µg/L	1	3/12/2015 7:06:35 AM	R24770
Xylenes, Total	ND	1.5		µg/L	1	3/12/2015 7:06:35 AM	R24770
Surr: 1,2-Dichloroethane-d4	89.8	70-130		%REC	1	3/12/2015 7:06:35 AM	R24770

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503425

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-01

Project: 2015 1st Quarter-OW Wells

Collection Date: 3/9/2015 4:15:00 PM

Lab ID: 1503425-007

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: cadg	
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	3/12/2015 7:06:35 AM	R24770
Surr: Dibromofluoromethane	90.5	70-130		%REC	1	3/12/2015 7:06:35 AM	R24770
Surr: Toluene-d8	94.2	70-130		%REC	1	3/12/2015 7:06:35 AM	R24770

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 22 of 40
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503425

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: 2015 1st Quarter-OW Wells

Collection Date:

Lab ID: 1503425-008

Matrix: TRIP BLANK

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/11/2015 11:40:01 AM	R24768
Surr: BFB	86.8	80-120		%REC	1	3/11/2015 11:40:01 AM	R24768
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Toluene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Ethylbenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Naphthalene	ND	2.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
2-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Acetone	ND	10		µg/L	1	3/12/2015 7:35:17 AM	R24770
Bromobenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Bromodichloromethane	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Bromoform	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Bromomethane	ND	3.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
2-Butanone	ND	10		µg/L	1	3/12/2015 7:35:17 AM	R24770
Carbon disulfide	ND	10		µg/L	1	3/12/2015 7:35:17 AM	R24770
Carbon Tetrachloride	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Chlorobenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Chloroethane	ND	2.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Chloroform	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Chloromethane	ND	3.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
2-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
4-Chlorotoluene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
cis-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Dibromochloromethane	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Dibromomethane	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,1-Dichloroethane	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,1-Dichloroethene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503425

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: 2015 1st Quarter-OW Wells

Collection Date:

Lab ID: 1503425-008

Matrix: TRIP BLANK

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
1,2-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,3-Dichloropropane	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
2,2-Dichloropropane	ND	2.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,1-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Hexachlorobutadiene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
2-Hexanone	ND	10		µg/L	1	3/12/2015 7:35:17 AM	R24770
Isopropylbenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
4-Isopropyltoluene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
4-Methyl-2-pentanone	ND	10		µg/L	1	3/12/2015 7:35:17 AM	R24770
Methylene Chloride	ND	3.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
n-Butylbenzene	ND	3.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
n-Propylbenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
sec-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Styrene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
tert-Butylbenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
trans-1,2-DCE	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Trichlorofluoromethane	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Vinyl chloride	ND	1.0		µg/L	1	3/12/2015 7:35:17 AM	R24770
Xylenes, Total	ND	1.5		µg/L	1	3/12/2015 7:35:17 AM	R24770
Surr: 1,2-Dichloroethane-d4	88.2	70-130		%REC	1	3/12/2015 7:35:17 AM	R24770
Surr: 4-Bromofluorobenzene	99.4	70-130		%REC	1	3/12/2015 7:35:17 AM	R24770
Surr: Dibromofluoromethane	94.2	70-130		%REC	1	3/12/2015 7:35:17 AM	R24770
Surr: Toluene-d8	93.5	70-130		%REC	1	3/12/2015 7:35:17 AM	R24770

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503425

01-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1st Quarter-OW Wells

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID:	R24791	RunNo:	24791					
Prep Date:		Analysis Date:	3/12/2015	SeqNo:	730236	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Silver	ND	0.0050								
Sodium	ND	1.0								
Zinc	ND	0.010								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW	Batch ID:	R24791	RunNo:	24791					
Prep Date:		Analysis Date:	3/12/2015	SeqNo:	730237	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0	99.2	85	115			
Cadmium	0.50	0.0020	0.5000	0	101	85	115			
Calcium	54	1.0	50.00	0	108	85	115			
Chromium	0.50	0.0060	0.5000	0	99.4	85	115			
Copper	0.49	0.0060	0.5000	0	97.4	85	115			
Iron	0.49	0.020	0.5000	0	97.8	85	115			
Magnesium	54	1.0	50.00	0	107	85	115			
Manganese	0.49	0.0020	0.5000	0	97.0	85	115			
Potassium	51	1.0	50.00	0	101	85	115			
Silver	0.11	0.0050	0.1000	0	106	85	115			
Sodium	53	1.0	50.00	0	105	85	115			
Zinc	0.49	0.010	0.5000	0	98.5	85	115			

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID:	R24791	RunNo:	24791					
Prep Date:		Analysis Date:	3/12/2015	SeqNo:	730238	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								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503425

01-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1st Quarter-OW Wells

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID:	R24791	RunNo:	24791					
Prep Date:		Analysis Date:	3/12/2015	SeqNo:	730238	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Silver	ND	0.0050								
Sodium	ND	1.0								
Zinc	ND	0.010								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW	Batch ID:	R24791	RunNo:	24791					
Prep Date:		Analysis Date:	3/12/2015	SeqNo:	730239	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	97.1	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.4	85	115			
Calcium	53	1.0	50.00	0	106	85	115			
Chromium	0.49	0.0060	0.5000	0	97.6	85	115			
Copper	0.48	0.0060	0.5000	0	95.1	85	115			
Iron	0.48	0.020	0.5000	0	96.1	85	115			
Magnesium	53	1.0	50.00	0	105	85	115			
Manganese	0.48	0.0020	0.5000	0	95.0	85	115			
Potassium	50	1.0	50.00	0	100	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Sodium	52	1.0	50.00	0	104	85	115			
Zinc	0.48	0.010	0.5000	0	96.3	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503425

01-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1st Quarter-OW Wells

Sample ID	MB-18191		SampType: MBLK		TestCode: EPA Method 200.7: Total Metals					
Client ID:	PBW		Batch ID: 18191		RunNo: 24914					
Prep Date:	3/17/2015		Analysis Date: 3/18/2015		SeqNo: 734029		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-18191		SampType: LCS		TestCode: EPA Method 200.7: Total Metals					
Client ID:	LCSW		Batch ID: 18191		RunNo: 24914					
Prep Date:	3/17/2015		Analysis Date: 3/18/2015		SeqNo: 734030		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	100	85	115			
Cadmium	0.51	0.0020	0.5000	0	101	85	115			
Chromium	0.51	0.0060	0.5000	0	102	85	115			
Copper	0.50	0.0060	0.5000	0	99.8	85	115			
Iron	0.51	0.020	0.5000	0	101	85	115			
Manganese	0.49	0.0020	0.5000	0	97.6	85	115			
Silver	0.11	0.0050	0.1000	0	106	85	115			
Zinc	0.50	0.010	0.5000	0	99.7	85	115			

Sample ID	1503425-005CMS		SampType: MS		TestCode: EPA Method 200.7: Total Metals					
Client ID:	OW-30		Batch ID: 18191		RunNo: 24914					
Prep Date:	3/17/2015		Analysis Date: 3/18/2015		SeqNo: 734085		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.56	0.0020	0.5000	0.08970	95.0	70	130			
Cadmium	0.49	0.0020	0.5000	0	98.8	70	130			
Chromium	0.49	0.0060	0.5000	0	97.0	70	130			
Copper	0.53	0.0060	0.5000	0	106	70	130			
Iron	0.58	0.020	0.5000	0.08875	99.2	70	130			
Manganese	0.51	0.0020	0.5000	0.03702	93.7	70	130			
Silver	0.11	0.0050	0.1000	0	106	70	130			
Zinc	0.48	0.010	0.5000	0	95.2	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503425

01-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1st Quarter-OW Wells

Sample ID	1503425-005CMSD			SampType:	MSD		TestCode: EPA Method 200.7: Total Metals				
Client ID:	OW-30			Batch ID:	18191		RunNo: 24914				
Prep Date:	3/17/2015			Analysis Date:	3/18/2015		SeqNo:	734086		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Barium	0.57	0.0020	0.5000	0.08970	95.4	70	130	0.336	20		
Cadmium	0.49	0.0020	0.5000	0	98.4	70	130	0.410	20		
Chromium	0.49	0.0060	0.5000	0	97.5	70	130	0.518	20		
Copper	0.53	0.0060	0.5000	0	106	70	130	0.124	20		
Iron	0.58	0.020	0.5000	0.08875	99.2	70	130	0.0581	20		
Manganese	0.51	0.0020	0.5000	0.03702	94.1	70	130	0.395	20		
Silver	0.11	0.0050	0.1000	0	107	70	130	1.07	20		
Zinc	0.48	0.010	0.5000	0	95.5	70	130	0.312	20		

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503425

01-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1st Quarter-OW Wells

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R24987		RunNo: 24987					
Prep Date:			Analysis Date: 3/20/2015		SeqNo: 736812		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	0.025	0.0010	0.02500	0	99.6	85	115			
Uranium	0.025	0.0010	0.02500	0	99.7	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R24987		RunNo: 24987					
Prep Date:			Analysis Date: 3/20/2015		SeqNo: 736813		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	93.4	85	115			
Lead	0.024	0.0010	0.02500	0	96.5	85	115			
Uranium	0.024	0.0010	0.02500	0	96.2	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R24987			RunNo: 24987					
Prep Date:		Analysis Date: 3/20/2015			SeqNo: 736814			Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R24987			RunNo: 24987					
Prep Date:		Analysis Date: 3/20/2015			SeqNo: 736815			Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25015		RunNo: 25015					
Prep Date:			Analysis Date: 3/23/2015		SeqNo: 737627		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.026	0.0010	0.02500	0	104	85	115			
Selenium	0.026	0.0010	0.02500	0	104	85	115			
Uranium	0.026	0.0010	0.02500	0	104	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503425

01-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1st Quarter-OW Wells

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25015		RunNo: 25015					
Prep Date:			Analysis Date: 3/23/2015		SeqNo: 737628		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	99.5	85	115			
Selenium	0.024	0.0010	0.02500	0	95.3	85	115			
Uranium	0.024	0.0010	0.02500	0	96.6	85	115			

Sample ID	MB		SampType: MBLK		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW		Batch ID: R25015		RunNo: 25015					
Prep Date:			Analysis Date: 3/23/2015		SeqNo: 737629		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	MB		SampType: MBLK		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW		Batch ID: R25015		RunNo: 25015					
Prep Date:			Analysis Date: 3/23/2015		SeqNo: 737630		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25045		RunNo: 25045					
Prep Date:			Analysis Date: 3/24/2015		SeqNo: 738857		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	95.3	85	115			
Selenium	0.023	0.0010	0.02500	0	93.7	85	115			

Sample ID	MB		SampType: MBLK		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW		Batch ID: R25045		RunNo: 25045					
Prep Date:			Analysis Date: 3/24/2015		SeqNo: 738858		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503425

01-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1st Quarter-OW Wells

Sample ID	1503425-002CMSLL		SampType:	MSLL		TestCode:	200.8 ICPMS Metals:Total				
Client ID:	OW-29		Batch ID:	18191		RunNo:	24951				
Prep Date:	3/17/2015		Analysis Date:	3/20/2015		SeqNo:	735444		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Lead	0.026	0.0010	0.02500	.00009102	103	70	130				

Sample ID	LLLCS-18191		SampType: LCSLL		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	BatchQC		Batch ID: 18191		RunNo: 24951					
Prep Date:	3/17/2015		Analysis Date: 3/20/2015		SeqNo: 735454		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.026	0.0010	0.02500	0	104	85	115			
Lead	0.026	0.0010	0.02500	0	103	85	115			
Selenium	0.024	0.0010	0.02500	0	95.7	85	115			
Uranium	0.026	0.0010	0.02500	0	105	85	115			

Sample ID	MB-18191	SampType:	MBLK		TestCode:	200.8 ICPMS Metals:Total				
Client ID:	PBW	Batch ID:	18191		RunNo:	24951				
Prep Date:	3/17/2015	Analysis Date:	3/20/2015		SeqNo:	735456		Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	1503425-002CMSLL			SampType:	MSLL		TestCode:	200.8 ICPMS Metals:Total			
Client ID:	OW-29		Batch ID:	18191		RunNo:	25044				
Prep Date:	3/17/2015		Analysis Date:	3/24/2015		SeqNo:	738793		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Uranium	0.087	0.0050	0.02500	0.06074	105	70	130				

Sample ID	1503425-002CMSLL			SampType:	MSLL		TestCode:	200.8 ICPMS Metals:Total			
Client ID:	OW-29		Batch ID:	18191		RunNo:	25044				
Prep Date:	3/17/2015		Analysis Date:	3/24/2015		SeqNo:	738794		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Arsenic	0.026	0.0050	0.02500	0	103	70	130				
Selenium	0.027	0.0050	0.02500	0.004022	92.0	70	130				

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503425

01-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1st Quarter-OW Wells

Sample ID	MB-18157		SampType: MBLK		TestCode: EPA Method 245.1: Mercury					
Client ID:	PBW		Batch ID: 18157		RunNo: 24865					
Prep Date:	3/16/2015		Analysis Date: 3/17/2015		SeqNo: 732488		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.00020								

Sample ID	LCS-18157		SampType: LCS		TestCode: EPA Method 245.1: Mercury					
Client ID:	LCSW		Batch ID: 18157		RunNo: 24865					
Prep Date:	3/16/2015		Analysis Date: 3/17/2015		SeqNo: 732489		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0051	0.00020	0.005000	0	101	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503425

01-Apr-15

Client: Western Refining Southwest, Gallup**Project:** 2015 1st Quarter-OW Wells

Sample ID MB	SampType: MBLK		TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch ID: R24785		RunNo: 24785							
Prep Date:	Analysis Date: 3/11/2015		SeqNo: 730087		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								

Sample ID LCS	SampType: LCS		TestCode: EPA Method 300.0: Anions							
Client ID: LCSW	Batch ID: R24785		RunNo: 24785							
Prep Date:	Analysis Date: 3/11/2015		SeqNo: 730088		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.49	0.10	0.5000	0	98.2	90	110			
Chloride	4.9	0.50	5.000	0	97.9	90	110			
Bromide	2.5	0.10	2.500	0	99.1	90	110			
Phosphorus, Orthophosphate (As P	4.8	0.50	5.000	0	96.1	90	110			
Sulfate	9.7	0.50	10.00	0	96.7	90	110			

Sample ID MB	SampType: MBLK		TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch ID: R24785		RunNo: 24785							
Prep Date:	Analysis Date: 3/12/2015		SeqNo: 730141		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								

Sample ID LCS	SampType: LCS		TestCode: EPA Method 300.0: Anions							
Client ID: LCSW	Batch ID: R24785		RunNo: 24785							
Prep Date:	Analysis Date: 3/12/2015		SeqNo: 730142		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.46	0.10	0.5000	0	91.2	90	110			
Chloride	4.7	0.50	5.000	0	93.5	90	110			
Bromide	2.4	0.10	2.500	0	95.7	90	110			
Phosphorus, Orthophosphate (As P	4.6	0.50	5.000	0	92.4	90	110			
Sulfate	9.3	0.50	10.00	0	93.3	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503425

01-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1st Quarter-OW Wells

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R24864	RunNo:	24864					
Prep Date:		Analysis Date:	3/16/2015	SeqNo:	732383	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSW	Batch ID:	R24864	RunNo:	24864					
Prep Date:		Analysis Date:	3/16/2015	SeqNo:	732384	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.7	0.50	5.000	0	94.5	90	110			

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R24918	RunNo:	24918					
Prep Date:		Analysis Date:	3/18/2015	SeqNo:	734196	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:	R24918	RunNo:	24918					
Prep Date:		Analysis Date:	3/18/2015	SeqNo:	734197	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.5	0.20	3.500	0	98.7	90	110			

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R24918	RunNo:	24918					
Prep Date:		Analysis Date:	3/18/2015	SeqNo:	734251	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:	R24918	RunNo:	24918					
Prep Date:		Analysis Date:	3/18/2015	SeqNo:	734252	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	103	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503425

01-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1st Quarter-OW Wells

Sample ID	MB-18082		SampType: MBLK		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	PBW		Batch ID: 18082		RunNo: 24775					
Prep Date:	3/11/2015		Analysis Date: 3/12/2015		SeqNo: 729760		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.2		1.000		122	76.5	150			

Sample ID	LCS-18082		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	LCSW		Batch ID: 18082		RunNo: 24774					
Prep Date:	3/11/2015		Analysis Date: 3/12/2015		SeqNo: 729945		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.8	1.0	5.000	0	117	60.1	156			
Surr: DNOP	0.67		0.5000		134	76.5	150			

Sample ID	1503425-006CMS		SampType: MS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	OW-10		Batch ID: 18082		RunNo: 24775					
Prep Date:	3/11/2015		Analysis Date: 3/12/2015		SeqNo: 730049		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.7	1.0	5.000	1.779	79.2	75.9	164			
Surr: DNOP	0.60		0.5000		120	76.5	150			

Sample ID	1503425-006CMSD		SampType: MSD		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	OW-10		Batch ID: 18082		RunNo: 24775					
Prep Date:	3/11/2015		Analysis Date: 3/12/2015		SeqNo: 730050		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	7.5	1.0	5.000	1.779	114	75.9	164	26.6	22.1	R
Surr: DNOP	0.56		0.5000		112	76.5	150	0	0	

Sample ID	LCS-18082		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	LCSW		Batch ID: 18082		RunNo: 24775					
Prep Date:	3/11/2015		Analysis Date: 3/12/2015		SeqNo: 730644		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.5	1.0	5.000	0	130	60.1	156			
Surr: DNOP	0.60		0.5000		121	76.5	150			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503425

01-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1st Quarter-OW Wells

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID:	R24768	RunNo:	24768					
Prep Date:		Analysis Date:	3/11/2015	SeqNo:	729569	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		86.9	80	120			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	R24768	RunNo:	24768					
Prep Date:		Analysis Date:	3/11/2015	SeqNo:	729570	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.44	0.050	0.5000	0	87.2	80	120			
Surr: BFB	20		20.00		101	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503425

01-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1st Quarter-OW Wells

Sample ID	b3	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R24770			RunNo: 24770					
Prep Date:		Analysis Date: 3/11/2015			SeqNo: 729597		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503425

01-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1st Quarter-OW Wells

Sample ID b3	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R24770			RunNo: 24770						
Prep Date:	Analysis Date: 3/11/2015			SeqNo: 729597		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.6	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	10		10.00		99.9	70	130			

Sample ID 100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSW	Batch ID: R24770			RunNo: 24770						
Prep Date:	Analysis Date: 3/11/2015			SeqNo: 729601		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	19	1.0	20.00	0	97.0	70	130			
Chlorobenzene	20	1.0	20.00	0	97.7	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503425

01-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1st Quarter-OW Wells

Sample ID 100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSW	Batch ID: R24770			RunNo: 24770						
Prep Date:	Analysis Date: 3/11/2015			SeqNo: 729601		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	20	1.0	20.00	0	98.7	75.6	144			
Trichloroethene (TCE)	17	1.0	20.00	0	87.4	70	130			
Surr: 1,2-Dichloroethane-d4	9.9		10.00		99.0	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.6		10.00		95.8	70	130			

Sample ID 1503425-002a ms	SampType: MS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: OW-29	Batch ID: R24770			RunNo: 24770						
Prep Date:	Analysis Date: 3/12/2015			SeqNo: 729629		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	19	1.0	20.00	0	97.4	70	130			
Chlorobenzene	19	1.0	20.00	0	93.6	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	104	70	130			
Trichloroethene (TCE)	16	1.0	20.00	0	79.8	70	130			
Surr: 1,2-Dichloroethane-d4	9.6		10.00		96.5	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.4	70	130			
Surr: Dibromofluoromethane	10		10.00		105	70	130			
Surr: Toluene-d8	9.7		10.00		96.6	70	130			

Sample ID 1503425-002a msd	SampType: MSD			TestCode: EPA Method 8260B: VOLATILES						
Client ID: OW-29	Batch ID: R24770			RunNo: 24770						
Prep Date:	Analysis Date: 3/12/2015			SeqNo: 729630		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	92.8	70	130	8.32	20	
Toluene	18	1.0	20.00	0	92.1	70	130	5.59	20	
Chlorobenzene	19	1.0	20.00	0	93.3	70	130	0.383	20	
1,1-Dichloroethene	19	1.0	20.00	0	97.2	70	130	6.88	20	
Trichloroethene (TCE)	15	1.0	20.00	0	73.0	70	130	8.98	20	
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.7	70	130	0	0	
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130	0	0	
Surr: Dibromofluoromethane	10		10.00		99.8	70	130	0	0	
Surr: Toluene-d8	9.6		10.00		95.6	70	130	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503425

01-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1st Quarter-OW Wells

Sample ID	5mL rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R24800			RunNo: 24800					
Prep Date:		Analysis Date: 3/12/2015			SeqNo: 730443		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	1.0								
Surr: 1,2-Dichloroethane-d4	9.3		10.00		93.3	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.5	70	130			
Surr: Toluene-d8	9.3		10.00		92.9	70	130			

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R24800			RunNo: 24800					
Prep Date:		Analysis Date: 3/12/2015			SeqNo: 730445		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.8		10.00		98.4	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.0	70	130			
Surr: Toluene-d8	9.1		10.00		91.5	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

Chain-of-Custody Record

Client: Western Refining Company

GALLUP REFINERY

Mailing Address:
 2 Giant Crossing Road, Gallup, NM 87301
 Phone #: 505-722-3833
 email or Fax#: 505-863-0930

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

Accreditation:
☐ EDD (Type)

Turn-Around Time:

X Standard ☐ Rush

Project Name:

2015 1st QUARTER - OW Wells

Project #:

PO #20825207

Project Manager:

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

Sampler:

On Ice: ☒ Yes ☐ No

Sample Temperature: 10°C

Date

Time

Matrix

Sample Request ID

Container Type and #

Preservative Type

HEAL No.

1503425

-001

-002

-003

-004

-005

-006

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

April 01, 2015

Cheryl Johnson

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

RE: 2015-1st Qtr-

OrderNo.: 1503430

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 8 sample(s) on 3/10/2015 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', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503430

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015-1st Qtr-

Collection Date: 3/10/2015 7:00:00 AM

Lab ID: 1503430-001

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
Toluene	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
Ethylbenzene	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
Naphthalene	ND	2.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
1-Methylnaphthalene	ND	4.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
2-Methylnaphthalene	ND	4.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
Acetone	ND	10		µg/L	1	3/11/2015 5:46:40 PM	R24773
Bromobenzene	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
Bromodichloromethane	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
Bromoform	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
Bromomethane	ND	3.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
2-Butanone	ND	10		µg/L	1	3/11/2015 5:46:40 PM	R24773
Carbon disulfide	ND	10		µg/L	1	3/11/2015 5:46:40 PM	R24773
Carbon Tetrachloride	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
Chlorobenzene	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
Chloroethane	ND	2.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
Chloroform	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
Chloromethane	ND	3.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
2-Chlorotoluene	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
4-Chlorotoluene	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
cis-1,2-DCE	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
Dibromochloromethane	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
Dibromomethane	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
1,1-Dichloroethane	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
1,1-Dichloroethene	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
1,2-Dichloropropane	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
1,3-Dichloropropane	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
2,2-Dichloropropane	ND	2.0		µg/L	1	3/11/2015 5:46:40 PM	R24773

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 1 of 49
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503430

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015-1st Qtr-

Collection Date: 3/10/2015 7:00:00 AM

Lab ID: 1503430-001

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloropropene	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
Hexachlorobutadiene	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
2-Hexanone	ND	10		µg/L	1	3/11/2015 5:46:40 PM	R24773
Isopropylbenzene	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
4-Isopropyltoluene	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
4-Methyl-2-pentanone	ND	10		µg/L	1	3/11/2015 5:46:40 PM	R24773
Methylene Chloride	ND	3.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
n-Butylbenzene	ND	3.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
n-Propylbenzene	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
sec-Butylbenzene	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
Styrene	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
tert-Butylbenzene	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
trans-1,2-DCE	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
Trichlorofluoromethane	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
Vinyl chloride	ND	1.0		µg/L	1	3/11/2015 5:46:40 PM	R24773
Xylenes, Total	ND	1.5		µg/L	1	3/11/2015 5:46:40 PM	R24773
Surr: 1,2-Dichloroethane-d4	83.4	70-130		%REC	1	3/11/2015 5:46:40 PM	R24773
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	3/11/2015 5:46:40 PM	R24773
Surr: Dibromofluoromethane	97.0	70-130		%REC	1	3/11/2015 5:46:40 PM	R24773
Surr: Toluene-d8	95.8	70-130		%REC	1	3/11/2015 5:46:40 PM	R24773

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 2 of 49
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503430

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: GW-1

Project: 2015-1st Qtr-

Collection Date: 3/10/2015 8:48:00 AM

Lab ID: 1503430-002

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	2.4	1.0		mg/L	1	3/12/2015 11:30:33 AM	18082
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/12/2015 11:30:33 AM	18082
Surr: DNOP	108	76.5-150		%REC	1	3/12/2015 11:30:33 AM	18082
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.49	0.050		mg/L	1	3/12/2015 10:33:04 AM	R24802
Surr: BFB	797	80-120	S	%REC	1	3/12/2015 10:33:04 AM	R24802
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	49	25		µg/L	10	3/11/2015 5:30:31 PM	R24768
Benzene	11	1.0		µg/L	1	3/12/2015 10:33:04 AM	R24802
Toluene	2.2	1.0		µg/L	1	3/12/2015 10:33:04 AM	R24802
Ethylbenzene	5.1	1.0		µg/L	1	3/12/2015 10:33:04 AM	R24802
Xylenes, Total	21	2.0		µg/L	1	3/12/2015 10:33:04 AM	R24802
1,2,4-Trimethylbenzene	2.8	1.0		µg/L	1	3/12/2015 10:33:04 AM	R24802
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2015 10:33:04 AM	R24802
Surr: 4-Bromofluorobenzene	525	80-120	S	%REC	1	3/12/2015 10:33:04 AM	R24802
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	2.2	0.50		mg/L	5	3/12/2015 12:56:53 AM	R24785
Chloride	1000	50		mg/L	100	3/17/2015 12:19:43 AM	R24864
Nitrogen, Nitrite (As N)	ND	0.50		mg/L	5	3/12/2015 12:56:53 AM	R24785
Bromide	2.8	0.50		mg/L	5	3/12/2015 12:56:53 AM	R24785
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	3/12/2015 12:56:53 AM	R24785
Phosphorus, Orthophosphate (As P)	ND	2.5		mg/L	5	3/12/2015 12:56:53 AM	R24785
Sulfate	85	2.5		mg/L	5	3/12/2015 12:56:53 AM	R24785
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.56	0.0020		mg/L	1	3/12/2015 4:37:55 PM	R24791
Cadmium	ND	0.0020		mg/L	1	3/12/2015 4:37:55 PM	R24791
Calcium	260	5.0		mg/L	5	3/12/2015 5:02:31 PM	R24791
Chromium	ND	0.0060		mg/L	1	3/12/2015 4:37:55 PM	R24791
Copper	ND	0.0060		mg/L	1	3/12/2015 4:37:55 PM	R24791
Iron	9.8	1.0	*	mg/L	50	3/12/2015 5:04:11 PM	R24791
Magnesium	58	1.0		mg/L	1	3/12/2015 4:37:55 PM	R24791
Manganese	2.3	0.010	*	mg/L	5	3/12/2015 5:02:31 PM	R24791
Potassium	3.9	1.0		mg/L	1	3/12/2015 4:37:55 PM	R24791
Silver	ND	0.0050		mg/L	1	3/12/2015 4:37:55 PM	R24791
Sodium	1100	50		mg/L	50	3/12/2015 5:04:11 PM	R24791
Zinc	0.021	0.010		mg/L	1	3/12/2015 4:37:55 PM	R24791

EPA METHOD 200.7: TOTAL METALS

Analyst: **JLF**

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503430

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: GWM-1

Project: 2015-1st Qtr-

Collection Date: 3/10/2015 8:48:00 AM

Lab ID: 1503430-002

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.49	0.0020		mg/L	1	3/23/2015 5:11:58 PM	18269
Cadmium	ND	0.0020		mg/L	1	3/23/2015 5:11:58 PM	18269
Chromium	ND	0.0060		mg/L	1	3/23/2015 5:11:58 PM	18269
Copper	ND	0.0060		mg/L	1	3/23/2015 5:11:58 PM	18269
Iron	12	0.40	*	mg/L	20	3/24/2015 4:10:56 PM	18269
Manganese	2.4	0.040	*	mg/L	20	3/24/2015 4:10:56 PM	18269
Silver	ND	0.0050		mg/L	1	3/23/2015 5:11:58 PM	18269
Zinc	0.020	0.010		mg/L	1	3/24/2015 4:09:09 PM	18269
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	0.12	0.010	*	mg/L	10	3/23/2015 3:13:23 PM	R25015
Lead	ND	0.0050		mg/L	5	3/20/2015 5:07:33 PM	R24987
Selenium	ND	0.020		mg/L	20	3/24/2015 6:14:37 PM	R25045
Uranium	0.011	0.0050		mg/L	5	3/20/2015 5:07:33 PM	R24987
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.13	0.020	*	mg/L	20	3/25/2015 2:33:03 PM	18269
Lead	0.0055	0.0010		mg/L	1	3/24/2015 2:31:58 PM	18269
Selenium	ND	0.020		mg/L	20	3/25/2015 2:33:03 PM	18269
Uranium	0.016	0.0010		mg/L	1	3/24/2015 2:31:58 PM	18269
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/17/2015 8:29:22 AM	18156

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 4 of 49
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503430

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OAPIS-1

Project: 2015-1st Qtr-

Collection Date: 3/10/2015 9:37:00 AM

Lab ID: 1503430-003

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	6.5	1.0		mg/L	1	3/12/2015 11:57:30 AM	18082
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/12/2015 11:57:30 AM	18082
Surr: DNOP	107	76.5-150		%REC	1	3/12/2015 11:57:30 AM	18082
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.56	0.25		mg/L	5	3/11/2015 12:09:14 PM	R24768
Surr: BFB	104	80-120		%REC	5	3/11/2015 12:09:14 PM	R24768
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	1.4	0.50		mg/L	5	3/12/2015 1:21:41 AM	R24785
Chloride	1800	100		mg/L	200	3/17/2015 12:56:56 AM	R24864
Nitrogen, Nitrite (As N)	ND	0.50		mg/L	5	3/12/2015 1:21:41 AM	R24785
Bromide	5.3	0.50		mg/L	5	3/12/2015 1:21:41 AM	R24785
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	3/12/2015 1:21:41 AM	R24785
Phosphorus, Orthophosphate (As P)	ND	2.5		mg/L	5	3/12/2015 1:21:41 AM	R24785
Sulfate	30	2.5		mg/L	5	3/12/2015 1:21:41 AM	R24785
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.63	0.0020		mg/L	1	3/12/2015 4:39:47 PM	R24791
Cadmium	ND	0.0020		mg/L	1	3/12/2015 4:39:47 PM	R24791
Calcium	170	5.0		mg/L	5	3/12/2015 5:06:06 PM	R24791
Chromium	ND	0.0060		mg/L	1	3/12/2015 4:39:47 PM	R24791
Copper	ND	0.0060		mg/L	1	3/12/2015 4:39:47 PM	R24791
Iron	4.9	0.10	*	mg/L	5	3/12/2015 5:06:06 PM	R24791
Magnesium	30	1.0		mg/L	1	3/12/2015 4:39:47 PM	R24791
Manganese	1.8	0.010	*	mg/L	5	3/12/2015 5:06:06 PM	R24791
Potassium	5.9	1.0		mg/L	1	3/12/2015 4:39:47 PM	R24791
Silver	ND	0.0050		mg/L	1	3/12/2015 4:39:47 PM	R24791
Sodium	1300	50		mg/L	50	3/12/2015 5:07:46 PM	R24791
Zinc	0.019	0.010		mg/L	1	3/12/2015 4:39:47 PM	R24791
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.66	0.0020		mg/L	1	3/23/2015 5:13:47 PM	18269
Cadmium	ND	0.0020		mg/L	1	3/23/2015 5:13:47 PM	18269
Chromium	ND	0.0060		mg/L	1	3/23/2015 5:13:47 PM	18269
Copper	ND	0.0060		mg/L	1	3/23/2015 5:13:47 PM	18269
Iron	6.9	0.20	*	mg/L	10	3/24/2015 4:14:58 PM	18269
Manganese	1.7	0.020	*	mg/L	10	3/24/2015 4:14:58 PM	18269
Silver	ND	0.0050		mg/L	1	3/23/2015 5:13:47 PM	18269
Zinc	0.020	0.010		mg/L	1	3/24/2015 4:12:59 PM	18269

EPA 200.8: DISSOLVED METALS

Analyst: **DBD**

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503430

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OAPIS-1

Project: 2015-1st Qtr-

Collection Date: 3/10/2015 9:37:00 AM

Lab ID: 1503430-003

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.020	*	mg/L	20	3/23/2015 3:16:26 PM	R25015
Lead	ND	0.0010		mg/L	1	3/20/2015 5:10:36 PM	R24987
Selenium	ND	0.050		mg/L	50	3/24/2015 6:17:40 PM	R25045
Uranium	0.020	0.0010		mg/L	1	3/20/2015 5:10:36 PM	R24987
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.050	*	mg/L	50	3/25/2015 5:41:28 PM	18269
Lead	0.0059	0.0010		mg/L	1	3/24/2015 2:35:09 PM	18269
Selenium	ND	0.050		mg/L	50	3/25/2015 5:41:28 PM	18269
Uranium	0.023	0.0010		mg/L	1	3/24/2015 2:35:09 PM	18269
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/17/2015 8:31:10 AM	18156
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Acenaphthylene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Aniline	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Anthracene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Azobenzene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Benz(a)anthracene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Benzo(a)pyrene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Benzo(b)fluoranthene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Benzo(k)fluoranthene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Benzoic acid	ND	20		µg/L	1	3/17/2015 12:38:17 PM	18121
Benzyl alcohol	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Butyl benzyl phthalate	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Carbazole	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
4-Chloroaniline	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
2-Chloronaphthalene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
2-Chlorophenol	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Chrysene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Di-n-butyl phthalate	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 6 of 49
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503430

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OAPIS-1

Project: 2015-1st Qtr-

Collection Date: 3/10/2015 9:37:00 AM

Lab ID: 1503430-003

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Di-n-octyl phthalate	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Dibenzofuran	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
1,2-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
1,3-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
1,4-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Diethyl phthalate	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Dimethyl phthalate	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
2,4-Dichlorophenol	ND	20		µg/L	1	3/17/2015 12:38:17 PM	18121
2,4-Dimethylphenol	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/17/2015 12:38:17 PM	18121
2,4-Dinitrophenol	ND	20		µg/L	1	3/17/2015 12:38:17 PM	18121
2,4-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
2,6-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Fluoranthene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Fluorene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Hexachlorobenzene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Hexachlorobutadiene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Hexachloroethane	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Isophorone	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
1-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
2-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
2-Methylphenol	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
3+4-Methylphenol	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
N-Nitrosodimethylamine	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Naphthalene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
2-Nitroaniline	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
3-Nitroaniline	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
4-Nitroaniline	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Nitrobenzene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
2-Nitrophenol	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
4-Nitrophenol	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Pentachlorophenol	ND	20		µg/L	1	3/17/2015 12:38:17 PM	18121
Phenanthrene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 7 of 49
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503430

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OAPIS-1

Project: 2015-1st Qtr-

Collection Date: 3/10/2015 9:37:00 AM

Lab ID: 1503430-003

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Phenol	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Pyrene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Pyridine	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/17/2015 12:38:17 PM	18121
Surr: 2-Fluorophenol	57.9	17.6-104		%REC	1	3/17/2015 12:38:17 PM	18121
Surr: Phenol-d5	53.4	17.7-89.9		%REC	1	3/17/2015 12:38:17 PM	18121
Surr: 2,4,6-Tribromophenol	63.2	16.3-122		%REC	1	3/17/2015 12:38:17 PM	18121
Surr: Nitrobenzene-d5	70.4	45.3-117		%REC	1	3/17/2015 12:38:17 PM	18121
Surr: 2-Fluorobiphenyl	72.5	43-113		%REC	1	3/17/2015 12:38:17 PM	18121
Surr: 4-Terphenyl-d14	80.8	47.6-122		%REC	1	3/17/2015 12:38:17 PM	18121
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	65	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
Toluene	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
Ethylbenzene	5.4	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
Methyl tert-butyl ether (MTBE)	290	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
1,2,4-Trimethylbenzene	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
Naphthalene	ND	10		µg/L	5	3/11/2015 2:34:38 PM	R24773
1-Methylnaphthalene	ND	20		µg/L	5	3/11/2015 2:34:38 PM	R24773
2-Methylnaphthalene	ND	20		µg/L	5	3/11/2015 2:34:38 PM	R24773
Acetone	ND	50		µg/L	5	3/11/2015 2:34:38 PM	R24773
Bromobenzene	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
Bromodichloromethane	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
Bromoform	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
Bromomethane	ND	15		µg/L	5	3/11/2015 2:34:38 PM	R24773
2-Butanone	ND	50		µg/L	5	3/11/2015 2:34:38 PM	R24773
Carbon disulfide	ND	50		µg/L	5	3/11/2015 2:34:38 PM	R24773
Carbon Tetrachloride	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
Chlorobenzene	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
Chloroethane	ND	10		µg/L	5	3/11/2015 2:34:38 PM	R24773
Chloroform	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
Chloromethane	ND	15		µg/L	5	3/11/2015 2:34:38 PM	R24773
2-Chlorotoluene	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
4-Chlorotoluene	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
cis-1,2-DCE	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 8 of 49
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503430

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OAPIS-1

Project: 2015-1st Qtr-

Collection Date: 3/10/2015 9:37:00 AM

Lab ID: 1503430-003

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	3/11/2015 2:34:38 PM	R24773
Dibromochloromethane	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
Dibromomethane	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
1,2-Dichlorobenzene	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
1,3-Dichlorobenzene	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
1,4-Dichlorobenzene	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
Dichlorodifluoromethane	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
1,1-Dichloroethane	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
1,1-Dichloroethene	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
1,2-Dichloropropane	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
1,3-Dichloropropane	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
2,2-Dichloropropane	ND	10		µg/L	5	3/11/2015 2:34:38 PM	R24773
1,1-Dichloropropene	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
Hexachlorobutadiene	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
2-Hexanone	ND	50		µg/L	5	3/11/2015 2:34:38 PM	R24773
Isopropylbenzene	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
4-Isopropyltoluene	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
4-Methyl-2-pentanone	ND	50		µg/L	5	3/11/2015 2:34:38 PM	R24773
Methylene Chloride	ND	15		µg/L	5	3/11/2015 2:34:38 PM	R24773
n-Butylbenzene	ND	15		µg/L	5	3/11/2015 2:34:38 PM	R24773
n-Propylbenzene	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
sec-Butylbenzene	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
Styrene	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
tert-Butylbenzene	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	3/11/2015 2:34:38 PM	R24773
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
trans-1,2-DCE	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
1,1,1-Trichloroethane	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
1,1,2-Trichloroethane	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
Trichloroethene (TCE)	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
Trichlorofluoromethane	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
1,2,3-Trichloropropane	ND	10		µg/L	5	3/11/2015 2:34:38 PM	R24773
Vinyl chloride	ND	5.0		µg/L	5	3/11/2015 2:34:38 PM	R24773
Xylenes, Total	ND	7.5		µg/L	5	3/11/2015 2:34:38 PM	R24773

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 9 of 49
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503430

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OAPIS-1

Project: 2015-1st Qtr-

Collection Date: 3/10/2015 9:37:00 AM

Lab ID: 1503430-003

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: DJF	
Surr: 1,2-Dichloroethane-d4	83.4	70-130		%REC	5	3/11/2015 2:34:38 PM	R24773
Surr: 4-Bromofluorobenzene	106	70-130		%REC	5	3/11/2015 2:34:38 PM	R24773
Surr: Dibromofluoromethane	95.6	70-130		%REC	5	3/11/2015 2:34:38 PM	R24773
Surr: Toluene-d8	98.0	70-130		%REC	5	3/11/2015 2:34:38 PM	R24773
EPA 335.4: TOTAL CYANIDE SUBBED						Analyst: SUB	
Cyanide	0.0804	0.0100		mg/L	1	3/23/2015	R25225

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 10 of 49
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503430

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-2

Project: 2015-1st Qtr-

Collection Date: 3/10/2015 11:00:00 AM

Lab ID: 1503430-004

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	1.2	1.0		mg/L	1	3/12/2015 12:24:23 PM	18082
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/12/2015 12:24:23 PM	18082
Surr: DNOP	113	76.5-150		%REC	1	3/12/2015 12:24:23 PM	18082
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.49	0.050		mg/L	1	3/11/2015 1:07:35 PM	R24768
Surr: BFB	139	80-120	S	%REC	1	3/11/2015 1:07:35 PM	R24768
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	220	25		µg/L	10	3/11/2015 12:38:24 PM	R24768
Benzene	32	1.0		µg/L	1	3/11/2015 1:07:35 PM	R24768
Toluene	ND	1.0		µg/L	1	3/11/2015 1:07:35 PM	R24768
Ethylbenzene	12	1.0		µg/L	1	3/11/2015 1:07:35 PM	R24768
Xylenes, Total	2.7	2.0		µg/L	1	3/11/2015 1:07:35 PM	R24768
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/11/2015 1:07:35 PM	R24768
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/11/2015 1:07:35 PM	R24768
Surr: 4-Bromofluorobenzene	135	80-120	S	%REC	1	3/11/2015 1:07:35 PM	R24768
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	1.4	0.50		mg/L	5	3/12/2015 2:11:20 AM	R24785
Chloride	300	10		mg/L	20	3/12/2015 2:23:45 AM	R24785
Nitrogen, Nitrite (As N)	ND	0.50		mg/L	5	3/12/2015 2:11:20 AM	R24785
Bromide	1.3	0.50		mg/L	5	3/12/2015 2:11:20 AM	R24785
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	3/12/2015 2:11:20 AM	R24785
Phosphorus, Orthophosphate (As P)	ND	2.5		mg/L	5	3/12/2015 2:11:20 AM	R24785
Sulfate	7.8	2.5		mg/L	5	3/12/2015 2:11:20 AM	R24785
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	1.8	0.010		mg/L	5	3/12/2015 5:09:44 PM	R24791
Cadmium	ND	0.0020		mg/L	1	3/12/2015 4:41:38 PM	R24791
Calcium	85	5.0		mg/L	5	3/12/2015 5:09:44 PM	R24791
Chromium	ND	0.0060		mg/L	1	3/12/2015 4:41:38 PM	R24791
Copper	ND	0.0060		mg/L	1	3/12/2015 4:41:38 PM	R24791
Iron	1.9	0.10	*	mg/L	5	3/12/2015 5:09:44 PM	R24791
Magnesium	16	1.0		mg/L	1	3/12/2015 4:41:38 PM	R24791
Manganese	1.0	0.010	*	mg/L	5	3/12/2015 5:09:44 PM	R24791
Potassium	1.2	1.0		mg/L	1	3/12/2015 4:41:38 PM	R24791
Silver	ND	0.0050		mg/L	1	3/12/2015 4:41:38 PM	R24791
Sodium	370	5.0		mg/L	5	3/12/2015 5:09:44 PM	R24791
Zinc	ND	0.010		mg/L	1	3/12/2015 4:41:38 PM	R24791
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503430

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-2

Project: 2015-1st Qtr-

Collection Date: 3/10/2015 11:00:00 AM

Lab ID: 1503430-004

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	1.9	0.010		mg/L	5	3/24/2015 4:18:36 PM	18269
Cadmium	ND	0.0020		mg/L	1	3/23/2015 5:15:39 PM	18269
Chromium	ND	0.0060		mg/L	1	3/23/2015 5:15:39 PM	18269
Copper	ND	0.0060		mg/L	1	3/23/2015 5:15:39 PM	18269
Iron	3.0	0.10	*	mg/L	5	3/24/2015 4:18:36 PM	18269
Manganese	1.1	0.010	*	mg/L	5	3/24/2015 4:18:36 PM	18269
Silver	ND	0.0050		mg/L	1	3/23/2015 5:15:39 PM	18269
Zinc	ND	0.010		mg/L	1	3/24/2015 4:16:49 PM	18269
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/23/2015 3:25:39 PM	R25015
Lead	ND	0.0010		mg/L	1	3/20/2015 5:19:50 PM	R24987
Selenium	ND	0.010		mg/L	10	3/23/2015 3:25:39 PM	R25015
Uranium	ND	0.0010		mg/L	1	3/20/2015 5:19:50 PM	R24987
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/25/2015 2:39:26 PM	18269
Lead	0.0013	0.0010		mg/L	1	3/24/2015 2:38:20 PM	18269
Selenium	ND	0.010		mg/L	10	3/25/2015 2:39:26 PM	18269
Uranium	ND	0.0010		mg/L	1	3/24/2015 2:38:20 PM	18269
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/17/2015 8:32:58 AM	18156
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Acenaphthylene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Aniline	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Anthracene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Azobenzene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Benz(a)anthracene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Benzo(a)pyrene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Benzo(b)fluoranthene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Benzo(k)fluoranthene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Benzoic acid	ND	20		µg/L	1	3/17/2015 1:06:32 PM	18121
Benzyl alcohol	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503430

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-2

Project: 2015-1st Qtr-

Collection Date: 3/10/2015 11:00:00 AM

Lab ID: 1503430-004

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Butyl benzyl phthalate	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Carbazole	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
4-Chloroaniline	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
2-Chloronaphthalene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
2-Chlorophenol	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Chrysene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Di-n-butyl phthalate	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Di-n-octyl phthalate	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Dibenzofuran	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
1,2-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
1,3-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
1,4-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Diethyl phthalate	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Dimethyl phthalate	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
2,4-Dichlorophenol	ND	20		µg/L	1	3/17/2015 1:06:32 PM	18121
2,4-Dimethylphenol	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/17/2015 1:06:32 PM	18121
2,4-Dinitrophenol	ND	20		µg/L	1	3/17/2015 1:06:32 PM	18121
2,4-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
2,6-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Fluoranthene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Fluorene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Hexachlorobenzene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Hexachlorobutadiene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Hexachloroethane	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Isophorone	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
1-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
2-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
2-Methylphenol	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
3+4-Methylphenol	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
N-Nitrosodimethylamine	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503430

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-2

Project: 2015-1st Qtr-

Collection Date: 3/10/2015 11:00:00 AM

Lab ID: 1503430-004

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Naphthalene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
2-Nitroaniline	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
3-Nitroaniline	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
4-Nitroaniline	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Nitrobenzene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
2-Nitrophenol	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
4-Nitrophenol	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Pentachlorophenol	ND	20		µg/L	1	3/17/2015 1:06:32 PM	18121
Phenanthrene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Phenol	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Pyrene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Pyridine	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/17/2015 1:06:32 PM	18121
Surr: 2-Fluorophenol	70.2	17.6-104		%REC	1	3/17/2015 1:06:32 PM	18121
Surr: Phenol-d5	62.5	17.7-89.9		%REC	1	3/17/2015 1:06:32 PM	18121
Surr: 2,4,6-Tribromophenol	92.7	16.3-122		%REC	1	3/17/2015 1:06:32 PM	18121
Surr: Nitrobenzene-d5	77.9	45.3-117		%REC	1	3/17/2015 1:06:32 PM	18121
Surr: 2-Fluorobiphenyl	82.9	43-113		%REC	1	3/17/2015 1:06:32 PM	18121
Surr: 4-Terphenyl-d14	111	47.6-122		%REC	1	3/17/2015 1:06:32 PM	18121

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503430

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: KA-3

Project: 2015-1st Qtr-

Collection Date: 3/10/2015 11:15:00 AM

Lab ID: 1503430-005

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/12/2015 12:50:53 PM	18082
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/12/2015 12:50:53 PM	18082
Surr: DNOP	124	76.5-150		%REC	1	3/12/2015 12:50:53 PM	18082
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/11/2015 3:04:24 PM	R24768
Surr: BFB	95.8	80-120		%REC	1	3/11/2015 3:04:24 PM	R24768
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	8.8	2.5		µg/L	1	3/11/2015 3:04:24 PM	R24768
Benzene	ND	1.0		µg/L	1	3/11/2015 3:04:24 PM	R24768
Toluene	ND	1.0		µg/L	1	3/11/2015 3:04:24 PM	R24768
Ethylbenzene	ND	1.0		µg/L	1	3/11/2015 3:04:24 PM	R24768
Xylenes, Total	ND	2.0		µg/L	1	3/11/2015 3:04:24 PM	R24768
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/11/2015 3:04:24 PM	R24768
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/11/2015 3:04:24 PM	R24768
Surr: 4-Bromofluorobenzene	110	80-120		%REC	1	3/11/2015 3:04:24 PM	R24768
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	1.1	0.10		mg/L	1	3/12/2015 3:00:58 AM	R24785
Chloride	120	10		mg/L	20	3/12/2015 3:13:23 AM	R24785
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	3/12/2015 3:00:58 AM	R24785
Bromide	1.0	0.10		mg/L	1	3/12/2015 3:00:58 AM	R24785
Nitrogen, Nitrate (As N)	0.53	0.10		mg/L	1	3/12/2015 3:00:58 AM	R24785
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	3/12/2015 3:00:58 AM	R24785
Sulfate	43	10		mg/L	20	3/12/2015 3:13:23 AM	R24785
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.25	0.0020		mg/L	1	3/12/2015 4:47:02 PM	R24791
Cadmium	ND	0.0020		mg/L	1	3/12/2015 4:47:02 PM	R24791
Calcium	64	1.0		mg/L	1	3/12/2015 4:47:02 PM	R24791
Chromium	ND	0.0060		mg/L	1	3/12/2015 4:47:02 PM	R24791
Copper	ND	0.0060		mg/L	1	3/12/2015 4:47:02 PM	R24791
Iron	ND	0.020		mg/L	1	3/12/2015 4:47:02 PM	R24791
Magnesium	10	1.0		mg/L	1	3/12/2015 4:47:02 PM	R24791
Manganese	0.69	0.0020	*	mg/L	1	3/12/2015 4:47:02 PM	R24791
Potassium	1.2	1.0		mg/L	1	3/12/2015 4:47:02 PM	R24791
Silver	ND	0.0050		mg/L	1	3/12/2015 4:47:02 PM	R24791
Sodium	290	5.0		mg/L	5	3/12/2015 5:15:58 PM	R24791
Zinc	0.010	0.010		mg/L	1	3/12/2015 4:47:02 PM	R24791

EPA METHOD 200.7: TOTAL METALS

Analyst: **JLF**

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503430

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: KA-3

Project: 2015-1st Qtr-

Collection Date: 3/10/2015 11:15:00 AM

Lab ID: 1503430-005

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.27	0.0020		mg/L	1	3/23/2015 5:23:03 PM	18269
Cadmium	ND	0.0020		mg/L	1	3/23/2015 5:23:03 PM	18269
Chromium	ND	0.0060		mg/L	1	3/23/2015 5:23:03 PM	18269
Copper	ND	0.0060		mg/L	1	3/23/2015 5:23:03 PM	18269
Iron	0.35	0.020	*	mg/L	1	3/23/2015 5:23:03 PM	18269
Manganese	1.6	0.010	*	mg/L	5	3/24/2015 4:22:33 PM	18269
Silver	ND	0.0050		mg/L	1	3/23/2015 5:23:03 PM	18269
Zinc	ND	0.010		mg/L	1	3/24/2015 4:20:29 PM	18269
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	0.0020	0.0010		mg/L	1	3/20/2015 5:22:53 PM	R24987
Lead	ND	0.0010		mg/L	1	3/20/2015 5:22:53 PM	R24987
Selenium	ND	0.010		mg/L	10	3/24/2015 6:20:43 PM	R25045
Uranium	0.018	0.0010		mg/L	1	3/20/2015 5:22:53 PM	R24987
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/25/2015 2:42:37 PM	18269
Lead	ND	0.0010		mg/L	1	3/24/2015 2:41:31 PM	18269
Selenium	ND	0.010		mg/L	10	3/25/2015 2:42:37 PM	18269
Uranium	0.015	0.0010		mg/L	1	3/24/2015 2:41:31 PM	18269
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/17/2015 8:38:28 AM	18156
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Acenaphthylene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Aniline	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Anthracene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Azobenzene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Benz(a)anthracene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Benzo(a)pyrene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Benzo(b)fluoranthene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Benzo(k)fluoranthene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Benzoic acid	ND	20		µg/L	1	3/17/2015 1:34:42 PM	18121
Benzyl alcohol	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503430

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: KA-3

Project: 2015-1st Qtr-

Collection Date: 3/10/2015 11:15:00 AM

Lab ID: 1503430-005

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Butyl benzyl phthalate	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Carbazole	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
4-Chloroaniline	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
2-Chloronaphthalene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
2-Chlorophenol	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Chrysene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Di-n-butyl phthalate	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Di-n-octyl phthalate	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Dibenzofuran	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
1,2-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
1,3-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
1,4-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Diethyl phthalate	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Dimethyl phthalate	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
2,4-Dichlorophenol	ND	20		µg/L	1	3/17/2015 1:34:42 PM	18121
2,4-Dimethylphenol	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/17/2015 1:34:42 PM	18121
2,4-Dinitrophenol	ND	20		µg/L	1	3/17/2015 1:34:42 PM	18121
2,4-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
2,6-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Fluoranthene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Fluorene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Hexachlorobenzene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Hexachlorobutadiene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Hexachloroethane	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Isophorone	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
1-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
2-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
2-Methylphenol	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
3+4-Methylphenol	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
N-Nitrosodimethylamine	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503430

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: KA-3

Project: 2015-1st Qtr-

Collection Date: 3/10/2015 11:15:00 AM

Lab ID: 1503430-005

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Naphthalene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
2-Nitroaniline	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
3-Nitroaniline	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
4-Nitroaniline	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Nitrobenzene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
2-Nitrophenol	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
4-Nitrophenol	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Pentachlorophenol	ND	20		µg/L	1	3/17/2015 1:34:42 PM	18121
Phenanthrene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Phenol	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Pyrene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Pyridine	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/17/2015 1:34:42 PM	18121
Surr: 2-Fluorophenol	79.7	17.6-104		%REC	1	3/17/2015 1:34:42 PM	18121
Surr: Phenol-d5	64.9	17.7-89.9		%REC	1	3/17/2015 1:34:42 PM	18121
Surr: 2,4,6-Tribromophenol	102	16.3-122		%REC	1	3/17/2015 1:34:42 PM	18121
Surr: Nitrobenzene-d5	89.4	45.3-117		%REC	1	3/17/2015 1:34:42 PM	18121
Surr: 2-Fluorobiphenyl	100	43-113		%REC	1	3/17/2015 1:34:42 PM	18121
Surr: 4-Terphenyl-d14	122	47.6-122	S	%REC	1	3/17/2015 1:34:42 PM	18121

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503430

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-3

Project: 2015-1st Qtr-

Collection Date: 3/10/2015 11:30:00 AM

Lab ID: 1503430-006

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/12/2015 1:19:23 PM	18082
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/12/2015 1:19:23 PM	18082
Surr: DNOP	135	76.5-150		%REC	1	3/12/2015 1:19:23 PM	18082
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/11/2015 4:32:09 PM	R24768
Surr: BFB	87.5	80-120		%REC	1	3/11/2015 4:32:09 PM	R24768
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	3/11/2015 4:32:09 PM	R24768
Benzene	ND	1.0		µg/L	1	3/11/2015 4:32:09 PM	R24768
Toluene	ND	1.0		µg/L	1	3/11/2015 4:32:09 PM	R24768
Ethylbenzene	ND	1.0		µg/L	1	3/11/2015 4:32:09 PM	R24768
Xylenes, Total	ND	2.0		µg/L	1	3/11/2015 4:32:09 PM	R24768
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/11/2015 4:32:09 PM	R24768
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/11/2015 4:32:09 PM	R24768
Surr: 4-Bromofluorobenzene	108	80-120		%REC	1	3/11/2015 4:32:09 PM	R24768
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	0.42	0.10		mg/L	1	3/11/2015 5:05:22 PM	R24785
Chloride	940	50		mg/L	100	3/17/2015 1:21:45 AM	R24864
Nitrogen, Nitrite (As N)	ND	2.0		mg/L	20	3/11/2015 5:17:46 PM	R24785
Bromide	5.1	0.10		mg/L	1	3/11/2015 5:05:22 PM	R24785
Nitrogen, Nitrate (As N)	20	2.0	*	mg/L	20	3/11/2015 5:17:46 PM	R24785
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	3/11/2015 5:05:22 PM	R24785
Sulfate	430	10		mg/L	20	3/11/2015 5:17:46 PM	R24785
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.048	0.0020		mg/L	1	3/12/2015 4:48:59 PM	R24791
Cadmium	ND	0.0020		mg/L	1	3/12/2015 4:48:59 PM	R24791
Calcium	42	1.0		mg/L	1	3/12/2015 4:48:59 PM	R24791
Chromium	ND	0.0060		mg/L	1	3/12/2015 4:48:59 PM	R24791
Copper	ND	0.0060		mg/L	1	3/12/2015 4:48:59 PM	R24791
Iron	ND	0.020		mg/L	1	3/12/2015 4:48:59 PM	R24791
Magnesium	6.5	1.0		mg/L	1	3/12/2015 4:48:59 PM	R24791
Manganese	ND	0.0020		mg/L	1	3/12/2015 4:48:59 PM	R24791
Potassium	4.6	1.0		mg/L	1	3/12/2015 4:48:59 PM	R24791
Silver	ND	0.0050		mg/L	1	3/12/2015 4:48:59 PM	R24791
Sodium	910	20		mg/L	20	3/12/2015 5:23:36 PM	R24791
Zinc	0.044	0.010		mg/L	1	3/12/2015 4:48:59 PM	R24791

EPA METHOD 200.7: TOTAL METALS

Analyst: **JLF**

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503430

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-3

Project: 2015-1st Qtr-

Collection Date: 3/10/2015 11:30:00 AM

Lab ID: 1503430-006

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.10	0.0020		mg/L	1	3/23/2015 5:24:59 PM	18269
Cadmium	ND	0.0020		mg/L	1	3/23/2015 5:24:59 PM	18269
Chromium	ND	0.0060		mg/L	1	3/23/2015 5:24:59 PM	18269
Copper	ND	0.0060		mg/L	1	3/23/2015 5:24:59 PM	18269
Iron	1.1	0.10	*	mg/L	5	3/24/2015 4:26:42 PM	18269
Manganese	0.26	0.0020	*	mg/L	1	3/23/2015 5:24:59 PM	18269
Silver	ND	0.0050		mg/L	1	3/23/2015 5:24:59 PM	18269
Zinc	0.018	0.010		mg/L	1	3/24/2015 4:24:36 PM	18269
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.020		mg/L	20	3/23/2015 3:31:45 PM	R25015
Lead	ND	0.0010		mg/L	1	3/20/2015 5:25:56 PM	R24987
Selenium	ND	0.050		mg/L	50	3/24/2015 6:23:46 PM	R25045
Uranium	0.036	0.0010	*	mg/L	1	3/20/2015 5:25:56 PM	R24987
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.020	*	mg/L	20	3/25/2015 2:45:48 PM	18269
Lead	0.0015	0.0010		mg/L	1	3/24/2015 2:44:43 PM	18269
Selenium	ND	0.050		mg/L	50	3/25/2015 5:44:39 PM	18269
Uranium	0.042	0.0010	*	mg/L	1	3/24/2015 2:44:43 PM	18269
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/17/2015 8:40:17 AM	18156
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Acenaphthylene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Aniline	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Anthracene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Azobenzene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Benz(a)anthracene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Benzo(a)pyrene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Benzo(b)fluoranthene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Benzo(k)fluoranthene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Benzoic acid	ND	20		µg/L	1	3/17/2015 2:02:55 PM	18121
Benzyl alcohol	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503430

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-3

Project: 2015-1st Qtr-

Collection Date: 3/10/2015 11:30:00 AM

Lab ID: 1503430-006

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Butyl benzyl phthalate	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Carbazole	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
4-Chloroaniline	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
2-Chloronaphthalene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
2-Chlorophenol	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Chrysene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Di-n-butyl phthalate	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Di-n-octyl phthalate	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Dibenzofuran	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
1,2-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
1,3-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
1,4-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Diethyl phthalate	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Dimethyl phthalate	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
2,4-Dichlorophenol	ND	20		µg/L	1	3/17/2015 2:02:55 PM	18121
2,4-Dimethylphenol	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/17/2015 2:02:55 PM	18121
2,4-Dinitrophenol	ND	20		µg/L	1	3/17/2015 2:02:55 PM	18121
2,4-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
2,6-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Fluoranthene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Fluorene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Hexachlorobenzene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Hexachlorobutadiene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Hexachloroethane	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Isophorone	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
1-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
2-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
2-Methylphenol	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
3+4-Methylphenol	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
N-Nitrosodimethylamine	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503430

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-3

Project: 2015-1st Qtr-

Collection Date: 3/10/2015 11:30:00 AM

Lab ID: 1503430-006

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: DAM	
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Naphthalene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
2-Nitroaniline	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
3-Nitroaniline	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
4-Nitroaniline	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Nitrobenzene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
2-Nitrophenol	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
4-Nitrophenol	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Pentachlorophenol	ND	20		µg/L	1	3/17/2015 2:02:55 PM	18121
Phenanthrene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Phenol	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Pyrene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Pyridine	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/17/2015 2:02:55 PM	18121
Surr: 2-Fluorophenol	49.2	17.6-104		%REC	1	3/17/2015 2:02:55 PM	18121
Surr: Phenol-d5	44.4	17.7-89.9		%REC	1	3/17/2015 2:02:55 PM	18121
Surr: 2,4,6-Tribromophenol	76.9	16.3-122		%REC	1	3/17/2015 2:02:55 PM	18121
Surr: Nitrobenzene-d5	55.7	45.3-117		%REC	1	3/17/2015 2:02:55 PM	18121
Surr: 2-Fluorobiphenyl	60.5	43-113		%REC	1	3/17/2015 2:02:55 PM	18121
Surr: 4-Terphenyl-d14	101	47.6-122		%REC	1	3/17/2015 2:02:55 PM	18121

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503430

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Blind Duplicate

Project: 2015-1st Qtr-

Collection Date: 3/10/2015

Lab ID: 1503430-007

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Acenaphthylene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Aniline	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Anthracene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Azobenzene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Benz(a)anthracene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Benzo(a)pyrene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Benzo(b)fluoranthene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Benzo(k)fluoranthene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Benzoic acid	ND	20		µg/L	1	3/17/2015 2:30:52 PM	18121
Benzyl alcohol	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Butyl benzyl phthalate	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Carbazole	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
4-Chloroaniline	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
2-Chloronaphthalene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
2-Chlorophenol	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Chrysene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Di-n-butyl phthalate	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Di-n-octyl phthalate	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Dibenzofuran	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
1,2-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
1,3-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
1,4-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Diethyl phthalate	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Dimethyl phthalate	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
2,4-Dichlorophenol	ND	20		µg/L	1	3/17/2015 2:30:52 PM	18121
2,4-Dimethylphenol	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/17/2015 2:30:52 PM	18121
2,4-Dinitrophenol	ND	20		µg/L	1	3/17/2015 2:30:52 PM	18121

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503430

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Blind Duplicate

Project: 2015-1st Qtr-

Collection Date: 3/10/2015

Lab ID: 1503430-007

Matrix: AQUEOUS

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
2,4-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
2,6-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Fluoranthene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Fluorene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Hexachlorobenzene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Hexachlorobutadiene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Hexachloroethane	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Isophorone	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
1-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
2-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
2-Methylphenol	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
3+4-Methylphenol	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
N-Nitrosodimethylamine	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Naphthalene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
2-Nitroaniline	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
3-Nitroaniline	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
4-Nitroaniline	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Nitrobenzene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
2-Nitrophenol	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
4-Nitrophenol	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Pentachlorophenol	ND	20		µg/L	1	3/17/2015 2:30:52 PM	18121
Phenanthrene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Phenol	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Pyrene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Pyridine	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/17/2015 2:30:52 PM	18121
Surr: 2-Fluorophenol	73.2	17.6-104		%REC	1	3/17/2015 2:30:52 PM	18121
Surr: Phenol-d5	64.9	17.7-89.9		%REC	1	3/17/2015 2:30:52 PM	18121
Surr: 2,4,6-Tribromophenol	97.2	16.3-122		%REC	1	3/17/2015 2:30:52 PM	18121
Surr: Nitrobenzene-d5	83.4	45.3-117		%REC	1	3/17/2015 2:30:52 PM	18121
Surr: 2-Fluorobiphenyl	86.3	43-113		%REC	1	3/17/2015 2:30:52 PM	18121
Surr: 4-Terphenyl-d14	116	47.6-122		%REC	1	3/17/2015 2:30:52 PM	18121

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503430

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: 2015-1st Qtr-

Collection Date:

Lab ID: 1503430-008

Matrix: TRIP BLANK

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/11/2015 5:01:21 PM	R24768
Surr: BFB	87.5	80-120		%REC	1	3/11/2015 5:01:21 PM	R24768
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	3/11/2015 5:01:21 PM	R24768
Benzene	ND	1.0		µg/L	1	3/11/2015 5:01:21 PM	R24768
Toluene	ND	1.0		µg/L	1	3/11/2015 5:01:21 PM	R24768
Ethylbenzene	ND	1.0		µg/L	1	3/11/2015 5:01:21 PM	R24768
Xylenes, Total	ND	2.0		µg/L	1	3/11/2015 5:01:21 PM	R24768
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/11/2015 5:01:21 PM	R24768
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/11/2015 5:01:21 PM	R24768
Surr: 4-Bromofluorobenzene	105	80-120		%REC	1	3/11/2015 5:01:21 PM	R24768
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
Toluene	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
Ethylbenzene	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
Naphthalene	ND	2.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
1-Methylnaphthalene	ND	4.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
2-Methylnaphthalene	ND	4.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
Acetone	ND	10		µg/L	1	3/11/2015 6:14:01 PM	R24773
Bromobenzene	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
Bromodichloromethane	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
Bromoform	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
Bromomethane	ND	3.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
2-Butanone	ND	10		µg/L	1	3/11/2015 6:14:01 PM	R24773
Carbon disulfide	ND	10		µg/L	1	3/11/2015 6:14:01 PM	R24773
Carbon Tetrachloride	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
Chlorobenzene	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
Chloroethane	ND	2.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
Chloroform	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
Chloromethane	ND	3.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
2-Chlorotoluene	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
4-Chlorotoluene	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
cis-1,2-DCE	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 25 of 49
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503430

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: 2015-1st Qtr-

Collection Date:

Lab ID: 1503430-008

Matrix: TRIP BLANK

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: DJF
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
Dibromochloromethane	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
Dibromomethane	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
1,1-Dichloroethane	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
1,1-Dichloroethene	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
1,2-Dichloropropane	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
1,3-Dichloropropane	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
2,2-Dichloropropane	ND	2.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
1,1-Dichloropropene	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
Hexachlorobutadiene	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
2-Hexanone	ND	10		µg/L	1	3/11/2015 6:14:01 PM	R24773
Isopropylbenzene	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
4-Isopropyltoluene	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
4-Methyl-2-pentanone	ND	10		µg/L	1	3/11/2015 6:14:01 PM	R24773
Methylene Chloride	ND	3.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
n-Butylbenzene	ND	3.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
n-Propylbenzene	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
sec-Butylbenzene	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
Styrene	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
tert-Butylbenzene	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
trans-1,2-DCE	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
Trichlorofluoromethane	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
Vinyl chloride	ND	1.0		µg/L	1	3/11/2015 6:14:01 PM	R24773
Xylenes, Total	ND	1.5		µg/L	1	3/11/2015 6:14:01 PM	R24773

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503430

Date Reported: 4/1/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: 2015-1st Qtr-

Collection Date:

Lab ID: 1503430-008

Matrix: TRIP BLANK

Received Date: 3/10/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: DJF	
Surr: 1,2-Dichloroethane-d4	91.2	70-130		%REC	1	3/11/2015 6:14:01 PM	R24773
Surr: 4-Bromofluorobenzene	96.2	70-130		%REC	1	3/11/2015 6:14:01 PM	R24773
Surr: Dibromofluoromethane	102	70-130		%REC	1	3/11/2015 6:14:01 PM	R24773
Surr: Toluene-d8	96.0	70-130		%REC	1	3/11/2015 6:14:01 PM	R24773

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 27 of 49
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Anatek Labs, Inc.

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

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

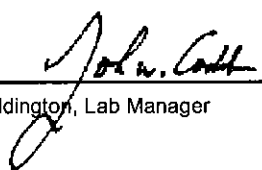
Batch #: 150312033
Project Name: 1503430

Analytical Results Report

Sample Number	150312033-001	Sampling Date	3/10/2015	Date/Time Received	3/12/2015 11:20 AM
Client Sample ID	1503430-003H / OAPIS-1	Sampling Time	9:37 AM		
Matrix	Water				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.0804	mg/L	0.01	3/23/2015	CRW	EPA 335.4	

Authorized Signature


John Coddington, Lab Manager

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

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

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 #: 150312033
Project Name: 1503430

Analytical Results Report Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Cyanide	0.527	mg/L	0.5	105.4	90-110	3/23/2015	3/23/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
150317044-003	Cyanide	0.0220	0.547	mg/L	0.5	105.0	90-110	3/23/2015	3/23/2015

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Cyanide	0.551	mg/L	0.5	105.8	0.7	0-20	3/23/2015	3/23/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Cyanide	ND	mg/L	0.01	3/23/2015	3/23/2015

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; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:Cert0028; NM: ID00013; OR:ID200001-002; WA:C595
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#: 1503430

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1st Qtr-

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R24791			RunNo: 24791					
Prep Date:		Analysis Date: 3/12/2015			SeqNo: 730236		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Silver	ND	0.0050								
Sodium	ND	1.0								
Zinc	ND	0.010								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R24791		RunNo: 24791					
Prep Date:			Analysis Date: 3/12/2015		SeqNo: 730237		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0	99.2	85	115			
Cadmium	0.50	0.0020	0.5000	0	101	85	115			
Calcium	54	1.0	50.00	0	108	85	115			
Chromium	0.50	0.0060	0.5000	0	99.4	85	115			
Copper	0.49	0.0060	0.5000	0	97.4	85	115			
Iron	0.49	0.020	0.5000	0	97.8	85	115			
Magnesium	54	1.0	50.00	0	107	85	115			
Manganese	0.49	0.0020	0.5000	0	97.0	85	115			
Potassium	51	1.0	50.00	0	101	85	115			
Silver	0.11	0.0050	0.1000	0	106	85	115			
Sodium	53	1.0	50.00	0	105	85	115			
Zinc	0.49	0.010	0.5000	0	98.5	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R24791			RunNo: 24791					
Prep Date:		Analysis Date: 3/12/2015			SeqNo: 730238		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								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503430

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1st Qtr-

Sample ID	MB		SampType:	MBLK		TestCode:	EPA Method 200.7: Dissolved Metals			
Client ID:	PBW		Batch ID:	R24791		RunNo:	24791			
Prep Date:			Analysis Date:	3/12/2015		SeqNo:	730238	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Silver	ND	0.0050								
Sodium	ND	1.0								
Zinc	ND	0.010								

Sample ID	LCS		SampType:	LCS		TestCode:	EPA Method 200.7: Dissolved Metals			
Client ID:	LCSW		Batch ID:	R24791		RunNo:	24791			
Prep Date:			Analysis Date:	3/12/2015		SeqNo:	730239	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	97.1	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.4	85	115			
Calcium	53	1.0	50.00	0	106	85	115			
Chromium	0.49	0.0060	0.5000	0	97.6	85	115			
Copper	0.48	0.0060	0.5000	0	95.1	85	115			
Iron	0.48	0.020	0.5000	0	96.1	85	115			
Magnesium	53	1.0	50.00	0	105	85	115			
Manganese	0.48	0.0020	0.5000	0	95.0	85	115			
Potassium	50	1.0	50.00	0	100	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Sodium	52	1.0	50.00	0	104	85	115			
Zinc	0.48	0.010	0.5000	0	96.3	85	115			

Sample ID	1503430-004DMS		SampType:	MS		TestCode:	EPA Method 200.7: Dissolved Metals			
Client ID:	NAPIS-2		Batch ID:	R24791		RunNo:	24791			
Prep Date:			Analysis Date:	3/12/2015		SeqNo:	730518	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.49	0.0020	0.5000	0	98.1	70	130			
Chromium	0.49	0.0060	0.5000	0	98.6	70	130			
Copper	0.49	0.0060	0.5000	0	97.2	70	130			
Magnesium	67	1.0	50.00	15.82	103	70	130			
Potassium	51	1.0	50.00	1.232	99.9	70	130			
Silver	0.096	0.0050	0.1000	0	95.6	70	130			
Zinc	0.51	0.010	0.5000	0.003160	101	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503430

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1st Qtr-

Sample ID	1503430-004DMSD			SampType:	MSD		TestCode:	EPA Method 200.7: Dissolved Metals			
Client ID:	NAPIS-2			Batch ID:	R24791		RunNo:	24791			
Prep Date:				Analysis Date:	3/12/2015		SeqNo:	730519		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Cadmium	0.50	0.0020	0.5000	0	99.5	70	130	1.49	20		
Chromium	0.50	0.0060	0.5000	0	99.3	70	130	0.752	20		
Copper	0.49	0.0060	0.5000	0	97.0	70	130	0.146	20		
Magnesium	67	1.0	50.00	15.82	101	70	130	1.16	20		
Potassium	50	1.0	50.00	1.232	97.7	70	130	2.14	20		
Silver	0.096	0.0050	0.1000	0	95.7	70	130	0.105	20		
Zinc	0.51	0.010	0.5000	0.003160	102	70	130	0.876	20		

Sample ID	1503430-004DMS		SampType: MS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	NAPIS-2		Batch ID: R24791		RunNo: 24791					
Prep Date:			Analysis Date: 3/12/2015		SeqNo: 730533		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	4.3	0.010	2.500	1.837	98.3	70	130			
Calcium	360	5.0	250.0	84.60	109	70	130			
Iron	4.3	0.10	2.500	1.938	95.5	70	130			
Manganese	3.4	0.010	2.500	1.036	95.6	70	130			

Sample ID	1503430-004DMSD			SampType:	MSD		TestCode: EPA Method 200.7: Dissolved Metals			
Client ID:	NAPIS-2		Batch ID:		R24791		RunNo: 24791			
Prep Date:			Analysis Date:		3/12/2015		SeqNo: 730534		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	4.3	0.010	2.500	1.837	98.7	70	130	0.228	20	
Calcium	350	5.0	250.0	84.60	106	70	130	1.85	20	
Iron	4.4	0.10	2.500	1.938	98.5	70	130	1.67	20	
Manganese	3.4	0.010	2.500	1.036	95.8	70	130	0.117	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503430

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1st Qtr-

Sample ID	MB-18269		SampType:	MBLK		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	PBW		Batch ID:	18269		RunNo:	25016			
Prep Date:	3/23/2015		Analysis Date:	3/23/2015		SeqNo:	737728		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								

Sample ID	LCS-18269		SampType:	LCS		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	LCSW		Batch ID:	18269		RunNo:	25016			
Prep Date:	3/23/2015		Analysis Date:	3/23/2015		SeqNo:	737729		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	99.8	85	115			
Cadmium	0.51	0.0020	0.5000	0	102	85	115			
Chromium	0.51	0.0060	0.5000	0	101	85	115			
Copper	0.51	0.0060	0.5000	0	103	85	115			
Iron	0.50	0.020	0.5000	0	100	85	115			
Manganese	0.49	0.0020	0.5000	0	97.6	85	115			
Silver	0.11	0.0050	0.1000	0	110	85	115			

Sample ID	MB-18269		SampType:	MBLK		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	PBW		Batch ID:	18269		RunNo:	25031			
Prep Date:	3/23/2015		Analysis Date:	3/24/2015		SeqNo:	738187		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	ND	0.010								

Sample ID	LCS-18269		SampType:	LCS		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	LCSW		Batch ID:	18269		RunNo:	25031			
Prep Date:	3/23/2015		Analysis Date:	3/24/2015		SeqNo:	738188		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	0.51	0.010	0.5000	0	102	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503430

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1st Qtr-

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R24987		RunNo: 24987					
Prep Date:			Analysis Date: 3/20/2015		SeqNo: 736812		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	0.025	0.0010	0.02500	0	99.6	85	115			
Uranium	0.025	0.0010	0.02500	0	99.7	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R24987		RunNo: 24987					
Prep Date:			Analysis Date: 3/20/2015		SeqNo: 736813		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	93.4	85	115			
Lead	0.024	0.0010	0.02500	0	96.5	85	115			
Uranium	0.024	0.0010	0.02500	0	96.2	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R24987			RunNo: 24987					
Prep Date:		Analysis Date: 3/20/2015			SeqNo: 736814		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R24987			RunNo: 24987					
Prep Date:		Analysis Date: 3/20/2015			SeqNo: 736815		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25015		RunNo: 25015					
Prep Date:			Analysis Date: 3/23/2015		SeqNo: 737627		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.026	0.0010	0.02500	0	104	85	115			
Selenium	0.026	0.0010	0.02500	0	104	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503430

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1st Qtr-

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25015		RunNo: 25015					
Prep Date:			Analysis Date: 3/23/2015		SeqNo: 737628		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	99.5	85	115			
Selenium	0.024	0.0010	0.02500	0	95.3	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R25015			RunNo: 25015					
Prep Date:		Analysis Date: 3/23/2015			SeqNo: 737629		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R25015			RunNo: 25015					
Prep Date:		Analysis Date: 3/23/2015			SeqNo: 737630		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25045		RunNo: 25045					
Prep Date:			Analysis Date: 3/24/2015		SeqNo: 738857		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	0.023	0.0010	0.02500	0	93.7	85	115			

Sample ID	MB		SampType: MBLK		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW		Batch ID: R25045		RunNo: 25045					
Prep Date:			Analysis Date: 3/24/2015		SeqNo: 738858		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	0.0010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503430

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1st Qtr-

Sample ID	LLLCS-18269		SampType: LCSLL		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	BatchQC		Batch ID: 18269		RunNo: 25044					
Prep Date:	3/23/2015		Analysis Date: 3/24/2015		SeqNo: 738815		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	101	85	115			
Lead	0.026	0.0010	0.02500	0	104	85	115			
Selenium	0.025	0.0010	0.02500	0	99.2	85	115			
Uranium	0.027	0.0010	0.02500	0	107	85	115			

Sample ID	MB-18269		SampType: MBLK		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	PBW		Batch ID: 18269		RunNo: 25044					
Prep Date:	3/23/2015		Analysis Date: 3/24/2015		SeqNo: 738819		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503430

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1st Qtr-

Sample ID	MB-18156	SampType:	MBLK	TestCode:	EPA Method 245.1: Mercury					
Client ID:	PBW	Batch ID:	18156	RunNo:	24865					
Prep Date:	3/16/2015	Analysis Date:	3/17/2015	SeqNo:	732460	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	LCS-18156	SampType:	LCS	TestCode:	EPA Method 245.1: Mercury					
Client ID:	LCSW	Batch ID:	18156	RunNo:	24865					
Prep Date:	3/16/2015	Analysis Date:	3/17/2015	SeqNo:	732461	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	99.9	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503430

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1st Qtr-

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID: R24785			RunNo: 24785					
Prep Date:		Analysis Date: 3/11/2015			SeqNo: 730087		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Bromide	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSW		Batch ID: R24785		RunNo: 24785					
Prep Date:			Analysis Date: 3/11/2015		SeqNo: 730088		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.49	0.10	0.5000	0	98.2	90	110			
Chloride	4.9	0.50	5.000	0	97.9	90	110			
Nitrogen, Nitrite (As N)	0.94	0.10	1.000	0	94.5	90	110			
Bromide	2.5	0.10	2.500	0	99.1	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	100	90	110			
Phosphorus, Orthophosphate (As P	4.8	0.50	5.000	0	96.1	90	110			
Sulfate	9.7	0.50	10.00	0	96.7	90	110			

Sample ID	MB	SampType: MBLK		TestCode: EPA Method 300.0: Anions						
Client ID:	PBW	Batch ID: R24785		RunNo: 24785						
Prep Date:		Analysis Date: 3/12/2015		SeqNo: 730141		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Bromide	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSW		Batch ID: R24785		RunNo: 24785					
Prep Date:			Analysis Date: 3/12/2015		SeqNo: 730142		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.46	0.10	0.5000	0	91.2	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503430

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1st Qtr-

Sample ID	LCS		SampType: LCS			TestCode: EPA Method 300.0: Anions				
Client ID:	LCSW		Batch ID: R24785			RunNo: 24785				
Prep Date:	Analysis Date: 3/12/2015			SeqNo: 730142		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.7	0.50	5.000	0	93.5	90	110			
Nitrogen, Nitrite (As N)	0.92	0.10	1.000	0	92.0	90	110			
Bromide	2.4	0.10	2.500	0	95.7	90	110			
Nitrogen, Nitrate (As N)	2.4	0.10	2.500	0	96.9	90	110			
Phosphorus, Orthophosphate (As P	4.6	0.50	5.000	0	92.4	90	110			
Sulfate	9.3	0.50	10.00	0	93.3	90	110			

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID: R24864			RunNo: 24864					
Prep Date:		Analysis Date: 3/16/2015			SeqNo: 732383		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSW		Batch ID: R24864		RunNo: 24864					
Prep Date:			Analysis Date: 3/16/2015		SeqNo: 732384		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.7	0.50	5.000	0	94.5	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503430

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1st Qtr-

Sample ID	MB-18082		SampType: MBLK		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	PBW		Batch ID: 18082		RunNo: 24775					
Prep Date:	3/11/2015		Analysis Date: 3/12/2015		SeqNo: 729760		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.2		1.000		122	76.5	150			

Sample ID	LCS-18082		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	LCSW		Batch ID: 18082		RunNo: 24774					
Prep Date:	3/11/2015		Analysis Date: 3/12/2015		SeqNo: 729945		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.8	1.0	5.000	0	117	60.1	156			
Surr: DNOP	0.67		0.5000		134	76.5	150			

Sample ID	LCS-18082		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	LCSW		Batch ID: 18082		RunNo: 24775					
Prep Date:	3/11/2015		Analysis Date: 3/12/2015		SeqNo: 730644		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.5	1.0	5.000	0	130	60.1	156			
Surr: DNOP	0.60		0.5000		121	76.5	150			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503430

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1st Qtr-

Sample ID 5ML RB	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBW	Batch ID: R24768		RunNo: 24768							
Prep Date:	Analysis Date: 3/11/2015		SeqNo: 729569		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		86.9	80	120			

Sample ID 2.5UG GRO LCS	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSW	Batch ID: R24768		RunNo: 24768							
Prep Date:	Analysis Date: 3/11/2015		SeqNo: 729570		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.44	0.050	0.5000	0	87.2	80	120			
Surr: BFB	20		20.00		101	80	120			

Sample ID 1503430-005AMS	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: KA-3	Batch ID: R24768		RunNo: 24768							
Prep Date:	Analysis Date: 3/11/2015		SeqNo: 729578		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0.01440	89.5	51	131			
Surr: BFB	21		20.00		105	80	120			

Sample ID 1503430-005AMSD	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: KA-3	Batch ID: R24768		RunNo: 24768							
Prep Date:	Analysis Date: 3/11/2015		SeqNo: 729579		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0.01440	89.6	51	131	0.0865	20	
Surr: BFB	22		20.00		108	80	120	0	0	

Sample ID 5ML RB	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBW	Batch ID: R24802		RunNo: 24802							
Prep Date:	Analysis Date: 3/12/2015		SeqNo: 730477		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		89.5	80	120			

Sample ID 2.5UG GRO LCS	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSW	Batch ID: R24802		RunNo: 24802							
Prep Date:	Analysis Date: 3/12/2015		SeqNo: 730479		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
E Value above quantitation range	H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit	P Sample pH Not In Range
R RPD outside accepted recovery limits	RL Reporting Detection Limit
S Spike Recovery outside accepted recovery limits	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503430

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1st Qtr-

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	R24802	RunNo:	24802					
Prep Date:		Analysis Date:	3/12/2015	SeqNo:	730479	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	93.4	80	120			
Surr: BFB	20		20.00		101	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503430

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1st Qtr-

Sample ID	5ML RB	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles						
Client ID:	PBW	Batch ID: R24768		RunNo: 24768						
Prep Date:	Analysis Date: 3/11/2015		SeqNo: 729585		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5								
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
Surr: 4-Bromofluorobenzene	22		20.00		109	80	120			

Sample ID	100NG BTEX LCS		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSW		Batch ID: R24768		RunNo: 24768					
Prep Date:			Analysis Date: 3/11/2015		SeqNo: 729586		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	19	2.5	20.00	0	95.2	72.5	125			
Benzene	22	1.0	20.00	0	109	80	120			
Toluene	22	1.0	20.00	0	108	80	120			
Ethylbenzene	21	1.0	20.00	0	107	80	120			
Xylenes, Total	64	2.0	60.00	0	107	80	120			
1,2,4-Trimethylbenzene	22	1.0	20.00	0	108	80	120			
1,3,5-Trimethylbenzene	22	1.0	20.00	0	108	80	120			
Surr: 4-Bromofluorobenzene	24		20.00		122	80	120			S

Sample ID	1503430-004AMS		SampType: MS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	NAPIS-2		Batch ID: R24768		RunNo: 24768					
Prep Date:			Analysis Date: 3/11/2015		SeqNo: 729589		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	230	2.5	20.00	190.0	187	64.7	132			ES
Benzene	52	1.0	20.00	32.05	97.3	77.5	121			
Toluene	20	1.0	20.00	0	102	78.6	122			
Ethylbenzene	32	1.0	20.00	11.55	101	78.1	128			
Xylenes, Total	64	2.0	60.00	2.704	101	80	120			
1,2,4-Trimethylbenzene	22	1.0	20.00	0.9960	103	79.1	128			
1,3,5-Trimethylbenzene	20	1.0	20.00	0	102	80	120			
Surr: 4-Bromofluorobenzene	29		20.00		146	80	120			S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503430

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1st Qtr-

Sample ID	1503430-004AMSD		SampType:	MSD		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	NAPIS-2		Batch ID:	R24768		RunNo:	24768			
Prep Date:			Analysis Date:	3/11/2015		SeqNo:	729590		Units: µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	230	2.5	20.00	190.0	176	64.7	132	0.994	20	ES
Benzene	52	1.0	20.00	32.05	100	77.5	121	1.04	20	
Toluene	21	1.0	20.00	0	104	78.6	122	1.84	20	
Ethylbenzene	32	1.0	20.00	11.55	102	78.1	128	0.503	20	
Xylenes, Total	64	2.0	60.00	2.704	102	80	120	0.364	20	
1,2,4-Trimethylbenzene	21	1.0	20.00	0.9960	102	79.1	128	0.829	20	
1,3,5-Trimethylbenzene	21	1.0	20.00	0	103	80	120	0.633	20	
Surr: 4-Bromofluorobenzene	28		20.00		142	80	120	0	0	S

Sample ID	5ML RB		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBW		Batch ID:	R24802		RunNo:	24802			
Prep Date:			Analysis Date:	3/12/2015		SeqNo:	730484		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								
Xylenes, Total	ND	2.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
Surr: 4-Bromofluorobenzene	22		20.00		112	80	120			

Sample ID	100NG BTEX LCS		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSW		Batch ID:	R24802		RunNo:	24802			
Prep Date:			Analysis Date:	3/12/2015		SeqNo:	730485		Units: µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	109	80	120			
Toluene	21	1.0	20.00	0	107	80	120			
Ethylbenzene	21	1.0	20.00	0	105	80	120			
Xylenes, Total	63	2.0	60.00	0	105	80	120			
1,2,4-Trimethylbenzene	22	1.0	20.00	0	108	80	120			
1,3,5-Trimethylbenzene	21	1.0	20.00	0	106	80	120			
Surr: 4-Bromofluorobenzene	24		20.00		120	80	120			S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503430

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1st Qtr-

Sample ID	5ml rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R24773	RunNo:	24773					
Prep Date:		Analysis Date:	3/11/2015	SeqNo:	729734	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503430

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1st Qtr-

Sample ID	5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R24773			RunNo: 24773					
Prep Date:		Analysis Date: 3/11/2015			SeqNo: 729734		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.4		10.00		84.2	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		95.7	70	130			
Surr: Dibromofluoromethane	9.6		10.00		95.6	70	130			
Surr: Toluene-d8	9.3		10.00		92.8	70	130			

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R24773			RunNo: 24773					
Prep Date:		Analysis Date: 3/11/2015			SeqNo: 729736			Units: µg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	107	70	130			
Toluene	21	1.0	20.00	0	103	70	130			
Chlorobenzene	20	1.0	20.00	0	98.2	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503430

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1st Qtr-

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R24773			RunNo: 24773					
Prep Date:		Analysis Date: 3/11/2015			SeqNo: 729736		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	24	1.0	20.00	0	120	75.6	144			
Trichloroethene (TCE)	20	1.0	20.00	0	98.0	70	130			
Surr: 1,2-Dichloroethane-d4	8.4		10.00		83.9	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.8	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.4	70	130			
Surr: Toluene-d8	9.7		10.00		96.6	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503430

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1st Qtr-

Sample ID	mb-18121	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	18121	RunNo:	24891					
Prep Date:	3/13/2015	Analysis Date:	3/17/2015	SeqNo:	733318	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503430

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1st Qtr-

Sample ID	mb-18121	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	18121	RunNo:	24891					
Prep Date:	3/13/2015	Analysis Date:	3/17/2015	SeqNo:	733318	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	140		200.0		72.4	17.6	104			
Surr: Phenol-d5	150		200.0		74.7	17.7	89.9			
Surr: 2,4,6-Tribromophenol	170		200.0		84.7	16.3	122			
Surr: Nitrobenzene-d5	77		100.0		77.5	45.3	117			
Surr: 2-Fluorobiphenyl	79		100.0		79.4	43	113			
Surr: 4-Terphenyl-d14	100		100.0		102	47.6	122			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503430

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1st Qtr-

Sample ID	lcs-18121		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 18121		RunNo: 24891					
Prep Date:	3/13/2015		Analysis Date: 3/17/2015		SeqNo: 733320		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	79	10	100.0	0	79.1	47.9	114			
4-Chloro-3-methylphenol	180	10	200.0	0	89.4	51.7	122			
2-Chlorophenol	160	10	200.0	0	81.4	40.7	113			
1,4-Dichlorobenzene	81	10	100.0	0	80.8	39.6	99.9			
2,4-Dinitrotoluene	78	10	100.0	0	78.2	40.8	113			
N-Nitrosodi-n-propylamine	86	10	100.0	0	85.9	51.2	111			
4-Nitrophenol	160	10	200.0	0	82.1	15.7	86.9			
Pentachlorophenol	160	20	200.0	0	79.5	21.6	104			
Phenol	170	10	200.0	0	85.1	28.6	71.7			S
Pyrene	100	10	100.0	0	104	54.2	128			
1,2,4-Trichlorobenzene	92	10	100.0	0	91.5	40.9	101			
Surr: 2-Fluorophenol	170		200.0		84.4	17.6	104			
Surr: Phenol-d5	180		200.0		91.2	17.7	89.9			S
Surr: 2,4,6-Tribromophenol	180		200.0		90.9	16.3	122			
Surr: Nitrobenzene-d5	84		100.0		84.3	45.3	117			
Surr: 2-Fluorobiphenyl	88		100.0		88.1	43	113			
Surr: 4-Terphenyl-d14	100		100.0		103	47.6	122			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503430

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1st Qtr-

Sample ID	MB-R25225		SampType: MBLK		TestCode: EPA 335.4: Total Cyanide Subbed					
Client ID:	PBW		Batch ID: R25225		RunNo: 25225					
Prep Date:			Analysis Date: 3/23/2015		SeqNo: 745808		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cyanide	ND	0.0100								

Sample ID	LCS-R25225		SampType: LCS		TestCode: EPA 335.4: Total Cyanide Subbed					
Client ID:	LCSW		Batch ID: R25225		RunNo: 25225					
Prep Date:			Analysis Date: 3/23/2015		SeqNo: 745809		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cyanide	0.527		0.5000	0	105	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

Sample Log-In Check List

Client Name: Western Refining Gallup

Work Order Number: 1503430

RcptNo: 1

Received by/date: CS 03/10/15

Logged By: Ashley Gallegos 3/10/2015 4:00:00 PM Ag

Completed By: Ashley Gallegos 3/11/2015 8:58:32 AM Ag

Reviewed By: mg/SA 03/11/15

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 ☒ 03/11 NA ☐
10. VOA vials have zero headspace? See Remarks Yes ☒ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels? Yes ☒ No ☐
(Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met? Yes ☒ No ☐
(If no, notify customer for authorization.)

of preserved bottles checked for pH: 15
+ 0.4 mg
(<2 or >12 unless noted)

Adjusted? yes

Checked by: mg

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: For Metals Analysis: Added 1 mL HNO₃ to -002E for acceptable pH. Added 0.4 mL HNO₃ to -006D for acceptable pH. mg 03/11/15

18. Cooler Information

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



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

April 06, 2015

Cheryl Johnson

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

RE: 2015 1ST QTR (MKTF)

OrderNo.: 1503556

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 16 sample(s) on 3/12/2015 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', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 7:00:00 AM

Lab ID: 1503556-001

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: KJH
Benzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Toluene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Ethylbenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Naphthalene	ND	2.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
2-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Acetone	ND	10		µg/L	1	3/13/2015 2:37:15 PM	R24833
Bromobenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Bromodichloromethane	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Bromoform	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Bromomethane	ND	3.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
2-Butanone	ND	10		µg/L	1	3/13/2015 2:37:15 PM	R24833
Carbon disulfide	ND	10		µg/L	1	3/13/2015 2:37:15 PM	R24833
Carbon Tetrachloride	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Chlorobenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Chloroethane	ND	2.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Chloroform	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Chloromethane	ND	3.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
2-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
4-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
cis-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Dibromochloromethane	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Dibromomethane	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,1-Dichloroethane	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,1-Dichloroethene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,2-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,3-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
2,2-Dichloropropane	ND	2.0		µg/L	1	3/13/2015 2:37:15 PM	R24833

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 7:00:00 AM

Lab ID: 1503556-001

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: KJH			
1,1-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Hexachlorobutadiene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
2-Hexanone	ND	10		µg/L	1	3/13/2015 2:37:15 PM	R24833
Isopropylbenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
4-Isopropyltoluene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
4-Methyl-2-pentanone	ND	10		µg/L	1	3/13/2015 2:37:15 PM	R24833
Methylene Chloride	ND	3.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
n-Butylbenzene	ND	3.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
n-Propylbenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
sec-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Styrene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
tert-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
trans-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Trichlorofluoromethane	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Vinyl chloride	ND	1.0		µg/L	1	3/13/2015 2:37:15 PM	R24833
Xylenes, Total	ND	1.5		µg/L	1	3/13/2015 2:37:15 PM	R24833
Surr: 1,2-Dichloroethane-d4	85.4	70-130		%REC	1	3/13/2015 2:37:15 PM	R24833
Surr: 4-Bromofluorobenzene	90.4	70-130		%REC	1	3/13/2015 2:37:15 PM	R24833
Surr: Dibromofluoromethane	87.7	70-130		%REC	1	3/13/2015 2:37:15 PM	R24833
Surr: Toluene-d8	102	70-130		%REC	1	3/13/2015 2:37:15 PM	R24833

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-27

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 8:25:00 AM

Lab ID: 1503556-002

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/14/2015 3:15:46 AM	18122
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/14/2015 3:15:46 AM	18122
Surr: DNOP	156	76.5-150	S	%REC	1	3/14/2015 3:15:46 AM	18122
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/13/2015 5:48:28 PM	R24831
Surr: BFB	86.0	80-120		%REC	1	3/13/2015 5:48:28 PM	R24831
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.086	0.0020		mg/L	1	3/25/2015 8:23:58 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:23:58 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 8:23:58 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 8:23:58 PM	R25072
Iron	0.15	0.020		mg/L	1	3/25/2015 8:23:58 PM	R25072
Manganese	0.10	0.0020	*	mg/L	1	3/25/2015 8:23:58 PM	R25072
Silver	ND	0.0050		mg/L	1	3/25/2015 8:23:58 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 8:23:58 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.13	0.0020		mg/L	1	3/25/2015 7:12:02 PM	18307
Cadmium	ND	0.0020		mg/L	1	3/25/2015 7:12:02 PM	18307
Chromium	ND	0.0060		mg/L	1	3/25/2015 7:12:02 PM	18307
Copper	ND	0.0060		mg/L	1	3/25/2015 7:12:02 PM	18307
Iron	3.3	0.10	*	mg/L	5	3/26/2015 1:59:45 PM	18307
Manganese	0.27	0.0020	*	mg/L	1	3/25/2015 7:12:02 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 7:12:02 PM	18307
Zinc	0.014	0.010		mg/L	1	3/25/2015 7:12:02 PM	18307
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/30/2015 1:46:29 PM	R25155
Lead	ND	0.010		mg/L	10	3/30/2015 1:46:29 PM	R25155
Selenium	0.014	0.010		mg/L	10	3/30/2015 1:46:29 PM	R25155
Uranium	0.075	0.010	*	mg/L	10	3/30/2015 1:46:29 PM	R25155
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/25/2015 5:54:16 PM	18307
Lead	ND	0.010		mg/L	10	3/25/2015 5:54:16 PM	18307
Selenium	ND	0.010		mg/L	10	3/25/2015 5:54:16 PM	18307
Uranium	0.071	0.010	*	mg/L	10	3/25/2015 5:54:16 PM	18307
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/24/2015 2:49:06 PM	18286

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-27

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 8:25:00 AM

Lab ID: 1503556-002

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Aniline	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Anthracene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Azobenzene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Benzoic acid	ND	20		µg/L	1	3/17/2015 4:23:32 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Carbazole	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Chrysene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/17/2015 4:23:32 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/17/2015 4:23:32 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/17/2015 4:23:32 PM	18138

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-27

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 8:25:00 AM

Lab ID: 1503556-002

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
2,4-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Fluoranthene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Fluorene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Isophorone	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Naphthalene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/17/2015 4:23:32 PM	18138
Phenanthrene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Phenol	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Pyrene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Pyridine	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/17/2015 4:23:32 PM	18138
Surr: 2-Fluorophenol	49.9	17.6-104		%REC	1	3/17/2015 4:23:32 PM	18138
Surr: Phenol-d5	61.6	17.7-89.9		%REC	1	3/17/2015 4:23:32 PM	18138
Surr: 2,4,6-Tribromophenol	68.9	16.3-122		%REC	1	3/17/2015 4:23:32 PM	18138
Surr: Nitrobenzene-d5	73.8	45.3-117		%REC	1	3/17/2015 4:23:32 PM	18138
Surr: 2-Fluorobiphenyl	81.7	43-113		%REC	1	3/17/2015 4:23:32 PM	18138
Surr: 4-Terphenyl-d14	119	47.6-122		%REC	1	3/17/2015 4:23:32 PM	18138

EPA METHOD 8260B: VOLATILES

Analyst: **KJH**

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-27

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 8:25:00 AM

Lab ID: 1503556-002

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: KJH
Benzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Toluene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Ethylbenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Methyl tert-butyl ether (MTBE)	8.9	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Naphthalene	ND	2.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
2-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Acetone	ND	10		µg/L	1	3/13/2015 3:06:00 PM	R24833
Bromobenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Bromodichloromethane	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Bromoform	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Bromomethane	ND	3.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
2-Butanone	ND	10		µg/L	1	3/13/2015 3:06:00 PM	R24833
Carbon disulfide	ND	10		µg/L	1	3/13/2015 3:06:00 PM	R24833
Carbon Tetrachloride	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Chlorobenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Chloroethane	ND	2.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Chloroform	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Chloromethane	ND	3.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
2-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
4-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
cis-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Dibromochloromethane	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Dibromomethane	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,1-Dichloroethane	1.6	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,1-Dichloroethene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,2-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,3-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
2,2-Dichloropropane	ND	2.0		µg/L	1	3/13/2015 3:06:00 PM	R24833

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-27

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 8:25:00 AM

Lab ID: 1503556-002

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: KJH
1,1-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Hexachlorobutadiene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
2-Hexanone	ND	10		µg/L	1	3/13/2015 3:06:00 PM	R24833
Isopropylbenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
4-Isopropyltoluene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
4-Methyl-2-pentanone	ND	10		µg/L	1	3/13/2015 3:06:00 PM	R24833
Methylene Chloride	ND	3.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
n-Butylbenzene	ND	3.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
n-Propylbenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
sec-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Styrene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
tert-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
trans-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Trichlorofluoromethane	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Vinyl chloride	ND	1.0		µg/L	1	3/13/2015 3:06:00 PM	R24833
Xylenes, Total	ND	1.5		µg/L	1	3/13/2015 3:06:00 PM	R24833
Surr: 1,2-Dichloroethane-d4	84.2	70-130		%REC	1	3/13/2015 3:06:00 PM	R24833
Surr: 4-Bromofluorobenzene	99.4	70-130		%REC	1	3/13/2015 3:06:00 PM	R24833
Surr: Dibromofluoromethane	79.9	70-130		%REC	1	3/13/2015 3:06:00 PM	R24833
Surr: Toluene-d8	91.6	70-130		%REC	1	3/13/2015 3:06:00 PM	R24833

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-28

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 8:55:00 AM

Lab ID: 1503556-003

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/14/2015 4:37:22 AM	18122
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/14/2015 4:37:22 AM	18122
Surr: DNOP	139	76.5-150		%REC	1	3/14/2015 4:37:22 AM	18122
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/13/2015 8:14:25 PM	R24831
Surr: BFB	88.0	80-120		%REC	1	3/13/2015 8:14:25 PM	R24831
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.090	0.0020		mg/L	1	3/25/2015 8:30:29 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:30:29 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 8:30:29 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 8:30:29 PM	R25072
Iron	0.075	0.020		mg/L	1	3/25/2015 8:30:29 PM	R25072
Manganese	0.0057	0.0020		mg/L	1	3/25/2015 8:30:29 PM	R25072
Silver	ND	0.0050		mg/L	1	3/25/2015 8:30:29 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 8:30:29 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.14	0.0020		mg/L	1	3/25/2015 7:13:54 PM	18307
Cadmium	ND	0.0020		mg/L	1	3/25/2015 7:13:54 PM	18307
Chromium	ND	0.0060		mg/L	1	3/25/2015 7:13:54 PM	18307
Copper	ND	0.0060		mg/L	1	3/25/2015 7:13:54 PM	18307
Iron	2.5	0.10	*	mg/L	5	3/26/2015 2:01:30 PM	18307
Manganese	0.097	0.0020	*	mg/L	1	3/25/2015 7:13:54 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 7:13:54 PM	18307
Zinc	0.014	0.010		mg/L	1	3/25/2015 7:13:54 PM	18307
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/30/2015 1:55:43 PM	R25155
Lead	ND	0.0010		mg/L	1	3/26/2015 7:00:25 PM	R25105
Selenium	ND	0.050		mg/L	50	3/30/2015 2:53:53 PM	R25155
Uranium	0.17	0.010	*	mg/L	10	3/30/2015 1:55:43 PM	R25155
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/25/2015 5:57:28 PM	18307
Lead	0.0028	0.0010		mg/L	1	3/25/2015 2:58:37 PM	18307
Selenium	0.013	0.010		mg/L	10	3/25/2015 5:57:28 PM	18307
Uranium	0.17	0.010	*	mg/L	10	3/25/2015 5:57:28 PM	18307
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/24/2015 2:50:50 PM	18286

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-28

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 8:55:00 AM

Lab ID: 1503556-003

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Aniline	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Anthracene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Azobenzene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Benzoic acid	ND	20		µg/L	1	3/17/2015 4:51:32 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Carbazole	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Chrysene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/17/2015 4:51:32 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/17/2015 4:51:32 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/17/2015 4:51:32 PM	18138

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-28

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 8:55:00 AM

Lab ID: 1503556-003

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Fluoranthene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Fluorene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Isophorone	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Naphthalene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/17/2015 4:51:32 PM	18138
Phenanthrene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Phenol	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Pyrene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Pyridine	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/17/2015 4:51:32 PM	18138
Surr: 2-Fluorophenol	75.1	17.6-104		%REC	1	3/17/2015 4:51:32 PM	18138
Surr: Phenol-d5	66.8	17.7-89.9		%REC	1	3/17/2015 4:51:32 PM	18138
Surr: 2,4,6-Tribromophenol	109	16.3-122		%REC	1	3/17/2015 4:51:32 PM	18138
Surr: Nitrobenzene-d5	83.4	45.3-117		%REC	1	3/17/2015 4:51:32 PM	18138
Surr: 2-Fluorobiphenyl	94.3	43-113		%REC	1	3/17/2015 4:51:32 PM	18138
Surr: 4-Terphenyl-d14	125	47.6-122	S	%REC	1	3/17/2015 4:51:32 PM	18138

EPA METHOD 8260B: VOLATILES

Analyst: **KJH**

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-28

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 8:55:00 AM

Lab ID: 1503556-003

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: KJH
Benzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Toluene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Ethylbenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Naphthalene	ND	2.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
2-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Acetone	ND	10		µg/L	1	3/13/2015 4:32:14 PM	R24833
Bromobenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Bromodichloromethane	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Bromoform	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Bromomethane	ND	3.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
2-Butanone	ND	10		µg/L	1	3/13/2015 4:32:14 PM	R24833
Carbon disulfide	ND	10		µg/L	1	3/13/2015 4:32:14 PM	R24833
Carbon Tetrachloride	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Chlorobenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Chloroethane	ND	2.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Chloroform	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Chloromethane	ND	3.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
2-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
4-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
cis-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Dibromochloromethane	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Dibromomethane	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,1-Dichloroethane	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,1-Dichloroethene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,2-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,3-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
2,2-Dichloropropane	ND	2.0		µg/L	1	3/13/2015 4:32:14 PM	R24833

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-28

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 8:55:00 AM

Lab ID: 1503556-003

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: KJH
1,1-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Hexachlorobutadiene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
2-Hexanone	ND	10		µg/L	1	3/13/2015 4:32:14 PM	R24833
Isopropylbenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
4-Isopropyltoluene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
4-Methyl-2-pentanone	ND	10		µg/L	1	3/13/2015 4:32:14 PM	R24833
Methylene Chloride	ND	3.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
n-Butylbenzene	ND	3.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
n-Propylbenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
sec-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Styrene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
tert-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
trans-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Trichlorofluoromethane	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Vinyl chloride	ND	1.0		µg/L	1	3/13/2015 4:32:14 PM	R24833
Xylenes, Total	ND	1.5		µg/L	1	3/13/2015 4:32:14 PM	R24833
Surr: 1,2-Dichloroethane-d4	94.5	70-130		%REC	1	3/13/2015 4:32:14 PM	R24833
Surr: 4-Bromofluorobenzene	96.3	70-130		%REC	1	3/13/2015 4:32:14 PM	R24833
Surr: Dibromofluoromethane	90.7	70-130		%REC	1	3/13/2015 4:32:14 PM	R24833
Surr: Toluene-d8	104	70-130		%REC	1	3/13/2015 4:32:14 PM	R24833

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-30

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 9:25:00 AM

Lab ID: 1503556-004

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/14/2015 5:04:25 AM	18122
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/14/2015 5:04:25 AM	18122
Surr: DNOP	147	76.5-150		%REC	1	3/14/2015 5:04:25 AM	18122
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.053	0.050		mg/L	1	3/13/2015 8:43:34 PM	R24831
Surr: BFB	88.4	80-120		%REC	1	3/13/2015 8:43:34 PM	R24831
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.036	0.0020		mg/L	1	3/25/2015 8:32:23 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:32:23 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 8:32:23 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 8:32:23 PM	R25072
Iron	0.19	0.020		mg/L	1	3/25/2015 8:32:23 PM	R25072
Manganese	0.018	0.0020		mg/L	1	3/25/2015 8:32:23 PM	R25072
Silver	ND	0.0050		mg/L	1	3/25/2015 8:32:23 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 8:32:23 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.29	0.0020		mg/L	1	3/25/2015 7:15:34 PM	18307
Cadmium	ND	0.0020		mg/L	1	3/25/2015 7:15:34 PM	18307
Chromium	0.0072	0.0060		mg/L	1	3/25/2015 7:15:34 PM	18307
Copper	ND	0.0060		mg/L	1	3/25/2015 7:15:34 PM	18307
Iron	8.6	0.20	*	mg/L	10	3/26/2015 2:03:10 PM	18307
Manganese	0.64	0.0020	*	mg/L	1	3/25/2015 7:15:34 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 7:15:34 PM	18307
Zinc	0.021	0.010		mg/L	1	3/25/2015 7:15:34 PM	18307
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/30/2015 1:58:46 PM	R25155
Lead	ND	0.010		mg/L	10	3/30/2015 1:58:46 PM	R25155
Selenium	0.014	0.010		mg/L	10	3/30/2015 1:58:46 PM	R25155
Uranium	0.041	0.010	*	mg/L	10	3/30/2015 1:58:46 PM	R25155
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	3/25/2015 6:00:39 PM	18307
Lead	0.011	0.0010		mg/L	1	3/25/2015 3:01:48 PM	18307
Selenium	0.0079	0.0050		mg/L	5	3/25/2015 6:00:39 PM	18307
Uranium	0.044	0.0010	*	mg/L	1	3/25/2015 3:01:48 PM	18307
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/24/2015 2:52:34 PM	18286

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-30

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 9:25:00 AM

Lab ID: 1503556-004

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Aniline	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Anthracene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Azobenzene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Benzoic acid	ND	20		µg/L	1	3/17/2015 5:19:39 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Carbazole	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Chrysene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/17/2015 5:19:39 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/17/2015 5:19:39 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/17/2015 5:19:39 PM	18138

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-30

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 9:25:00 AM

Lab ID: 1503556-004

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Fluoranthene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Fluorene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Isophorone	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Naphthalene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/17/2015 5:19:39 PM	18138
Phenanthrene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Phenol	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Pyrene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Pyridine	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/17/2015 5:19:39 PM	18138
Surr: 2-Fluorophenol	38.0	17.6-104		%REC	1	3/17/2015 5:19:39 PM	18138
Surr: Phenol-d5	49.4	17.7-89.9		%REC	1	3/17/2015 5:19:39 PM	18138
Surr: 2,4,6-Tribromophenol	56.9	16.3-122		%REC	1	3/17/2015 5:19:39 PM	18138
Surr: Nitrobenzene-d5	67.6	45.3-117		%REC	1	3/17/2015 5:19:39 PM	18138
Surr: 2-Fluorobiphenyl	68.6	43-113		%REC	1	3/17/2015 5:19:39 PM	18138
Surr: 4-Terphenyl-d14	94.9	47.6-122		%REC	1	3/17/2015 5:19:39 PM	18138

EPA METHOD 8260B: VOLATILES

Analyst: **KJH**

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-30

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 9:25:00 AM

Lab ID: 1503556-004

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: KJH
Benzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Toluene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Ethylbenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Methyl tert-butyl ether (MTBE)	1.9	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,2-Dichloroethane (EDC)	4.0	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Naphthalene	ND	2.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
2-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Acetone	ND	10		µg/L	1	3/13/2015 5:00:50 PM	R24833
Bromobenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Bromodichloromethane	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Bromoform	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Bromomethane	ND	3.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
2-Butanone	ND	10		µg/L	1	3/13/2015 5:00:50 PM	R24833
Carbon disulfide	ND	10		µg/L	1	3/13/2015 5:00:50 PM	R24833
Carbon Tetrachloride	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Chlorobenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Chloroethane	ND	2.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Chloroform	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Chloromethane	ND	3.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
2-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
4-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
cis-1,2-DCE	4.5	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Dibromochloromethane	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Dibromomethane	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,1-Dichloroethane	81	10		µg/L	10	3/16/2015 11:11:54 AM	R24859
1,1-Dichloroethene	4.0	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,2-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,3-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
2,2-Dichloropropane	ND	2.0		µg/L	1	3/13/2015 5:00:50 PM	R24833

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-30

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 9:25:00 AM

Lab ID: 1503556-004

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: KJH
1,1-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Hexachlorobutadiene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
2-Hexanone	ND	10		µg/L	1	3/13/2015 5:00:50 PM	R24833
Isopropylbenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
4-Isopropyltoluene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
4-Methyl-2-pentanone	ND	10		µg/L	1	3/13/2015 5:00:50 PM	R24833
Methylene Chloride	ND	3.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
n-Butylbenzene	ND	3.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
n-Propylbenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
sec-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Styrene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
tert-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
trans-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,1,1-Trichloroethane	1.9	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Trichloroethene (TCE)	3.6	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Trichlorofluoromethane	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Vinyl chloride	ND	1.0		µg/L	1	3/13/2015 5:00:50 PM	R24833
Xylenes, Total	ND	1.5		µg/L	1	3/13/2015 5:00:50 PM	R24833
Surr: 1,2-Dichloroethane-d4	83.4	70-130		%REC	1	3/13/2015 5:00:50 PM	R24833
Surr: 4-Bromofluorobenzene	97.3	70-130		%REC	1	3/13/2015 5:00:50 PM	R24833
Surr: Dibromofluoromethane	79.0	70-130		%REC	1	3/13/2015 5:00:50 PM	R24833
Surr: Toluene-d8	100	70-130		%REC	1	3/13/2015 5:00:50 PM	R24833

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-29

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 9:50:00 AM

Lab ID: 1503556-005

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/14/2015 5:31:44 AM	18122
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/14/2015 5:31:44 AM	18122
Surr: DNOP	113	76.5-150		%REC	1	3/14/2015 5:31:44 AM	18122
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/13/2015 9:12:38 PM	R24831
Surr: BFB	88.4	80-120		%REC	1	3/13/2015 9:12:38 PM	R24831
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.031	0.0020		mg/L	1	3/25/2015 8:41:27 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:41:27 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 8:41:27 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 8:41:27 PM	R25072
Iron	ND	0.020		mg/L	1	3/25/2015 8:41:27 PM	R25072
Manganese	0.34	0.0020	*	mg/L	1	3/25/2015 8:41:27 PM	R25072
Silver	ND	0.0050		mg/L	1	3/25/2015 8:41:27 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 8:41:27 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.057	0.0020		mg/L	1	3/25/2015 7:24:35 PM	18307
Cadmium	ND	0.0020		mg/L	1	3/25/2015 7:24:35 PM	18307
Chromium	ND	0.0060		mg/L	1	3/25/2015 7:24:35 PM	18307
Copper	ND	0.0060		mg/L	1	3/25/2015 7:24:35 PM	18307
Iron	0.81	0.10	*	mg/L	5	3/27/2015 3:46:06 PM	18307
Manganese	0.36	0.0020	*	mg/L	1	3/25/2015 7:24:35 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 7:24:35 PM	18307
Zinc	ND	0.010		mg/L	1	3/25/2015 7:24:35 PM	18307
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	0.0024	0.0010		mg/L	1	3/26/2015 7:06:31 PM	R25105
Lead	ND	0.0010		mg/L	1	3/26/2015 7:06:31 PM	R25105
Selenium	0.0045	0.0010		mg/L	1	3/26/2015 7:06:31 PM	R25105
Uranium	0.023	0.0010		mg/L	1	3/26/2015 7:06:31 PM	R25105
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.0020	0.0010		mg/L	1	3/25/2015 3:04:59 PM	18307
Lead	ND	0.0010		mg/L	1	3/25/2015 3:04:59 PM	18307
Selenium	0.0023	0.0010		mg/L	1	3/25/2015 3:04:59 PM	18307
Uranium	0.023	0.0010		mg/L	1	3/25/2015 3:04:59 PM	18307
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/24/2015 2:54:20 PM	18286

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-29

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 9:50:00 AM

Lab ID: 1503556-005

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Aniline	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Anthracene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Azobenzene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Benzoic acid	ND	20		µg/L	1	3/17/2015 5:47:45 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Carbazole	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Chrysene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/17/2015 5:47:45 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/17/2015 5:47:45 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/17/2015 5:47:45 PM	18138

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-29

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 9:50:00 AM

Lab ID: 1503556-005

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Fluoranthene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Fluorene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Isophorone	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Naphthalene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/17/2015 5:47:45 PM	18138
Phenanthrene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Phenol	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Pyrene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Pyridine	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/17/2015 5:47:45 PM	18138
Surr: 2-Fluorophenol	91.0	17.6-104		%REC	1	3/17/2015 5:47:45 PM	18138
Surr: Phenol-d5	80.2	17.7-89.9		%REC	1	3/17/2015 5:47:45 PM	18138
Surr: 2,4,6-Tribromophenol	107	16.3-122		%REC	1	3/17/2015 5:47:45 PM	18138
Surr: Nitrobenzene-d5	99.7	45.3-117		%REC	1	3/17/2015 5:47:45 PM	18138
Surr: 2-Fluorobiphenyl	103	43-113		%REC	1	3/17/2015 5:47:45 PM	18138
Surr: 4-Terphenyl-d14	131	47.6-122	S	%REC	1	3/17/2015 5:47:45 PM	18138

EPA METHOD 8260B: VOLATILES

Analyst: **KJH**

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.
	E Value above quantitation range
	J Analyte detected below quantitation limits
	O RSD is greater than RSDlimit
	R RPD outside accepted recovery limits
	S Spike Recovery outside accepted recovery limits

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-29

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 9:50:00 AM

Lab ID: 1503556-005

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: KJH
Benzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Toluene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Ethylbenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Methyl tert-butyl ether (MTBE)	17	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Naphthalene	ND	2.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
2-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Acetone	ND	10		µg/L	1	3/13/2015 5:29:35 PM	R24833
Bromobenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Bromodichloromethane	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Bromoform	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Bromomethane	ND	3.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
2-Butanone	ND	10		µg/L	1	3/13/2015 5:29:35 PM	R24833
Carbon disulfide	ND	10		µg/L	1	3/13/2015 5:29:35 PM	R24833
Carbon Tetrachloride	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Chlorobenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Chloroethane	ND	2.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Chloroform	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Chloromethane	ND	3.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
2-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
4-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
cis-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Dibromochloromethane	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Dibromomethane	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,1-Dichloroethane	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,1-Dichloroethene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,2-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,3-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
2,2-Dichloropropane	ND	2.0		µg/L	1	3/13/2015 5:29:35 PM	R24833

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-29

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 9:50:00 AM

Lab ID: 1503556-005

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: KJH			
1,1-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Hexachlorobutadiene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
2-Hexanone	ND	10		µg/L	1	3/13/2015 5:29:35 PM	R24833
Isopropylbenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
4-Isopropyltoluene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
4-Methyl-2-pentanone	ND	10		µg/L	1	3/13/2015 5:29:35 PM	R24833
Methylene Chloride	ND	3.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
n-Butylbenzene	ND	3.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
n-Propylbenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
sec-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Styrene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
tert-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
trans-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Trichlorofluoromethane	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Vinyl chloride	ND	1.0		µg/L	1	3/13/2015 5:29:35 PM	R24833
Xylenes, Total	ND	1.5		µg/L	1	3/13/2015 5:29:35 PM	R24833
Surr: 1,2-Dichloroethane-d4	91.7	70-130		%REC	1	3/13/2015 5:29:35 PM	R24833
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	3/13/2015 5:29:35 PM	R24833
Surr: Dibromofluoromethane	99.5	70-130		%REC	1	3/13/2015 5:29:35 PM	R24833
Surr: Toluene-d8	97.4	70-130		%REC	1	3/13/2015 5:29:35 PM	R24833

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-26

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 10:36:00 AM

Lab ID: 1503556-006

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/14/2015 5:58:16 AM	18122
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/14/2015 5:58:16 AM	18122
Surr: DNOP	164	76.5-150	S	%REC	1	3/14/2015 5:58:16 AM	18122
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	2.5	0.25		mg/L	5	3/13/2015 9:41:53 PM	R24831
Surr: BFB	88.9	80-120		%REC	5	3/13/2015 9:41:53 PM	R24831
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.17	0.0020		mg/L	1	3/25/2015 8:43:24 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:43:24 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 8:43:24 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 8:43:24 PM	R25072
Iron	0.85	0.020	*	mg/L	1	3/25/2015 8:43:24 PM	R25072
Manganese	1.4	0.010	*	mg/L	5	3/26/2015 2:51:39 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 8:43:24 PM	R25072
Zinc	0.068	0.010		mg/L	1	3/25/2015 8:43:24 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.20	0.0020		mg/L	1	3/25/2015 7:30:15 PM	18307
Cadmium	ND	0.0020		mg/L	1	3/25/2015 7:30:15 PM	18307
Chromium	ND	0.0060		mg/L	1	3/25/2015 7:30:15 PM	18307
Copper	ND	0.0060		mg/L	1	3/25/2015 7:30:15 PM	18307
Iron	3.1	0.10	*	mg/L	5	3/26/2015 2:09:46 PM	18307
Manganese	1.3	0.010	*	mg/L	5	3/26/2015 2:09:46 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 7:30:15 PM	18307
Zinc	0.012	0.010		mg/L	1	3/25/2015 7:30:15 PM	18307
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/30/2015 2:01:50 PM	R25155
Lead	ND	0.0010		mg/L	1	3/26/2015 7:09:34 PM	R25105
Selenium	ND	0.010		mg/L	10	3/30/2015 2:01:50 PM	R25155
Uranium	0.045	0.0010	*	mg/L	1	3/26/2015 7:09:34 PM	R25105
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.0040	0.0010		mg/L	1	3/25/2015 3:08:11 PM	18307
Lead	0.0029	0.0010		mg/L	1	3/25/2015 3:08:11 PM	18307
Selenium	0.0047	0.0010		mg/L	1	3/25/2015 3:08:11 PM	18307
Uranium	0.045	0.0010	*	mg/L	1	3/25/2015 3:08:11 PM	18307
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/24/2015 2:56:05 PM	18286

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-26

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 10:36:00 AM

Lab ID: 1503556-006

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Aniline	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Anthracene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Azobenzene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Benzoic acid	ND	20		µg/L	1	3/17/2015 6:15:51 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Carbazole	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Chrysene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/17/2015 6:15:51 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/17/2015 6:15:51 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/17/2015 6:15:51 PM	18138

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-26

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 10:36:00 AM

Lab ID: 1503556-006

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Fluoranthene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Fluorene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Isophorone	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Naphthalene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/17/2015 6:15:51 PM	18138
Phenanthrene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Phenol	14	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Pyrene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Pyridine	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/17/2015 6:15:51 PM	18138
Surr: 2-Fluorophenol	64.0	17.6-104		%REC	1	3/17/2015 6:15:51 PM	18138
Surr: Phenol-d5	55.1	17.7-89.9		%REC	1	3/17/2015 6:15:51 PM	18138
Surr: 2,4,6-Tribromophenol	91.0	16.3-122		%REC	1	3/17/2015 6:15:51 PM	18138
Surr: Nitrobenzene-d5	67.9	45.3-117		%REC	1	3/17/2015 6:15:51 PM	18138
Surr: 2-Fluorobiphenyl	77.5	43-113		%REC	1	3/17/2015 6:15:51 PM	18138
Surr: 4-Terphenyl-d14	106	47.6-122		%REC	1	3/17/2015 6:15:51 PM	18138

EPA METHOD 8260B: VOLATILES

Analyst: **KJH**

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-26

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 10:36:00 AM

Lab ID: 1503556-006

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: KJH	
Benzene	800	50		µg/L	50	3/13/2015 5:58:15 PM	R24833
Toluene	7.8	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Ethylbenzene	7.1	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Methyl tert-butyl ether (MTBE)	99	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,2,4-Trimethylbenzene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Naphthalene	ND	10		µg/L	5	3/13/2015 6:26:58 PM	R24833
1-Methylnaphthalene	ND	20		µg/L	5	3/13/2015 6:26:58 PM	R24833
2-Methylnaphthalene	ND	20		µg/L	5	3/13/2015 6:26:58 PM	R24833
Acetone	ND	50		µg/L	5	3/13/2015 6:26:58 PM	R24833
Bromobenzene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Bromodichloromethane	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Bromoform	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Bromomethane	ND	15		µg/L	5	3/13/2015 6:26:58 PM	R24833
2-Butanone	ND	50		µg/L	5	3/13/2015 6:26:58 PM	R24833
Carbon disulfide	ND	50		µg/L	5	3/13/2015 6:26:58 PM	R24833
Carbon Tetrachloride	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Chlorobenzene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Chloroethane	ND	10		µg/L	5	3/13/2015 6:26:58 PM	R24833
Chloroform	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Chloromethane	ND	15		µg/L	5	3/13/2015 6:26:58 PM	R24833
2-Chlorotoluene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
4-Chlorotoluene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
cis-1,2-DCE	8.0	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	3/13/2015 6:26:58 PM	R24833
Dibromochloromethane	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Dibromomethane	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,2-Dichlorobenzene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,3-Dichlorobenzene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,4-Dichlorobenzene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Dichlorodifluoromethane	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,1-Dichloroethane	49	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,1-Dichloroethene	9.0	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,2-Dichloropropane	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,3-Dichloropropane	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
2,2-Dichloropropane	ND	10		µg/L	5	3/13/2015 6:26:58 PM	R24833

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-26

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 10:36:00 AM

Lab ID: 1503556-006

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: KJH			
1,1-Dichloropropene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Hexachlorobutadiene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
2-Hexanone	ND	50		µg/L	5	3/13/2015 6:26:58 PM	R24833
Isopropylbenzene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
4-Isopropyltoluene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
4-Methyl-2-pentanone	ND	50		µg/L	5	3/13/2015 6:26:58 PM	R24833
Methylene Chloride	ND	15		µg/L	5	3/13/2015 6:26:58 PM	R24833
n-Butylbenzene	ND	15		µg/L	5	3/13/2015 6:26:58 PM	R24833
n-Propylbenzene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
sec-Butylbenzene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Styrene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
tert-Butylbenzene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	3/13/2015 6:26:58 PM	R24833
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
trans-1,2-DCE	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,1,1-Trichloroethane	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,1,2-Trichloroethane	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Trichloroethene (TCE)	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Trichlorofluoromethane	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
1,2,3-Trichloropropane	ND	10		µg/L	5	3/13/2015 6:26:58 PM	R24833
Vinyl chloride	ND	5.0		µg/L	5	3/13/2015 6:26:58 PM	R24833
Xylenes, Total	ND	7.5		µg/L	5	3/13/2015 6:26:58 PM	R24833
Surr: 1,2-Dichloroethane-d4	90.6	70-130		%REC	5	3/13/2015 6:26:58 PM	R24833
Surr: 4-Bromofluorobenzene	96.2	70-130		%REC	5	3/13/2015 6:26:58 PM	R24833
Surr: Dibromofluoromethane	94.1	70-130		%REC	5	3/13/2015 6:26:58 PM	R24833
Surr: Toluene-d8	103	70-130		%REC	5	3/13/2015 6:26:58 PM	R24833

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-24

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 11:56:00 AM

Lab ID: 1503556-007

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/14/2015 6:25:03 AM	18122
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/14/2015 6:25:03 AM	18122
Surr: DNOP	183	76.5-150	S	%REC	1	3/14/2015 6:25:03 AM	18122
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	9.2	0.50		mg/L	10	3/13/2015 10:11:03 PM	R24831
Surr: BFB	102	80-120		%REC	10	3/13/2015 10:11:03 PM	R24831
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.26	0.0020		mg/L	1	3/25/2015 8:45:23 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:45:23 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 8:45:23 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 8:45:23 PM	R25072
Iron	0.34	0.020	*	mg/L	1	3/25/2015 8:45:23 PM	R25072
Manganese	1.2	0.010	*	mg/L	5	3/26/2015 2:56:42 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 8:45:23 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 8:45:23 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.71	0.0020		mg/L	1	3/25/2015 7:31:55 PM	18307
Cadmium	ND	0.0020		mg/L	1	3/25/2015 7:31:55 PM	18307
Chromium	0.014	0.0060		mg/L	1	3/25/2015 7:31:55 PM	18307
Copper	0.019	0.0060		mg/L	1	3/25/2015 7:31:55 PM	18307
Iron	12	0.40	*	mg/L	20	3/26/2015 2:11:25 PM	18307
Manganese	2.2	0.040	*	mg/L	20	3/26/2015 2:11:25 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 7:31:55 PM	18307
Zinc	0.031	0.010		mg/L	1	3/25/2015 7:31:55 PM	18307
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	3/30/2015 2:04:53 PM	R25155
Lead	0.0015	0.0010		mg/L	1	3/26/2015 7:12:38 PM	R25105
Selenium	0.011	0.0050		mg/L	5	3/30/2015 2:04:53 PM	R25155
Uranium	0.043	0.0050	*	mg/L	5	3/30/2015 2:04:53 PM	R25155
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/25/2015 6:03:50 PM	18307
Lead	0.020	0.0010	*	mg/L	1	3/25/2015 3:14:33 PM	18307
Selenium	ND	0.010		mg/L	10	3/25/2015 6:03:50 PM	18307
Uranium	0.046	0.0010	*	mg/L	1	3/25/2015 3:14:33 PM	18307
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/24/2015 2:57:50 PM	18286

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-24

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 11:56:00 AM

Lab ID: 1503556-007

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Aniline	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Anthracene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Azobenzene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Benzoic acid	ND	20		µg/L	1	3/17/2015 6:43:52 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Carbazole	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Chrysene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/17/2015 6:43:52 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/17/2015 6:43:52 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/17/2015 6:43:52 PM	18138

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-24

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 11:56:00 AM

Lab ID: 1503556-007

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Fluoranthene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Fluorene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Isophorone	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Naphthalene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/17/2015 6:43:52 PM	18138
Phenanthrene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Phenol	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Pyrene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Pyridine	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/17/2015 6:43:52 PM	18138
Surr: 2-Fluorophenol	69.9	17.6-104		%REC	1	3/17/2015 6:43:52 PM	18138
Surr: Phenol-d5	68.5	17.7-89.9		%REC	1	3/17/2015 6:43:52 PM	18138
Surr: 2,4,6-Tribromophenol	92.8	16.3-122		%REC	1	3/17/2015 6:43:52 PM	18138
Surr: Nitrobenzene-d5	79.6	45.3-117		%REC	1	3/17/2015 6:43:52 PM	18138
Surr: 2-Fluorobiphenyl	90.3	43-113		%REC	1	3/17/2015 6:43:52 PM	18138
Surr: 4-Terphenyl-d14	114	47.6-122		%REC	1	3/17/2015 6:43:52 PM	18138

EPA METHOD 8260B: VOLATILES

Analyst: **KJH**

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-24

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 11:56:00 AM

Lab ID: 1503556-007

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: KJH
Benzene	2600	500		µg/L	500	3/16/2015 11:40:33 AM	R24859
Toluene	12	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Ethylbenzene	31	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Methyl tert-butyl ether (MTBE)	170	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,2,4-Trimethylbenzene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,2-Dichloroethane (EDC)	7.0	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Naphthalene	ND	10		µg/L	5	3/13/2015 7:24:26 PM	R24833
1-Methylnaphthalene	ND	20		µg/L	5	3/13/2015 7:24:26 PM	R24833
2-Methylnaphthalene	ND	20		µg/L	5	3/13/2015 7:24:26 PM	R24833
Acetone	ND	50		µg/L	5	3/13/2015 7:24:26 PM	R24833
Bromobenzene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Bromodichloromethane	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Bromoform	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Bromomethane	ND	15		µg/L	5	3/13/2015 7:24:26 PM	R24833
2-Butanone	ND	50		µg/L	5	3/13/2015 7:24:26 PM	R24833
Carbon disulfide	ND	50		µg/L	5	3/13/2015 7:24:26 PM	R24833
Carbon Tetrachloride	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Chlorobenzene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Chloroethane	ND	10		µg/L	5	3/13/2015 7:24:26 PM	R24833
Chloroform	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Chloromethane	ND	15		µg/L	5	3/13/2015 7:24:26 PM	R24833
2-Chlorotoluene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
4-Chlorotoluene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
cis-1,2-DCE	35	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	3/13/2015 7:24:26 PM	R24833
Dibromochloromethane	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Dibromomethane	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,2-Dichlorobenzene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,3-Dichlorobenzene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,4-Dichlorobenzene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Dichlorodifluoromethane	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,1-Dichloroethane	100	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,1-Dichloroethene	51	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,2-Dichloropropane	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,3-Dichloropropane	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
2,2-Dichloropropane	ND	10		µg/L	5	3/13/2015 7:24:26 PM	R24833

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-24

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 11:56:00 AM

Lab ID: 1503556-007

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: KJH			
1,1-Dichloropropene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Hexachlorobutadiene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
2-Hexanone	ND	50		µg/L	5	3/13/2015 7:24:26 PM	R24833
Isopropylbenzene	16	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
4-Isopropyltoluene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
4-Methyl-2-pentanone	ND	50		µg/L	5	3/13/2015 7:24:26 PM	R24833
Methylene Chloride	ND	15		µg/L	5	3/13/2015 7:24:26 PM	R24833
n-Butylbenzene	ND	15		µg/L	5	3/13/2015 7:24:26 PM	R24833
n-Propylbenzene	24	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
sec-Butylbenzene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Styrene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
tert-Butylbenzene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	3/13/2015 7:24:26 PM	R24833
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
trans-1,2-DCE	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,1,1-Trichloroethane	10	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,1,2-Trichloroethane	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Trichloroethene (TCE)	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Trichlorofluoromethane	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
1,2,3-Trichloropropane	ND	10		µg/L	5	3/13/2015 7:24:26 PM	R24833
Vinyl chloride	ND	5.0		µg/L	5	3/13/2015 7:24:26 PM	R24833
Xylenes, Total	ND	7.5		µg/L	5	3/13/2015 7:24:26 PM	R24833
Surr: 1,2-Dichloroethane-d4	87.1	70-130		%REC	5	3/13/2015 7:24:26 PM	R24833
Surr: 4-Bromofluorobenzene	92.7	70-130		%REC	5	3/13/2015 7:24:26 PM	R24833
Surr: Dibromofluoromethane	86.3	70-130		%REC	5	3/13/2015 7:24:26 PM	R24833
Surr: Toluene-d8	91.7	70-130		%REC	5	3/13/2015 7:24:26 PM	R24833

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-1

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 12:30:00 PM

Lab ID: 1503556-008

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	370	10		mg/L	10	3/16/2015 2:26:33 PM	18122
Motor Oil Range Organics (MRO)	ND	50		mg/L	10	3/16/2015 2:26:33 PM	18122
Surr: DNOP	0	76.5-150	S	%REC	10	3/16/2015 2:26:33 PM	18122
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	31	2.5		mg/L	50	3/13/2015 10:40:16 PM	R24831
Surr: BFB	95.6	80-120		%REC	50	3/13/2015 10:40:16 PM	R24831
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	2.0	0.010		mg/L	5	3/26/2015 3:03:23 PM	R25095
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:47:26 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 8:47:26 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 8:47:26 PM	R25072
Iron	4.4	0.10	*	mg/L	5	3/26/2015 3:03:23 PM	R25095
Manganese	1.9	0.010	*	mg/L	5	3/26/2015 3:03:23 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 8:47:26 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 8:47:26 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	2.1	0.020	*	mg/L	10	3/26/2015 2:13:05 PM	18307
Cadmium	ND	0.0020		mg/L	1	3/25/2015 7:33:45 PM	18307
Chromium	ND	0.0060		mg/L	1	3/25/2015 7:33:45 PM	18307
Copper	ND	0.0060		mg/L	1	3/25/2015 7:33:45 PM	18307
Iron	5.6	0.20	*	mg/L	10	3/26/2015 2:13:05 PM	18307
Manganese	1.9	0.020	*	mg/L	10	3/26/2015 2:13:05 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 7:33:45 PM	18307
Zinc	ND	0.010		mg/L	1	3/25/2015 7:33:45 PM	18307
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/30/2015 2:14:03 PM	R25155
Lead	ND	0.0010		mg/L	1	3/26/2015 7:21:48 PM	R25105
Selenium	ND	0.020		mg/L	20	3/30/2015 3:03:07 PM	R25155
Uranium	ND	0.0010		mg/L	1	3/26/2015 7:21:48 PM	R25105
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.0032	0.0010		mg/L	1	3/25/2015 3:17:44 PM	18307
Lead	0.0020	0.0010		mg/L	1	3/25/2015 3:17:44 PM	18307
Selenium	0.0056	0.0010		mg/L	1	3/25/2015 3:17:44 PM	18307
Uranium	ND	0.0010		mg/L	1	3/25/2015 3:17:44 PM	18307
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/24/2015 2:59:36 PM	18286

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-1

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 12:30:00 PM

Lab ID: 1503556-008

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Aniline	18	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Anthracene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Azobenzene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Benzoic acid	ND	20		µg/L	1	3/17/2015 7:11:52 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Carbazole	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Chrysene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/17/2015 7:11:52 PM	18138
2,4-Dimethylphenol	51	10		µg/L	1	3/17/2015 7:11:52 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/17/2015 7:11:52 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/17/2015 7:11:52 PM	18138

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-1

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 12:30:00 PM

Lab ID: 1503556-008

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
2,4-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Fluoranthene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Fluorene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Isophorone	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
1-Methylnaphthalene	120	10		µg/L	1	3/17/2015 7:11:52 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
2-Methylphenol	61	10		µg/L	1	3/17/2015 7:11:52 PM	18138
3+4-Methylphenol	35	10		µg/L	1	3/17/2015 7:11:52 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Naphthalene	90	10		µg/L	1	3/17/2015 7:11:52 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/17/2015 7:11:52 PM	18138
Phenanthrene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Phenol	23	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Pyrene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Pyridine	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/17/2015 7:11:52 PM	18138
Surr: 2-Fluorophenol	46.6	17.6-104		%REC	1	3/17/2015 7:11:52 PM	18138
Surr: Phenol-d5	66.2	17.7-89.9		%REC	1	3/17/2015 7:11:52 PM	18138
Surr: 2,4,6-Tribromophenol	91.5	16.3-122		%REC	1	3/17/2015 7:11:52 PM	18138
Surr: Nitrobenzene-d5	83.8	45.3-117		%REC	1	3/17/2015 7:11:52 PM	18138
Surr: 2-Fluorobiphenyl	85.7	43-113		%REC	1	3/17/2015 7:11:52 PM	18138
Surr: 4-Terphenyl-d14	116	47.6-122		%REC	1	3/17/2015 7:11:52 PM	18138

EPA METHOD 8260B: VOLATILES

Analyst: **KJH**

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-1

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 12:30:00 PM

Lab ID: 1503556-008

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst: KJH		
Benzene	9300	500		µg/L	500	3/13/2015 7:53:08 PM	R24833
Toluene	2000	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Ethylbenzene	740	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Methyl tert-butyl ether (MTBE)	370	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,2,4-Trimethylbenzene	590	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,3,5-Trimethylbenzene	100	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Naphthalene	ND	100		µg/L	50	3/13/2015 8:21:53 PM	R24833
1-Methylnaphthalene	ND	200		µg/L	50	3/13/2015 8:21:53 PM	R24833
2-Methylnaphthalene	ND	200		µg/L	50	3/13/2015 8:21:53 PM	R24833
Acetone	ND	500		µg/L	50	3/13/2015 8:21:53 PM	R24833
Bromobenzene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Bromodichloromethane	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Bromoform	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Bromomethane	ND	150		µg/L	50	3/13/2015 8:21:53 PM	R24833
2-Butanone	ND	500		µg/L	50	3/13/2015 8:21:53 PM	R24833
Carbon disulfide	ND	500		µg/L	50	3/13/2015 8:21:53 PM	R24833
Carbon Tetrachloride	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Chlorobenzene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Chloroethane	ND	100		µg/L	50	3/13/2015 8:21:53 PM	R24833
Chloroform	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Chloromethane	ND	150		µg/L	50	3/13/2015 8:21:53 PM	R24833
2-Chlorotoluene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
4-Chlorotoluene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
cis-1,2-DCE	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
cis-1,3-Dichloropropene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	3/13/2015 8:21:53 PM	R24833
Dibromochloromethane	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Dibromomethane	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,2-Dichlorobenzene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,3-Dichlorobenzene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,4-Dichlorobenzene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Dichlorodifluoromethane	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,1-Dichloroethane	66	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,1-Dichloroethene	58	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,2-Dichloropropane	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,3-Dichloropropane	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
2,2-Dichloropropane	ND	100		µg/L	50	3/13/2015 8:21:53 PM	R24833

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-1

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 12:30:00 PM

Lab ID: 1503556-008

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: KJH			
1,1-Dichloropropene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Hexachlorobutadiene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
2-Hexanone	ND	500		µg/L	50	3/13/2015 8:21:53 PM	R24833
Isopropylbenzene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
4-Isopropyltoluene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
4-Methyl-2-pentanone	ND	500		µg/L	50	3/13/2015 8:21:53 PM	R24833
Methylene Chloride	ND	150		µg/L	50	3/13/2015 8:21:53 PM	R24833
n-Butylbenzene	ND	150		µg/L	50	3/13/2015 8:21:53 PM	R24833
n-Propylbenzene	110	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
sec-Butylbenzene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Styrene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
tert-Butylbenzene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	3/13/2015 8:21:53 PM	R24833
Tetrachloroethene (PCE)	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
trans-1,2-DCE	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
trans-1,3-Dichloropropene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,2,3-Trichlorobenzene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,2,4-Trichlorobenzene	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,1,1-Trichloroethane	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,1,2-Trichloroethane	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Trichloroethene (TCE)	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Trichlorofluoromethane	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
1,2,3-Trichloropropane	ND	100		µg/L	50	3/13/2015 8:21:53 PM	R24833
Vinyl chloride	ND	50		µg/L	50	3/13/2015 8:21:53 PM	R24833
Xylenes, Total	1900	75		µg/L	50	3/13/2015 8:21:53 PM	R24833
Surr: 1,2-Dichloroethane-d4	87.7	70-130		%REC	50	3/13/2015 8:21:53 PM	R24833
Surr: 4-Bromofluorobenzene	87.1	70-130		%REC	50	3/13/2015 8:21:53 PM	R24833
Surr: Dibromofluoromethane	85.8	70-130		%REC	50	3/13/2015 8:21:53 PM	R24833
Surr: Toluene-d8	109	70-130		%REC	50	3/13/2015 8:21:53 PM	R24833

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-2

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 1:15:00 PM

Lab ID: 1503556-009

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/14/2015 7:18:58 AM	18122
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/14/2015 7:18:58 AM	18122
Surr: DNOP	157	76.5-150	S	%REC	1	3/14/2015 7:18:58 AM	18122
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	1.3	0.050		mg/L	1	3/13/2015 11:09:27 PM	R24831
Surr: BFB	102	80-120		%REC	1	3/13/2015 11:09:27 PM	R24831
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.13	0.0020		mg/L	1	3/25/2015 8:49:07 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:49:07 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 8:49:07 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 8:49:07 PM	R25072
Iron	0.11	0.020		mg/L	1	3/25/2015 8:49:07 PM	R25072
Manganese	0.56	0.0020	*	mg/L	1	3/25/2015 8:49:07 PM	R25072
Silver	ND	0.0050		mg/L	1	3/25/2015 8:49:07 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 8:49:07 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.21	0.0020		mg/L	1	3/25/2015 7:35:25 PM	18307
Cadmium	ND	0.0020		mg/L	1	3/25/2015 7:35:25 PM	18307
Chromium	ND	0.0060		mg/L	1	3/25/2015 7:35:25 PM	18307
Copper	0.0074	0.0060		mg/L	1	3/25/2015 7:35:25 PM	18307
Iron	4.6	0.20	*	mg/L	10	3/26/2015 2:19:46 PM	18307
Manganese	0.64	0.0020	*	mg/L	1	3/25/2015 7:35:25 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 7:35:25 PM	18307
Zinc	0.017	0.010		mg/L	1	3/25/2015 7:35:25 PM	18307
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	0.0047	0.0010		mg/L	1	3/26/2015 7:24:51 PM	R25105
Lead	ND	0.0010		mg/L	1	3/26/2015 7:24:51 PM	R25105
Selenium	0.0084	0.0010		mg/L	1	3/26/2015 7:24:51 PM	R25105
Uranium	0.049	0.0010	*	mg/L	1	3/26/2015 7:24:51 PM	R25105
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.0046	0.0010		mg/L	1	3/25/2015 3:20:56 PM	18307
Lead	0.0057	0.0010		mg/L	1	3/25/2015 3:20:56 PM	18307
Selenium	0.0043	0.0010		mg/L	1	3/25/2015 3:20:56 PM	18307
Uranium	0.048	0.0010	*	mg/L	1	3/25/2015 3:20:56 PM	18307
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/24/2015 3:01:23 PM	18286

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-2

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 1:15:00 PM

Lab ID: 1503556-009

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: DAM	
Acenaphthene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Aniline	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Anthracene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Azobenzene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Benzoic acid	ND	20		µg/L	1	3/17/2015 7:39:50 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Carbazole	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Chrysene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/17/2015 7:39:50 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/17/2015 7:39:50 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/17/2015 7:39:50 PM	18138

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 39 of 105
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-2

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 1:15:00 PM

Lab ID: 1503556-009

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Fluoranthene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Fluorene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Isophorone	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Naphthalene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/17/2015 7:39:50 PM	18138
Phenanthrene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Phenol	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Pyrene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Pyridine	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/17/2015 7:39:50 PM	18138
Surr: 2-Fluorophenol	79.7	17.6-104		%REC	1	3/17/2015 7:39:50 PM	18138
Surr: Phenol-d5	69.4	17.7-89.9		%REC	1	3/17/2015 7:39:50 PM	18138
Surr: 2,4,6-Tribromophenol	105	16.3-122		%REC	1	3/17/2015 7:39:50 PM	18138
Surr: Nitrobenzene-d5	89.7	45.3-117		%REC	1	3/17/2015 7:39:50 PM	18138
Surr: 2-Fluorobiphenyl	101	43-113		%REC	1	3/17/2015 7:39:50 PM	18138
Surr: 4-Terphenyl-d14	129	47.6-122	S	%REC	1	3/17/2015 7:39:50 PM	18138

EPA METHOD 8260B: VOLATILES

Analyst: **KJH**

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-2

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 1:15:00 PM

Lab ID: 1503556-009

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: KJH	
Benzene	200	10		µg/L	10	3/13/2015 8:50:38 PM	R24833
Toluene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Ethylbenzene	4.1	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Methyl tert-butyl ether (MTBE)	44	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,2,4-Trimethylbenzene	5.1	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,3,5-Trimethylbenzene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,2-Dichloroethane (EDC)	4.5	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Naphthalene	ND	4.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1-Methylnaphthalene	ND	8.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
2-Methylnaphthalene	ND	8.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Acetone	ND	20		µg/L	2	3/17/2015 11:19:48 AM	R24887
Bromobenzene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Bromodichloromethane	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Bromoform	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Bromomethane	ND	6.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
2-Butanone	ND	20		µg/L	2	3/17/2015 11:19:48 AM	R24887
Carbon disulfide	ND	20		µg/L	2	3/17/2015 11:19:48 AM	R24887
Carbon Tetrachloride	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Chlorobenzene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Chloroethane	ND	4.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Chloroform	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Chloromethane	ND	6.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
2-Chlorotoluene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
4-Chlorotoluene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
cis-1,2-DCE	9.3	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Dibromochloromethane	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Dibromomethane	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,2-Dichlorobenzene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,3-Dichlorobenzene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,4-Dichlorobenzene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Dichlorodifluoromethane	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,1-Dichloroethane	50	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,1-Dichloroethene	31	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,2-Dichloropropane	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,3-Dichloropropane	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
2,2-Dichloropropane	ND	4.0		µg/L	2	3/17/2015 11:19:48 AM	R24887

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-2

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 1:15:00 PM

Lab ID: 1503556-009

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: KJH
1,1-Dichloropropene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Hexachlorobutadiene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
2-Hexanone	ND	20		µg/L	2	3/17/2015 11:19:48 AM	R24887
Isopropylbenzene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
4-Isopropyltoluene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
4-Methyl-2-pentanone	ND	20		µg/L	2	3/17/2015 11:19:48 AM	R24887
Methylene Chloride	ND	6.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
n-Butylbenzene	ND	6.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
n-Propylbenzene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
sec-Butylbenzene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Styrene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
tert-Butylbenzene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
trans-1,2-DCE	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,1,1-Trichloroethane	2.3	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,1,2-Trichloroethane	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Trichloroethene (TCE)	2.4	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Trichlorofluoromethane	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
1,2,3-Trichloropropane	ND	4.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Vinyl chloride	ND	2.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Xylenes, Total	7.6	3.0		µg/L	2	3/17/2015 11:19:48 AM	R24887
Surr: 1,2-Dichloroethane-d4	81.4	70-130		%REC	2	3/17/2015 11:19:48 AM	R24887
Surr: 4-Bromofluorobenzene	92.5	70-130		%REC	2	3/17/2015 11:19:48 AM	R24887
Surr: Dibromofluoromethane	88.9	70-130		%REC	2	3/17/2015 11:19:48 AM	R24887
Surr: Toluene-d8	93.5	70-130		%REC	2	3/17/2015 11:19:48 AM	R24887

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-25

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 2:10:00 PM

Lab ID: 1503556-010

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	1.1	1.0		mg/L	1	3/17/2015 5:23:36 PM	18122
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/17/2015 5:23:36 PM	18122
Surr: DNOP	127	76.5-150		%REC	1	3/17/2015 5:23:36 PM	18122
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	10	0.50		mg/L	10	3/13/2015 11:38:36 PM	R24831
Surr: BFB	121	80-120	S	%REC	10	3/13/2015 11:38:36 PM	R24831
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.26	0.0020		mg/L	1	3/25/2015 8:51:05 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:51:05 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 8:51:05 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 8:51:05 PM	R25072
Iron	0.20	0.020		mg/L	1	3/25/2015 8:51:05 PM	R25072
Manganese	3.2	0.010	*	mg/L	5	3/26/2015 3:05:06 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 8:51:05 PM	R25072
Zinc	0.017	0.010		mg/L	1	3/25/2015 8:51:05 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.58	0.0020		mg/L	1	3/25/2015 7:37:07 PM	18307
Cadmium	ND	0.0020		mg/L	1	3/25/2015 7:37:07 PM	18307
Chromium	0.0064	0.0060		mg/L	1	3/25/2015 7:37:07 PM	18307
Copper	0.014	0.0060		mg/L	1	3/25/2015 7:37:07 PM	18307
Iron	7.5	0.20	*	mg/L	10	3/26/2015 2:21:27 PM	18307
Manganese	3.9	0.020	*	mg/L	10	3/26/2015 2:21:27 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 7:37:07 PM	18307
Zinc	0.017	0.010		mg/L	1	3/25/2015 7:37:07 PM	18307
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/30/2015 2:17:06 PM	R25155
Lead	ND	0.0010		mg/L	1	3/26/2015 7:34:05 PM	R25105
Selenium	ND	0.020		mg/L	20	3/30/2015 3:06:10 PM	R25155
Uranium	0.038	0.0010	*	mg/L	1	3/26/2015 7:34:05 PM	R25105
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.0041	0.0010		mg/L	1	3/25/2015 3:24:07 PM	18307
Lead	0.013	0.0010		mg/L	1	3/25/2015 3:24:07 PM	18307
Selenium	0.0058	0.0050		mg/L	5	3/25/2015 6:07:01 PM	18307
Uranium	0.038	0.0010	*	mg/L	1	3/25/2015 3:24:07 PM	18307
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/24/2015 3:03:10 PM	18286

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-25

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 2:10:00 PM

Lab ID: 1503556-010

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Aniline	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Anthracene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Azobenzene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Benzoic acid	ND	20		µg/L	1	3/17/2015 8:07:39 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Carbazole	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Chrysene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/17/2015 8:07:39 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/17/2015 8:07:39 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/17/2015 8:07:39 PM	18138

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-25

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 2:10:00 PM

Lab ID: 1503556-010

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Fluoranthene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Fluorene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Isophorone	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Naphthalene	17	10		µg/L	1	3/17/2015 8:07:39 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/17/2015 8:07:39 PM	18138
Phenanthrene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Phenol	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Pyrene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Pyridine	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/17/2015 8:07:39 PM	18138
Surr: 2-Fluorophenol	80.2	17.6-104		%REC	1	3/17/2015 8:07:39 PM	18138
Surr: Phenol-d5	74.0	17.7-89.9		%REC	1	3/17/2015 8:07:39 PM	18138
Surr: 2,4,6-Tribromophenol	102	16.3-122		%REC	1	3/17/2015 8:07:39 PM	18138
Surr: Nitrobenzene-d5	88.5	45.3-117		%REC	1	3/17/2015 8:07:39 PM	18138
Surr: 2-Fluorobiphenyl	101	43-113		%REC	1	3/17/2015 8:07:39 PM	18138
Surr: 4-Terphenyl-d14	113	47.6-122		%REC	1	3/17/2015 8:07:39 PM	18138

EPA METHOD 8260B: VOLATILES

Analyst: **KJH**

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-25

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 2:10:00 PM

Lab ID: 1503556-010

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: KJH
Benzene	970	50		µg/L	50	3/13/2015 9:19:20 PM	R24833
Toluene	12	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Ethylbenzene	170	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Methyl tert-butyl ether (MTBE)	270	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,2,4-Trimethylbenzene	8.6	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,2-Dichloroethane (EDC)	12	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Naphthalene	18	10		µg/L	5	3/13/2015 9:47:55 PM	R24833
1-Methylnaphthalene	ND	20		µg/L	5	3/13/2015 9:47:55 PM	R24833
2-Methylnaphthalene	ND	20		µg/L	5	3/13/2015 9:47:55 PM	R24833
Acetone	ND	50		µg/L	5	3/13/2015 9:47:55 PM	R24833
Bromobenzene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Bromodichloromethane	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Bromoform	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Bromomethane	ND	15		µg/L	5	3/13/2015 9:47:55 PM	R24833
2-Butanone	ND	50		µg/L	5	3/13/2015 9:47:55 PM	R24833
Carbon disulfide	ND	50		µg/L	5	3/13/2015 9:47:55 PM	R24833
Carbon Tetrachloride	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Chlorobenzene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Chloroethane	ND	10		µg/L	5	3/13/2015 9:47:55 PM	R24833
Chloroform	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Chloromethane	ND	15		µg/L	5	3/13/2015 9:47:55 PM	R24833
2-Chlorotoluene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
4-Chlorotoluene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
cis-1,2-DCE	55	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	3/13/2015 9:47:55 PM	R24833
Dibromochloromethane	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Dibromomethane	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,2-Dichlorobenzene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,3-Dichlorobenzene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,4-Dichlorobenzene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Dichlorodifluoromethane	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,1-Dichloroethane	280	50		µg/L	50	3/13/2015 9:19:20 PM	R24833
1,1-Dichloroethene	140	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,2-Dichloropropane	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,3-Dichloropropane	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
2,2-Dichloropropane	ND	10		µg/L	5	3/13/2015 9:47:55 PM	R24833

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-25

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 2:10:00 PM

Lab ID: 1503556-010

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: KJH
1,1-Dichloropropene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Hexachlorobutadiene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
2-Hexanone	ND	50		µg/L	5	3/13/2015 9:47:55 PM	R24833
Isopropylbenzene	37	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
4-Isopropyltoluene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
4-Methyl-2-pentanone	ND	50		µg/L	5	3/13/2015 9:47:55 PM	R24833
Methylene Chloride	ND	15		µg/L	5	3/13/2015 9:47:55 PM	R24833
n-Butylbenzene	16	15		µg/L	5	3/13/2015 9:47:55 PM	R24833
n-Propylbenzene	51	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
sec-Butylbenzene	7.3	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Styrene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
tert-Butylbenzene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	3/13/2015 9:47:55 PM	R24833
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
trans-1,2-DCE	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,1,1-Trichloroethane	53	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,1,2-Trichloroethane	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Trichloroethene (TCE)	31	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Trichlorofluoromethane	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
1,2,3-Trichloropropane	ND	10		µg/L	5	3/13/2015 9:47:55 PM	R24833
Vinyl chloride	ND	5.0		µg/L	5	3/13/2015 9:47:55 PM	R24833
Xylenes, Total	ND	7.5		µg/L	5	3/13/2015 9:47:55 PM	R24833
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	5	3/13/2015 9:47:55 PM	R24833
Surr: 4-Bromofluorobenzene	100	70-130		%REC	5	3/13/2015 9:47:55 PM	R24833
Surr: Dibromofluoromethane	102	70-130		%REC	5	3/13/2015 9:47:55 PM	R24833
Surr: Toluene-d8	99.8	70-130		%REC	5	3/13/2015 9:47:55 PM	R24833

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-31

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 2:36:00 PM

Lab ID: 1503556-011

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/14/2015 8:13:13 AM	18122
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/14/2015 8:13:13 AM	18122
Surr: DNOP	143	76.5-150		%REC	1	3/14/2015 8:13:13 AM	18122
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.077	0.050		mg/L	1	3/14/2015 12:07:43 AM	R24831
Surr: BFB	85.7	80-120		%REC	1	3/14/2015 12:07:43 AM	R24831
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.17	0.0020		mg/L	1	3/25/2015 8:53:02 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:53:02 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 8:53:02 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 8:53:02 PM	R25072
Iron	0.026	0.020		mg/L	1	3/25/2015 8:53:02 PM	R25072
Manganese	0.032	0.0020		mg/L	1	3/25/2015 8:53:02 PM	R25072
Silver	ND	0.0050		mg/L	1	3/25/2015 8:53:02 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 8:53:02 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.20	0.0020		mg/L	1	3/25/2015 7:38:56 PM	18307
Cadmium	ND	0.0020		mg/L	1	3/25/2015 7:38:56 PM	18307
Chromium	ND	0.0060		mg/L	1	3/25/2015 7:38:56 PM	18307
Copper	ND	0.0060		mg/L	1	3/25/2015 7:38:56 PM	18307
Iron	2.2	0.10	*	mg/L	5	3/27/2015 3:53:50 PM	18307
Manganese	0.12	0.0020	*	mg/L	1	3/25/2015 7:38:56 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 7:38:56 PM	18307
Zinc	ND	0.010		mg/L	1	3/25/2015 7:38:56 PM	18307
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/30/2015 2:20:10 PM	R25155
Lead	ND	0.0010		mg/L	1	3/26/2015 7:37:08 PM	R25105
Selenium	0.013	0.010		mg/L	10	3/30/2015 2:20:10 PM	R25155
Uranium	0.054	0.010	*	mg/L	10	3/30/2015 2:20:10 PM	R25155
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/27/2015 3:19:48 PM	18307
Lead	ND	0.010		mg/L	10	3/27/2015 3:19:48 PM	18307
Selenium	ND	0.010		mg/L	10	3/27/2015 3:19:48 PM	18307
Uranium	0.056	0.010	*	mg/L	10	3/27/2015 3:19:48 PM	18307
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/24/2015 3:08:40 PM	18286

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-31

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 2:36:00 PM

Lab ID: 1503556-011

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Aniline	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Anthracene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Azobenzene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Benzoic acid	ND	20		µg/L	1	3/17/2015 8:35:06 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Carbazole	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Chrysene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/17/2015 8:35:06 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/17/2015 8:35:06 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/17/2015 8:35:06 PM	18138

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-31

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 2:36:00 PM

Lab ID: 1503556-011

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: DAM	
2,4-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Fluoranthene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Fluorene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Isophorone	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Naphthalene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/17/2015 8:35:06 PM	18138
Phenanthrene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Phenol	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Pyrene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Pyridine	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/17/2015 8:35:06 PM	18138
Surr: 2-Fluorophenol	11.9	17.6-104	S	%REC	1	3/17/2015 8:35:06 PM	18138
Surr: Phenol-d5	24.3	17.7-89.9		%REC	1	3/17/2015 8:35:06 PM	18138
Surr: 2,4,6-Tribromophenol	19.7	16.3-122		%REC	1	3/17/2015 8:35:06 PM	18138
Surr: Nitrobenzene-d5	84.4	45.3-117		%REC	1	3/17/2015 8:35:06 PM	18138
Surr: 2-Fluorobiphenyl	92.9	43-113		%REC	1	3/17/2015 8:35:06 PM	18138
Surr: 4-Terphenyl-d14	110	47.6-122		%REC	1	3/17/2015 8:35:06 PM	18138

EPA METHOD 8260B: VOLATILES

Analyst: **KJH**

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-31

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 2:36:00 PM

Lab ID: 1503556-011

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: KJH
Benzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Toluene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Ethylbenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Methyl tert-butyl ether (MTBE)	54	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,2-Dichloroethane (EDC)	14	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Naphthalene	ND	2.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1-Methylnaphthalene	ND	4.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
2-Methylnaphthalene	ND	4.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Acetone	ND	10		µg/L	1	3/16/2015 12:09:04 PM	R24859
Bromobenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Bromodichloromethane	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Bromoform	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Bromomethane	ND	3.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
2-Butanone	ND	10		µg/L	1	3/16/2015 12:09:04 PM	R24859
Carbon disulfide	ND	10		µg/L	1	3/16/2015 12:09:04 PM	R24859
Carbon Tetrachloride	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Chlorobenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Chloroethane	ND	2.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Chloroform	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Chloromethane	ND	3.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
2-Chlorotoluene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
4-Chlorotoluene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
cis-1,2-DCE	1.6	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Dibromochloromethane	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Dibromomethane	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,1-Dichloroethane	21	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,1-Dichloroethene	40	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,2-Dichloropropane	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,3-Dichloropropane	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
2,2-Dichloropropane	ND	2.0		µg/L	1	3/16/2015 12:09:04 PM	R24859

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-31

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 2:36:00 PM

Lab ID: 1503556-011

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: KJH
1,1-Dichloropropene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Hexachlorobutadiene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
2-Hexanone	ND	10		µg/L	1	3/16/2015 12:09:04 PM	R24859
Isopropylbenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
4-Isopropyltoluene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
4-Methyl-2-pentanone	ND	10		µg/L	1	3/16/2015 12:09:04 PM	R24859
Methylene Chloride	ND	3.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
n-Butylbenzene	ND	3.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
n-Propylbenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
sec-Butylbenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Styrene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
tert-Butylbenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
trans-1,2-DCE	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,1,1-Trichloroethane	3.9	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,1,2-Trichloroethane	1.5	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Trichloroethene (TCE)	2.5	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Trichlorofluoromethane	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Vinyl chloride	ND	1.0		µg/L	1	3/16/2015 12:09:04 PM	R24859
Xylenes, Total	ND	1.5		µg/L	1	3/16/2015 12:09:04 PM	R24859
Surr: 1,2-Dichloroethane-d4	95.1	70-130		%REC	1	3/16/2015 12:09:04 PM	R24859
Surr: 4-Bromofluorobenzene	86.9	70-130		%REC	1	3/16/2015 12:09:04 PM	R24859
Surr: Dibromofluoromethane	89.8	70-130		%REC	1	3/16/2015 12:09:04 PM	R24859
Surr: Toluene-d8	90.8	70-130		%REC	1	3/16/2015 12:09:04 PM	R24859

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-40

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 3:05:00 PM

Lab ID: 1503556-012

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/14/2015 8:40:31 AM	18122
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/14/2015 8:40:31 AM	18122
Surr: DNOP	171	76.5-150	S	%REC	1	3/14/2015 8:40:31 AM	18122
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/14/2015 12:36:49 AM	R24831
Surr: BFB	87.0	80-120		%REC	1	3/14/2015 12:36:49 AM	R24831
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.19	0.0020		mg/L	1	3/25/2015 8:55:02 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:55:02 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 8:55:02 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 8:55:02 PM	R25072
Iron	0.11	0.020		mg/L	1	3/25/2015 8:55:02 PM	R25072
Manganese	0.20	0.0020	*	mg/L	1	3/25/2015 8:55:02 PM	R25072
Silver	ND	0.0050		mg/L	1	3/25/2015 8:55:02 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 8:55:02 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.28	0.0020		mg/L	1	3/25/2015 7:51:20 PM	18307
Cadmium	ND	0.0020		mg/L	1	3/25/2015 7:51:20 PM	18307
Chromium	ND	0.0060		mg/L	1	3/25/2015 7:51:20 PM	18307
Copper	ND	0.0060		mg/L	1	3/25/2015 7:51:20 PM	18307
Iron	5.6	0.20	*	mg/L	10	3/26/2015 2:28:07 PM	18307
Manganese	0.34	0.0020	*	mg/L	1	3/25/2015 7:51:20 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 7:51:20 PM	18307
Zinc	0.023	0.010		mg/L	1	3/25/2015 7:51:20 PM	18307
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/30/2015 2:29:24 PM	R25155
Lead	ND	0.010		mg/L	10	3/30/2015 2:29:24 PM	R25155
Selenium	0.020	0.010		mg/L	10	3/30/2015 2:29:24 PM	R25155
Uranium	0.070	0.010	*	mg/L	10	3/30/2015 2:29:24 PM	R25155
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/27/2015 3:22:59 PM	18307
Lead	ND	0.010		mg/L	10	3/27/2015 3:22:59 PM	18307
Selenium	0.015	0.010		mg/L	10	3/27/2015 3:22:59 PM	18307
Uranium	0.085	0.010	*	mg/L	10	3/27/2015 3:22:59 PM	18307
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/24/2015 3:10:28 PM	18286

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-40

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 3:05:00 PM

Lab ID: 1503556-012

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Aniline	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Anthracene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Azobenzene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Benzoic acid	ND	20		µg/L	1	3/17/2015 9:02:54 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Carbazole	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Chrysene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/17/2015 9:02:54 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/17/2015 9:02:54 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/17/2015 9:02:54 PM	18138

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-40

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 3:05:00 PM

Lab ID: 1503556-012

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
2,4-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Fluoranthene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Fluorene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Isophorone	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Naphthalene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/17/2015 9:02:54 PM	18138
Phenanthrene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Phenol	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Pyrene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Pyridine	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/17/2015 9:02:54 PM	18138
Surr: 2-Fluorophenol	44.3	17.6-104		%REC	1	3/17/2015 9:02:54 PM	18138
Surr: Phenol-d5	60.8	17.7-89.9		%REC	1	3/17/2015 9:02:54 PM	18138
Surr: 2,4,6-Tribromophenol	55.1	16.3-122		%REC	1	3/17/2015 9:02:54 PM	18138
Surr: Nitrobenzene-d5	81.8	45.3-117		%REC	1	3/17/2015 9:02:54 PM	18138
Surr: 2-Fluorobiphenyl	88.8	43-113		%REC	1	3/17/2015 9:02:54 PM	18138
Surr: 4-Terphenyl-d14	112	47.6-122		%REC	1	3/17/2015 9:02:54 PM	18138

EPA METHOD 8260B: VOLATILES

Analyst: **KJH**

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-40

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 3:05:00 PM

Lab ID: 1503556-012

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: KJH
Benzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Toluene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Ethylbenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Naphthalene	ND	2.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
2-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Acetone	ND	10		µg/L	1	3/13/2015 10:45:21 PM	R24833
Bromobenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Bromodichloromethane	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Bromoform	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Bromomethane	ND	3.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
2-Butanone	ND	10		µg/L	1	3/13/2015 10:45:21 PM	R24833
Carbon disulfide	ND	10		µg/L	1	3/13/2015 10:45:21 PM	R24833
Carbon Tetrachloride	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Chlorobenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Chloroethane	ND	2.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Chloroform	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Chloromethane	ND	3.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
2-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
4-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
cis-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Dibromochloromethane	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Dibromomethane	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,1-Dichloroethane	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,1-Dichloroethene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,2-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,3-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
2,2-Dichloropropane	ND	2.0		µg/L	1	3/13/2015 10:45:21 PM	R24833

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-40

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 3:05:00 PM

Lab ID: 1503556-012

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: KJH
1,1-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Hexachlorobutadiene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
2-Hexanone	ND	10		µg/L	1	3/13/2015 10:45:21 PM	R24833
Isopropylbenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
4-Isopropyltoluene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
4-Methyl-2-pentanone	ND	10		µg/L	1	3/13/2015 10:45:21 PM	R24833
Methylene Chloride	ND	3.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
n-Butylbenzene	ND	3.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
n-Propylbenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
sec-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Styrene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
tert-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
trans-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Trichlorofluoromethane	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Vinyl chloride	ND	1.0		µg/L	1	3/13/2015 10:45:21 PM	R24833
Xylenes, Total	ND	1.5		µg/L	1	3/13/2015 10:45:21 PM	R24833
Surr: 1,2-Dichloroethane-d4	84.8	70-130		%REC	1	3/13/2015 10:45:21 PM	R24833
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	3/13/2015 10:45:21 PM	R24833
Surr: Dibromofluoromethane	82.5	70-130		%REC	1	3/13/2015 10:45:21 PM	R24833
Surr: Toluene-d8	100	70-130		%REC	1	3/13/2015 10:45:21 PM	R24833

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-43

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 3:36:00 PM

Lab ID: 1503556-013

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/14/2015 9:07:55 AM	18122
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/14/2015 9:07:55 AM	18122
Surr: DNOP	136	76.5-150		%REC	1	3/14/2015 9:07:55 AM	18122
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/14/2015 1:05:57 AM	R24831
Surr: BFB	87.8	80-120		%REC	1	3/14/2015 1:05:57 AM	R24831
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.17	0.010		mg/L	5	3/26/2015 3:06:46 PM	R25095
Cadmium	ND	0.010		mg/L	5	3/26/2015 3:06:46 PM	R25095
Chromium	0.048	0.030		mg/L	5	3/26/2015 3:06:46 PM	R25095
Copper	ND	0.030		mg/L	5	3/26/2015 3:06:46 PM	R25095
Iron	0.49	0.10	*	mg/L	5	3/26/2015 3:06:46 PM	R25095
Manganese	3.7	0.010	*	mg/L	5	3/26/2015 3:06:46 PM	R25095
Silver	ND	0.025		mg/L	5	3/30/2015 6:32:32 PM	R25178
Zinc	ND	0.050		mg/L	5	3/27/2015 4:37:55 PM	R25152
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.24	0.010		mg/L	5	3/26/2015 2:29:53 PM	18307
Cadmium	ND	0.010		mg/L	5	3/26/2015 2:29:53 PM	18307
Chromium	0.031	0.030		mg/L	5	3/26/2015 2:29:53 PM	18307
Copper	ND	0.030		mg/L	5	3/26/2015 2:29:53 PM	18307
Iron	3.2	0.10	*	mg/L	5	3/26/2015 2:29:53 PM	18307
Manganese	3.7	0.010	*	mg/L	5	3/26/2015 2:29:53 PM	18307
Silver	ND	0.025		mg/L	5	3/26/2015 2:29:53 PM	18307
Zinc	ND	0.050		mg/L	5	3/27/2015 4:07:31 PM	18307
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.050	*	mg/L	50	3/30/2015 3:09:13 PM	R25155
Lead	ND	0.050		mg/L	50	3/30/2015 3:09:13 PM	R25155
Selenium	0.11	0.050	*	mg/L	50	3/30/2015 3:09:13 PM	R25155
Uranium	0.15	0.050	*	mg/L	50	3/30/2015 3:09:13 PM	R25155
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.050	*	mg/L	50	3/27/2015 4:03:35 PM	18307
Lead	ND	0.020		mg/L	20	3/25/2015 6:16:35 PM	18307
Selenium	0.071	0.020	*	mg/L	20	3/25/2015 6:16:35 PM	18307
Uranium	0.14	0.020	*	mg/L	20	3/25/2015 6:16:35 PM	18307
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/24/2015 3:12:16 PM	18286

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-43

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 3:36:00 PM

Lab ID: 1503556-013

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: DAM	
Acenaphthene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Aniline	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Anthracene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Azobenzene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Benzoic acid	ND	20		µg/L	1	3/19/2015 4:10:21 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Carbazole	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Chrysene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/19/2015 4:10:21 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/19/2015 4:10:21 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/19/2015 4:10:21 PM	18138

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-43

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 3:36:00 PM

Lab ID: 1503556-013

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Fluoranthene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Fluorene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Isophorone	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Naphthalene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/19/2015 4:10:21 PM	18138
Phenanthrene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Phenol	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Pyrene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Pyridine	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/19/2015 4:10:21 PM	18138
Surr: 2-Fluorophenol	4.72	17.6-104	S	%REC	1	3/19/2015 4:10:21 PM	18138
Surr: Phenol-d5	8.76	17.7-89.9	S	%REC	1	3/19/2015 4:10:21 PM	18138
Surr: 2,4,6-Tribromophenol	7.06	16.3-122	S	%REC	1	3/19/2015 4:10:21 PM	18138
Surr: Nitrobenzene-d5	74.3	45.3-117		%REC	1	3/19/2015 4:10:21 PM	18138
Surr: 2-Fluorobiphenyl	74.3	43-113		%REC	1	3/19/2015 4:10:21 PM	18138
Surr: 4-Terphenyl-d14	90.7	47.6-122		%REC	1	3/19/2015 4:10:21 PM	18138

EPA METHOD 8260B: VOLATILES

Analyst: **KJH**

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.
	E Value above quantitation range
	J Analyte detected below quantitation limits
	O RSD is greater than RSDlimit
	R RPD outside accepted recovery limits
	S Spike Recovery outside accepted recovery limits

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-43

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 3:36:00 PM

Lab ID: 1503556-013

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: KJH
Benzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Toluene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Ethylbenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Naphthalene	ND	2.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
2-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Acetone	ND	10		µg/L	1	3/13/2015 11:14:09 PM	R24833
Bromobenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Bromodichloromethane	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Bromoform	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Bromomethane	ND	3.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
2-Butanone	ND	10		µg/L	1	3/13/2015 11:14:09 PM	R24833
Carbon disulfide	ND	10		µg/L	1	3/13/2015 11:14:09 PM	R24833
Carbon Tetrachloride	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Chlorobenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Chloroethane	ND	2.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Chloroform	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Chloromethane	ND	3.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
2-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
4-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
cis-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Dibromochloromethane	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Dibromomethane	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,1-Dichloroethane	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,1-Dichloroethene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,2-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,3-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
2,2-Dichloropropane	ND	2.0		µg/L	1	3/13/2015 11:14:09 PM	R24833

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-43

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 3:36:00 PM

Lab ID: 1503556-013

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: KJH
1,1-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Hexachlorobutadiene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
2-Hexanone	ND	10		µg/L	1	3/13/2015 11:14:09 PM	R24833
Isopropylbenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
4-Isopropyltoluene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
4-Methyl-2-pentanone	ND	10		µg/L	1	3/13/2015 11:14:09 PM	R24833
Methylene Chloride	ND	3.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
n-Butylbenzene	ND	3.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
n-Propylbenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
sec-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Styrene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
tert-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
trans-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Trichlorofluoromethane	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Vinyl chloride	ND	1.0		µg/L	1	3/13/2015 11:14:09 PM	R24833
Xylenes, Total	ND	1.5		µg/L	1	3/13/2015 11:14:09 PM	R24833
Surr: 1,2-Dichloroethane-d4	92.0	70-130		%REC	1	3/13/2015 11:14:09 PM	R24833
Surr: 4-Bromofluorobenzene	85.3	70-130		%REC	1	3/13/2015 11:14:09 PM	R24833
Surr: Dibromofluoromethane	96.0	70-130		%REC	1	3/13/2015 11:14:09 PM	R24833
Surr: Toluene-d8	90.1	70-130		%REC	1	3/13/2015 11:14:09 PM	R24833

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-42

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 4:07:00 PM

Lab ID: 1503556-014

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	27	1.0		mg/L	1	3/17/2015 5:45:04 PM	18122
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/17/2015 5:45:04 PM	18122
Surr: DNOP	96.3	76.5-150		%REC	1	3/17/2015 5:45:04 PM	18122
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.50		mg/L	10	3/16/2015 6:06:44 PM	R24858
Surr: BFB	84.7	80-120		%REC	10	3/16/2015 6:06:44 PM	R24858
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.094	0.0020		mg/L	1	3/25/2015 9:11:34 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:11:34 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 9:11:34 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:11:34 PM	R25072
Iron	0.11	0.020		mg/L	1	3/25/2015 9:11:34 PM	R25072
Manganese	0.54	0.0020	*	mg/L	1	3/25/2015 9:11:34 PM	R25072
Silver	ND	0.0050		mg/L	1	3/25/2015 9:11:34 PM	R25072
Zinc	0.036	0.010		mg/L	1	3/25/2015 9:11:34 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.16	0.0020		mg/L	1	3/25/2015 7:54:48 PM	18307
Cadmium	ND	0.0020		mg/L	1	3/25/2015 7:54:48 PM	18307
Chromium	ND	0.0060		mg/L	1	3/25/2015 7:54:48 PM	18307
Copper	0.0071	0.0060		mg/L	1	3/25/2015 7:54:48 PM	18307
Iron	2.5	0.10	*	mg/L	5	3/26/2015 2:31:49 PM	18307
Manganese	0.58	0.0020	*	mg/L	1	3/25/2015 7:54:48 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 7:54:48 PM	18307
Zinc	0.012	0.010		mg/L	1	3/25/2015 7:54:48 PM	18307
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/30/2015 2:35:30 PM	R25155
Lead	ND	0.0010		mg/L	1	3/26/2015 7:46:18 PM	R25105
Selenium	0.015	0.010		mg/L	10	3/30/2015 2:35:30 PM	R25155
Uranium	0.040	0.0010	*	mg/L	1	3/26/2015 7:46:18 PM	R25105
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.0035	0.0010		mg/L	1	3/25/2015 3:43:17 PM	18307
Lead	0.0034	0.0010		mg/L	1	3/25/2015 3:43:17 PM	18307
Selenium	0.0075	0.0010		mg/L	1	3/25/2015 3:43:17 PM	18307
Uranium	0.039	0.0010	*	mg/L	1	3/25/2015 3:43:17 PM	18307
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/24/2015 3:14:04 PM	18286

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-42

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 4:07:00 PM

Lab ID: 1503556-014

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Aniline	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Anthracene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Azobenzene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Benzoic acid	ND	20		µg/L	1	3/18/2015 6:54:38 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Carbazole	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Chrysene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/18/2015 6:54:38 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/18/2015 6:54:38 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/18/2015 6:54:38 PM	18138

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-42

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 4:07:00 PM

Lab ID: 1503556-014

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Fluoranthene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Fluorene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Isophorone	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Naphthalene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/18/2015 6:54:38 PM	18138
Phenanthrene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Phenol	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Pyrene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Pyridine	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/18/2015 6:54:38 PM	18138
Surr: 2-Fluorophenol	71.8	17.6-104		%REC	1	3/18/2015 6:54:38 PM	18138
Surr: Phenol-d5	61.2	17.7-89.9		%REC	1	3/18/2015 6:54:38 PM	18138
Surr: 2,4,6-Tribromophenol	0	16.3-122	S	%REC	1	3/18/2015 6:54:38 PM	18138
Surr: Nitrobenzene-d5	92.9	45.3-117		%REC	1	3/18/2015 6:54:38 PM	18138
Surr: 2-Fluorobiphenyl	0	43-113	S	%REC	1	3/18/2015 6:54:38 PM	18138
Surr: 4-Terphenyl-d14	91.1	47.6-122		%REC	1	3/18/2015 6:54:38 PM	18138

EPA METHOD 8260B: VOLATILES

Analyst: **KJH**

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-42

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 4:07:00 PM

Lab ID: 1503556-014

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: KJH
Benzene	1.7	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Toluene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Ethylbenzene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,2,4-Trimethylbenzene	3.9	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,3,5-Trimethylbenzene	2.6	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Naphthalene	14	2.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1-Methylnaphthalene	7.5	4.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
2-Methylnaphthalene	6.1	4.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Acetone	10	10		µg/L	1	3/19/2015 11:20:03 AM	R24923
Bromobenzene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Bromodichloromethane	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Bromoform	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Bromomethane	ND	3.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
2-Butanone	ND	10		µg/L	1	3/16/2015 12:37:37 PM	R24859
Carbon disulfide	ND	10		µg/L	1	3/16/2015 12:37:37 PM	R24859
Carbon Tetrachloride	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Chlorobenzene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Chloroethane	ND	2.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Chloroform	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Chloromethane	ND	3.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
2-Chlorotoluene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
4-Chlorotoluene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
cis-1,2-DCE	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Dibromochloromethane	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Dibromomethane	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,1-Dichloroethane	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,1-Dichloroethene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,2-Dichloropropane	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,3-Dichloropropane	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
2,2-Dichloropropane	ND	2.0		µg/L	1	3/16/2015 12:37:37 PM	R24859

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-42

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015 4:07:00 PM

Lab ID: 1503556-014

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: KJH
1,1-Dichloropropene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Hexachlorobutadiene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
2-Hexanone	ND	10		µg/L	1	3/16/2015 12:37:37 PM	R24859
Isopropylbenzene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
4-Isopropyltoluene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
4-Methyl-2-pentanone	ND	10		µg/L	1	3/16/2015 12:37:37 PM	R24859
Methylene Chloride	ND	3.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
n-Butylbenzene	ND	3.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
n-Propylbenzene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
sec-Butylbenzene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Styrene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
tert-Butylbenzene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
trans-1,2-DCE	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Trichlorofluoromethane	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Vinyl chloride	ND	1.0		µg/L	1	3/16/2015 12:37:37 PM	R24859
Xylenes, Total	10	1.5		µg/L	1	3/16/2015 12:37:37 PM	R24859
Surr: 1,2-Dichloroethane-d4	106	70-130		%REC	1	3/16/2015 12:37:37 PM	R24859
Surr: 4-Bromofluorobenzene	93.3	70-130		%REC	1	3/16/2015 12:37:37 PM	R24859
Surr: Dibromofluoromethane	106	70-130		%REC	1	3/16/2015 12:37:37 PM	R24859
Surr: Toluene-d8	94.4	70-130		%REC	1	3/16/2015 12:37:37 PM	R24859

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Blank Duplicate

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015

Lab ID: 1503556-015

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Acenaphthylene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Aniline	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Anthracene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Azobenzene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Benzoic acid	ND	20		µg/L	1	3/18/2015 10:29:32 AM	18138
Benzyl alcohol	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Carbazole	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
4-Chloroaniline	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
2-Chlorophenol	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Chrysene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Dibenzofuran	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Diethyl phthalate	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/18/2015 10:29:32 AM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/18/2015 10:29:32 AM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/18/2015 10:29:32 AM	18138

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Blank Duplicate

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/11/2015

Lab ID: 1503556-015

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
2,4-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Fluoranthene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Fluorene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Hexachloroethane	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Isophorone	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
2-Methylphenol	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Naphthalene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
2-Nitroaniline	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
3-Nitroaniline	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
4-Nitroaniline	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Nitrobenzene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
2-Nitrophenol	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
4-Nitrophenol	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Pentachlorophenol	ND	20		µg/L	1	3/18/2015 10:29:32 AM	18138
Phenanthrene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Phenol	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Pyrene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Pyridine	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/18/2015 10:29:32 AM	18138
Surr: 2-Fluorophenol	79.0	17.6-104		%REC	1	3/18/2015 10:29:32 AM	18138
Surr: Phenol-d5	73.6	17.7-89.9		%REC	1	3/18/2015 10:29:32 AM	18138
Surr: 2,4,6-Tribromophenol	103	16.3-122		%REC	1	3/18/2015 10:29:32 AM	18138
Surr: Nitrobenzene-d5	90.5	45.3-117		%REC	1	3/18/2015 10:29:32 AM	18138
Surr: 2-Fluorobiphenyl	92.4	43-113		%REC	1	3/18/2015 10:29:32 AM	18138
Surr: 4-Terphenyl-d14	117	47.6-122		%REC	1	3/18/2015 10:29:32 AM	18138

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Trip Blank

Project: 2015 1ST QTR (MKTF)

Collection Date:

Lab ID: 1503556-016

Matrix: TRIP BLANK

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/16/2015 8:32:42 PM	R24858
Surr: BFB	84.7	80-120		%REC	1	3/16/2015 8:32:42 PM	R24858
EPA METHOD 8260B: VOLATILES							Analyst: KJH
Benzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Toluene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Ethylbenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Naphthalene	ND	2.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1-Methylnaphthalene	ND	4.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
2-Methylnaphthalene	ND	4.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Acetone	ND	10		µg/L	1	3/14/2015 2:06:45 AM	R24833
Bromobenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Bromodichloromethane	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Bromoform	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Bromomethane	ND	3.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
2-Butanone	ND	10		µg/L	1	3/14/2015 2:06:45 AM	R24833
Carbon disulfide	ND	10		µg/L	1	3/14/2015 2:06:45 AM	R24833
Carbon Tetrachloride	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Chlorobenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Chloroethane	ND	2.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Chloroform	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Chloromethane	ND	3.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
2-Chlorotoluene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
4-Chlorotoluene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
cis-1,2-DCE	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Dibromochloromethane	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Dibromomethane	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,1-Dichloroethane	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,1-Dichloroethene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503556

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Trip Blank

Project: 2015 1ST QTR (MKTF)

Collection Date:

Lab ID: 1503556-016

Matrix: TRIP BLANK

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: KJH			
1,2-Dichloropropane	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,3-Dichloropropane	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
2,2-Dichloropropane	ND	2.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,1-Dichloropropene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Hexachlorobutadiene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
2-Hexanone	ND	10		µg/L	1	3/14/2015 2:06:45 AM	R24833
Isopropylbenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
4-Isopropyltoluene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
4-Methyl-2-pentanone	ND	10		µg/L	1	3/14/2015 2:06:45 AM	R24833
Methylene Chloride	ND	3.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
n-Butylbenzene	ND	3.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
n-Propylbenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
sec-Butylbenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Styrene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
tert-Butylbenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
trans-1,2-DCE	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Trichlorofluoromethane	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Vinyl chloride	ND	1.0		µg/L	1	3/14/2015 2:06:45 AM	R24833
Xylenes, Total	ND	1.5		µg/L	1	3/14/2015 2:06:45 AM	R24833
Surr: 1,2-Dichloroethane-d4	88.0	70-130		%REC	1	3/14/2015 2:06:45 AM	R24833
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	3/14/2015 2:06:45 AM	R24833
Surr: Dibromofluoromethane	88.6	70-130		%REC	1	3/14/2015 2:06:45 AM	R24833
Surr: Toluene-d8	92.5	70-130		%REC	1	3/14/2015 2:06:45 AM	R24833

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R25072			RunNo: 25072					
Prep Date:		Analysis Date: 3/25/2015			SeqNo: 739895		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25072		RunNo: 25072					
Prep Date:			Analysis Date: 3/25/2015		SeqNo: 739896		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.7	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.3	85	115			
Chromium	0.49	0.0060	0.5000	0	97.5	85	115			
Copper	0.49	0.0060	0.5000	0	97.2	85	115			
Iron	0.48	0.020	0.5000	0	95.1	85	115			
Manganese	0.47	0.0020	0.5000	0	94.7	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.48	0.010	0.5000	0	96.8	85	115			

Sample ID	MB	SampType: MBLK		TestCode: EPA Method 200.7: Dissolved Metals						
Client ID:	PBW	Batch ID: R25072		RunNo: 25072						
Prep Date:		Analysis Date: 3/25/2015		SeqNo: 739897		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	LCS		SampType: LCS			TestCode: EPA Method 200.7: Dissolved Metals				
Client ID:	LCSW		Batch ID: R25072			RunNo: 25072				
Prep Date:	Analysis Date: 3/25/2015			SeqNo: 739898		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	97.2	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.9	85	115			
Chromium	0.49	0.0060	0.5000	0	97.9	85	115			
Copper	0.49	0.0060	0.5000	0	97.0	85	115			
Iron	0.48	0.020	0.5000	0	96.7	85	115			
Manganese	0.48	0.0020	0.5000	0	95.0	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.49	0.010	0.5000	0	97.2	85	115			

Sample ID	1503556-002FMS		SampType: MS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	MKTF-27		Batch ID: R25072		RunNo: 25072					
Prep Date:			Analysis Date: 3/25/2015		SeqNo: 740000		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.57	0.0020	0.5000	0.08568	97.6	70	130			
Cadmium	0.52	0.0020	0.5000	0	105	70	130			
Chromium	0.50	0.0060	0.5000	0	99.2	70	130			
Copper	0.59	0.0060	0.5000	0	119	70	130			
Iron	0.66	0.020	0.5000	0.1482	102	70	130			
Manganese	0.58	0.0020	0.5000	0.09974	96.4	70	130			
Silver	0.085	0.0050	0.1000	0	85.5	70	130			
Zinc	0.50	0.010	0.5000	0.006770	98.8	70	130			

Sample ID	1503556-002FMSD		SampType: MSD		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	MKTF-27		Batch ID: R25072		RunNo: 25072					
Prep Date:			Analysis Date: 3/25/2015		SeqNo: 740001		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.58	0.0020	0.5000	0.08568	98.0	70	130	0.367	20	
Cadmium	0.52	0.0020	0.5000	0	105	70	130	0.124	20	
Chromium	0.50	0.0060	0.5000	0	99.2	70	130	0.0121	20	
Copper	0.59	0.0060	0.5000	0	118	70	130	1.10	20	
Iron	0.68	0.020	0.5000	0.1482	105	70	130	2.57	20	
Manganese	0.58	0.0020	0.5000	0.09974	96.5	70	130	0.0172	20	
Silver	0.088	0.0050	0.1000	0	88.1	70	130	3.06	20	
Zinc	0.50	0.010	0.5000	0.006770	99.5	70	130	0.663	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	1503556-012FMS		SampType: MS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	MKTF-40		Batch ID: R25072		RunNo: 25072					
Prep Date:			Analysis Date: 3/25/2015		SeqNo: 740016		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.69	0.0020	0.5000	0.1918	98.7	70	130			
Cadmium	0.54	0.0020	0.5000	0	108	70	130			
Chromium	0.50	0.0060	0.5000	0	100	70	130			
Copper	0.63	0.0060	0.5000	0	126	70	130			
Iron	0.60	0.020	0.5000	0.1148	96.4	70	130			
Manganese	0.69	0.0020	0.5000	0.2034	97.8	70	130			
Silver	0.12	0.0050	0.1000	0	117	70	130			
Zinc	0.48	0.010	0.5000	0.006770	94.6	70	130			

Sample ID	1503556-012FMSD		SampType: MSD		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	MKTF-40		Batch ID: R25072		RunNo: 25072					
Prep Date:			Analysis Date: 3/25/2015		SeqNo: 740017		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.67	0.0020	0.5000	0.1918	95.3	70	130	2.49	20	
Cadmium	0.53	0.0020	0.5000	0	107	70	130	1.65	20	
Chromium	0.49	0.0060	0.5000	0	98.4	70	130	1.63	20	
Copper	0.61	0.0060	0.5000	0	123	70	130	2.37	20	
Iron	0.61	0.020	0.5000	0.1148	98.4	70	130	1.72	20	
Manganese	0.68	0.0020	0.5000	0.2034	94.5	70	130	2.41	20	
Silver	0.11	0.0050	0.1000	0	114	70	130	2.84	20	
Zinc	0.47	0.010	0.5000	0.006770	92.4	70	130	2.32	20	

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R25095			RunNo: 25095					
Prep Date:		Analysis Date: 3/26/2015			SeqNo: 740730		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								

Sample ID	LCS		SampType:	LCS		TestCode:	EPA Method 200.7: Dissolved Metals				
Client ID:	LCSW		Batch ID:	R25095		RunNo:	25095				
Prep Date:			Analysis Date:	3/26/2015		SeqNo:	740731		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
E Value above quantitation range	H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit	P Sample pH Not In Range
R RPD outside accepted recovery limits	RL Reporting Detection Limit
S Spike Recovery outside accepted recovery limits	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	LCS		SampType: LCS			TestCode: EPA Method 200.7: Dissolved Metals				
Client ID:	LCSW		Batch ID: R25095			RunNo: 25095				
Prep Date:			Analysis Date: 3/26/2015			SeqNo: 740731		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.2	85	115			
Cadmium	0.48	0.0020	0.5000	0	96.8	85	115			
Chromium	0.48	0.0060	0.5000	0	96.6	85	115			
Copper	0.47	0.0060	0.5000	0	94.8	85	115			
Iron	0.52	0.020	0.5000	0	104	85	115			
Manganese	0.47	0.0020	0.5000	0	94.8	85	115			

Sample ID	1503556-006FMS		SampType: MS			TestCode: EPA Method 200.7: Dissolved Metals				
Client ID:	MKTF-26		Batch ID: R25095			RunNo: 25095				
Prep Date:			Analysis Date: 3/26/2015			SeqNo: 740776		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	3.9	0.010	2.500	1.357	99.9	70	130			

Sample ID	1503556-006FMSD		SampType: MSD			TestCode: EPA Method 200.7: Dissolved Metals				
Client ID:	MKTF-26		Batch ID: R25095			RunNo: 25095				
Prep Date:			Analysis Date: 3/26/2015			SeqNo: 740777		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	3.8	0.010	2.500	1.357	97.7	70	130	1.41	20	

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R25152			RunNo: 25152					
Prep Date:		Analysis Date: 3/27/2015			SeqNo: 743103		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	ND	0.010								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25152		RunNo: 25152					
Prep Date:			Analysis Date: 3/27/2015		SeqNo: 743104		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	0.50	0.010	0.5000	0	99.4	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R25178			RunNo: 25178					
Prep Date:		Analysis Date: 3/30/2015			SeqNo: 744023		Units: mg/L			
Analyte	Result	POL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals						
Client ID:	PBW	Batch ID: R25178			RunNo: 25178						
Prep Date:		Analysis Date: 3/30/2015			SeqNo: 744023		Units: mg/L				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver		ND	0.0050								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 200.7: Dissolved Metals						
Client ID:	LCSW	Batch ID:	R25178	RunNo:	25178						
Prep Date:		Analysis Date:	3/30/2015	SeqNo:	744024	Units:	mg/L				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver		0.10	0.0050	0.1000	0	101	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB-18307		SampType: MBLK		TestCode: EPA Method 200.7: Total Metals					
Client ID:	PBW		Batch ID: 18307		RunNo: 25072					
Prep Date:	3/24/2015		Analysis Date: 3/25/2015		SeqNo: 739891		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-18307		SampType: LCS		TestCode: EPA Method 200.7: Total Metals					
Client ID:	LCSW		Batch ID: 18307		RunNo: 25072					
Prep Date:	3/24/2015		Analysis Date: 3/25/2015		SeqNo: 739892		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	97.4	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.0	85	115			
Chromium	0.49	0.0060	0.5000	0	98.2	85	115			
Copper	0.49	0.0060	0.5000	0	97.8	85	115			
Iron	0.49	0.020	0.5000	0	98.1	85	115			
Manganese	0.48	0.0020	0.5000	0	95.4	85	115			
Silver	0.11	0.0050	0.1000	0	106	85	115			
Zinc	0.48	0.010	0.5000	0	97.0	85	115			

Sample ID	1503556-005EMS		SampType: MS		TestCode: EPA Method 200.7: Total Metals					
Client ID:	MKTF-29		Batch ID: 18307		RunNo: 25072					
Prep Date:	3/24/2015		Analysis Date: 3/25/2015		SeqNo: 739968		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.54	0.0020	0.5000	0.05671	96.3	70	130			
Cadmium	0.50	0.0020	0.5000	0	100	70	130			
Chromium	0.49	0.0060	0.5000	0	97.4	70	130			
Copper	0.55	0.0060	0.5000	0	110	70	130			
Manganese	0.82	0.0020	0.5000	0.3563	92.2	70	130			
Silver	0.11	0.0050	0.1000	0	108	70	130			
Zinc	0.48	0.010	0.5000	0.004020	94.9	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	1503556-005EMSD		SampType:	MSD		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	MKTF-29		Batch ID:	18307		RunNo:	25072			
Prep Date:	3/24/2015		Analysis Date:	3/25/2015		SeqNo:	739969		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.56	0.0020	0.5000	0.05671	99.7	70	130	3.10	20	
Cadmium	0.51	0.0020	0.5000	0	103	70	130	2.44	20	
Chromium	0.50	0.0060	0.5000	0	100	70	130	2.81	20	
Copper	0.58	0.0060	0.5000	0	116	70	130	4.58	20	
Manganese	0.85	0.0020	0.5000	0.3563	98.3	70	130	3.64	20	
Silver	0.11	0.0050	0.1000	0	111	70	130	2.28	20	
Zinc	0.49	0.010	0.5000	0.004020	97.9	70	130	3.08	20	

Sample ID	1503556-011EMS		SampType:	MS		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	MKTF-31		Batch ID:	18307		RunNo:	25072			
Prep Date:	3/24/2015		Analysis Date:	3/25/2015		SeqNo:	739976		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.69	0.0020	0.5000	0.2030	96.8	70	130			
Cadmium	0.51	0.0020	0.5000	0	103	70	130			
Chromium	0.49	0.0060	0.5000	0	98.5	70	130			
Copper	0.57	0.0060	0.5000	0	114	70	130			
Manganese	0.59	0.0020	0.5000	0.1165	95.4	70	130			
Silver	0.11	0.0050	0.1000	0	111	70	130			
Zinc	0.47	0.010	0.5000	0.007820	91.8	70	130			

Sample ID	1503556-011EMSD		SampType:	MSD		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	MKTF-31		Batch ID:	18307		RunNo:	25072			
Prep Date:	3/24/2015		Analysis Date:	3/25/2015		SeqNo:	739980		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.67	0.0020	0.5000	0.2030	92.5	70	130	3.17	20	
Cadmium	0.49	0.0020	0.5000	0	98.9	70	130	3.65	20	
Chromium	0.47	0.0060	0.5000	0	94.9	70	130	3.72	20	
Copper	0.56	0.0060	0.5000	0	112	70	130	1.60	20	
Manganese	0.58	0.0020	0.5000	0.1165	92.1	70	130	2.81	20	
Silver	0.11	0.0050	0.1000	0	110	70	130	1.31	20	
Zinc	0.45	0.010	0.5000	0.007820	88.2	70	130	3.95	20	

Sample ID	1503556-005EMS		SampType:	MS		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	MKTF-29		Batch ID:	18307		RunNo:	25152			
Prep Date:	3/24/2015		Analysis Date:	3/27/2015		SeqNo:	743108		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	1.8	0.10	0.5000	0.8131	196	70	130			S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	1503556-005EMSD		SampType: MSD		TestCode: EPA Method 200.7: Total Metals					
Client ID:	MKTF-29		Batch ID: 18307		RunNo: 25152					
Prep Date:	3/24/2015		Analysis Date: 3/27/2015		SeqNo: 743109		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	1.9	0.10	0.5000	0.8131	213	70	130	4.58	20	S

Sample ID	1503556-011EMS		SampType: MS		TestCode: EPA Method 200.7: Total Metals					
Client ID:	MKTF-31		Batch ID: 18307		RunNo: 25152					
Prep Date:	3/24/2015		Analysis Date: 3/27/2015		SeqNo: 743112		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	4.3	0.10	0.5000	2.170	424	70	130			S

Sample ID	1503556-011EMSD		SampType:	MSD		TestCode:	EPA Method 200.7: Total Metals				
Client ID:	MKTF-31		Batch ID:	18307		RunNo:	25152				
Prep Date:	3/24/2015		Analysis Date:	3/27/2015		SeqNo:	743116		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Iron	4.1	0.10	0.5000	2.170	388	70	130	4.26	20	S	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	1503556-007FMS		SampType: MS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	MKTF-24		Batch ID: R25105		RunNo: 25105					
Prep Date:			Analysis Date: 3/26/2015		SeqNo: 741172		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.028	0.0010	0.02500	0.001450	107	70	130			

Sample ID	1503556-007FMSD		SampType: MSD		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	MKTF-24		Batch ID: R25105		RunNo: 25105					
Prep Date:			Analysis Date: 3/26/2015		SeqNo: 741173		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.028	0.0010	0.02500	0.001450	107	70	130	0.319	20	

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25105		RunNo: 25105					
Prep Date:			Analysis Date: 3/26/2015		SeqNo: 741199		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	96.8	85	115			
Lead	0.024	0.0010	0.02500	0	94.3	85	115			
Selenium	0.024	0.0010	0.02500	0	96.7	85	115			
Uranium	0.024	0.0010	0.02500	0	96.5	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25105		RunNo: 25105					
Prep Date:			Analysis Date: 3/26/2015		SeqNo: 741200		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	95.0	85	115			
Lead	0.024	0.0010	0.02500	0	95.1	85	115			
Selenium	0.023	0.0010	0.02500	0	93.9	85	115			
Uranium	0.024	0.0010	0.02500	0	95.2	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25105		RunNo: 25105					
Prep Date:			Analysis Date: 3/26/2015		SeqNo: 741201		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	96.8	85	115			
Lead	0.023	0.0010	0.02500	0	91.2	85	115			
Selenium	0.024	0.0010	0.02500	0	96.4	85	115			
Uranium	0.023	0.0010	0.02500	0	90.3	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB	SampType:	MBLK	TestCode:	EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID:	R25105	RunNo:	25105					
Prep Date:		Analysis Date:	3/26/2015	SeqNo:	741202	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	MB	SampType:	MBLK	TestCode:	EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID:	R25105	RunNo:	25105					
Prep Date:		Analysis Date:	3/26/2015	SeqNo:	741203	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	MB	SampType:	MBLK	TestCode:	EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID:	R25105	RunNo:	25105					
Prep Date:		Analysis Date:	3/26/2015	SeqNo:	741204	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	1503556-007FMS	SampType:	MS	TestCode:	EPA 200.8: Dissolved Metals					
Client ID:	MKTF-24	Batch ID:	R25155	RunNo:	25155					
Prep Date:		Analysis Date:	3/30/2015	SeqNo:	743877	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.13	0.0050	0.1250	0.004936	103	70	130			
Selenium	0.13	0.0050	0.1250	0.01131	97.8	70	130			
Uranium	0.18	0.0050	0.1250	0.04315	113	70	130			

Sample ID	1503556-007FMSD	SampType:	MSD	TestCode:	EPA 200.8: Dissolved Metals					
Client ID:	MKTF-24	Batch ID:	R25155	RunNo:	25155					
Prep Date:		Analysis Date:	3/30/2015	SeqNo:	743878	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.13	0.0050	0.1250	0.004936	103	70	130	0.273	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	1503556-007FMSD		SampType: MSD		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	MKTF-24		Batch ID: R25155		RunNo: 25155					
Prep Date:			Analysis Date: 3/30/2015		SeqNo: 743878		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	0.13	0.0050	0.1250	0.01131	98.6	70	130	0.760	20	
Uranium	0.18	0.0050	0.1250	0.04315	112	70	130	0.454	20	

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25155		RunNo: 25155					
Prep Date:			Analysis Date: 3/30/2015		SeqNo: 743933		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	99.2	85	115			
Lead	0.025	0.0010	0.02500	0	99.7	85	115			
Selenium	0.025	0.0010	0.02500	0	100	85	115			
Uranium	0.025	0.0010	0.02500	0	102	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25155		RunNo: 25155					
Prep Date:			Analysis Date: 3/30/2015		SeqNo: 743934		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	97.2	85	115			
Lead	0.025	0.0010	0.02500	0	99.8	85	115			
Selenium	0.025	0.0010	0.02500	0	98.0	85	115			
Uranium	0.026	0.0010	0.02500	0	102	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25155		RunNo: 25155					
Prep Date:			Analysis Date: 3/30/2015		SeqNo: 743935		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	99.0	85	115			
Lead	0.025	0.0010	0.02500	0	99.2	85	115			
Selenium	0.024	0.0010	0.02500	0	97.6	85	115			
Uranium	0.025	0.0010	0.02500	0	101	85	115			

Sample ID	MB	SampType: MBLK		TestCode: EPA 200.8: Dissolved Metals						
Client ID:	PBW	Batch ID: R25155		RunNo: 25155						
Prep Date:		Analysis Date: 3/30/2015		SeqNo: 743936		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB	SampType:	MBLK	TestCode:	EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID:	R25155	RunNo:	25155					
Prep Date:		Analysis Date:	3/30/2015	SeqNo:	743936	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	MB	SampType:	MBLK	TestCode:	EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID:	R25155	RunNo:	25155					
Prep Date:		Analysis Date:	3/30/2015	SeqNo:	743937	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	MB	SampType:	MBLK	TestCode:	EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID:	R25155	RunNo:	25155					
Prep Date:		Analysis Date:	3/30/2015	SeqNo:	743938	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	1503556-006EMSL		SampType:	MSLL		TestCode:	200.8 ICPMS Metals:Total			
Client ID:	MKTF-26		Batch ID:	18307		RunNo:	25061			
Prep Date:	3/24/2015		Analysis Date:	3/25/2015		SeqNo:	740126		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.028	0.0010	0.02500	0.003985	95.1	70	130			
Lead	0.030	0.0010	0.02500	0.002893	110	70	130			
Selenium	0.025	0.0010	0.02500	0.004744	82.1	70	130			
Uranium	0.073	0.0010	0.02500	0.04499	112	70	130			E

Sample ID	LLCS-18307		SampType:	LCSLL		TestCode:	200.8 ICPMS Metals:Total			
Client ID:	BatchQC		Batch ID:	18307		RunNo:	25061			
Prep Date:	3/24/2015		Analysis Date:	3/25/2015		SeqNo:	740312		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	99.8	85	115			
Lead	0.026	0.0010	0.02500	0	103	85	115			
Selenium	0.024	0.0010	0.02500	0	95.1	85	115			
Uranium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID	MB-18307		SampType:	MBLK		TestCode:	200.8 ICPMS Metals:Total			
Client ID:	PBW		Batch ID:	18307		RunNo:	25061			
Prep Date:	3/24/2015		Analysis Date:	3/25/2015		SeqNo:	740314		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB-18286	SampType:	MBLK	TestCode:	EPA Method 245.1: Mercury					
Client ID:	PBW	Batch ID:	18286	RunNo:	25035					
Prep Date:	3/23/2015	Analysis Date:	3/24/2015	SeqNo:	738271	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	LCS-18286	SampType:	LCS	TestCode:	EPA Method 245.1: Mercury					
Client ID:	LCSW	Batch ID:	18286	RunNo:	25035					
Prep Date:	3/23/2015	Analysis Date:	3/24/2015	SeqNo:	738272	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0054	0.00020	0.005000	0	108	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID MB-18123	SampType: MBLK				TestCode: EPA Method 8015D: Diesel Range					
Client ID: PBW	Batch ID: 18123				RunNo: 24810					
Prep Date: 3/13/2015	Analysis Date: 3/13/2015				SeqNo: 731809	Units: %REC				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	1.5		1.000		146	76.5	150			

Sample ID MB-18122	SampType: MBLK				TestCode: EPA Method 8015D: Diesel Range					
Client ID: PBW	Batch ID: 18122				RunNo: 24848					
Prep Date: 3/13/2015	Analysis Date: 3/16/2015				SeqNo: 731819	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		109	76.5	150			

Sample ID LCS-18122	SampType: LCS				TestCode: EPA Method 8015D: Diesel Range					
Client ID: LCSW	Batch ID: 18122				RunNo: 24810					
Prep Date: 3/13/2015	Analysis Date: 3/14/2015				SeqNo: 731829	Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.4	1.0	5.000	0	109	60.1	156			
Surr: DNOP	0.62		0.5000		123	76.5	150			

Sample ID 1503556-002CMS	SampType: MS				TestCode: EPA Method 8015D: Diesel Range					
Client ID: MKTF-27	Batch ID: 18122				RunNo: 24810					
Prep Date: 3/13/2015	Analysis Date: 3/14/2015				SeqNo: 731841	Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.7	1.0	5.000	0	115	75.9	164			
Surr: DNOP	0.79		0.5000		157	76.5	150			S

Sample ID 1503556-002CMSD	SampType: MSD				TestCode: EPA Method 8015D: Diesel Range					
Client ID: MKTF-27	Batch ID: 18122				RunNo: 24810					
Prep Date: 3/13/2015	Analysis Date: 3/14/2015				SeqNo: 731842	Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.0	1.0	5.000	0	120	75.9	164	4.74	22.1	
Surr: DNOP	0.71		0.5000		143	76.5	150	0	0	

Sample ID LCS-18123	SampType: LCS				TestCode: EPA Method 8015D: Diesel Range					
Client ID: LCSW	Batch ID: 18123				RunNo: 24848					
Prep Date: 3/13/2015	Analysis Date: 3/16/2015				SeqNo: 731923	Units: %REC				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup**Project:** 2015 1ST QTR (MKTF)

Sample ID	LCS-18123	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range					
Client ID:	LCSW	Batch ID:	18123	RunNo:	24848					
Prep Date:	3/13/2015	Analysis Date:	3/16/2015	SeqNo:	731923	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	0.89		0.5000		177	76.5	150			S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID:	R24831	RunNo:	24831					
Prep Date:		Analysis Date:	3/13/2015	SeqNo:	731426	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		88.8	80	120			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	R24831	RunNo:	24831					
Prep Date:		Analysis Date:	3/13/2015	SeqNo:	731427	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0	92.2	80	120			
Surr: BFB	19		20.00		97.2	80	120			

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID:	R24858	RunNo:	24858					
Prep Date:		Analysis Date:	3/16/2015	SeqNo:	732143	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		87.6	80	120			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	R24858	RunNo:	24858					
Prep Date:		Analysis Date:	3/16/2015	SeqNo:	732146	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.41	0.050	0.5000	0	81.5	80	120			
Surr: BFB	19		20.00		96.2	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	b3	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R24833	RunNo:	24833					
Prep Date:		Analysis Date:	3/13/2015	SeqNo:	731463	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID b3	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R24833			RunNo: 24833						
Prep Date:	Analysis Date: 3/13/2015			SeqNo: 731463		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	8.9		10.00		88.5	70	130			
Surr: Toluene-d8	8.9		10.00		88.7	70	130			

Sample ID 100ng lcs2	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSW	Batch ID: R24833			RunNo: 24833						
Prep Date:	Analysis Date: 3/13/2015			SeqNo: 731465		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	90.8	70	130			
Toluene	20	1.0	20.00	0	98.3	70	130			
Chlorobenzene	18	1.0	20.00	0	89.0	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID 100ng lcs2	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSW	Batch ID: R24833			RunNo: 24833						
Prep Date:	Analysis Date: 3/13/2015			SeqNo: 731465		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	20	1.0	20.00	0	97.6	75.6	144			
Trichloroethene (TCE)	17	1.0	20.00	0	85.3	70	130			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.5	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.9	70	130			
Surr: Dibromofluoromethane	9.1		10.00		90.7	70	130			
Surr: Toluene-d8	11		10.00		108	70	130			

Sample ID 1503556-002a ms	SampType: MS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: MKTF-27	Batch ID: R24833			RunNo: 24833						
Prep Date:	Analysis Date: 3/13/2015			SeqNo: 731471		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	90.3	70	130			
Toluene	17	1.0	20.00	0	86.0	70	130			
Chlorobenzene	16	1.0	20.00	0	77.8	70	130			
1,1-Dichloroethene	20	1.0	20.00	0.4560	98.4	70	130			
Trichloroethene (TCE)	15	1.0	20.00	0	74.9	70	130			
Surr: 1,2-Dichloroethane-d4	9.6		10.00		95.9	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		95.2	70	130			
Surr: Dibromofluoromethane	8.8		10.00		87.9	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID 1503556-002a msd	SampType: MSD			TestCode: EPA Method 8260B: VOLATILES						
Client ID: MKTF-27	Batch ID: R24833			RunNo: 24833						
Prep Date:	Analysis Date: 3/13/2015			SeqNo: 731472		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.7	70	130	5.72	20	
Toluene	18	1.0	20.00	0	88.4	70	130	2.77	20	
Chlorobenzene	17	1.0	20.00	0	83.2	70	130	6.60	20	
1,1-Dichloroethene	18	1.0	20.00	0.4560	90.2	70	130	8.57	20	
Trichloroethene (TCE)	16	1.0	20.00	0	78.1	70	130	4.24	20	
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.6	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.4		10.00		94.1	70	130	0	0	
Surr: Dibromofluoromethane	9.2		10.00		91.6	70	130	0	0	
Surr: Toluene-d8	10		10.00		100	70	130	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	b4	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R24833	RunNo:	24833					
Prep Date:		Analysis Date:	3/14/2015	SeqNo:	731503	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID b4	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R24833			RunNo: 24833						
Prep Date:	Analysis Date: 3/14/2015			SeqNo: 731503		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.6	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		91.6	70	130			
Surr: Dibromofluoromethane	9.1		10.00		90.8	70	130			
Surr: Toluene-d8	9.3		10.00		93.0	70	130			

Sample ID 100ng lcs3	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSW	Batch ID: R24833			RunNo: 24833						
Prep Date:	Analysis Date: 3/14/2015			SeqNo: 731505		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	96.3	70	130			
Toluene	16	1.0	20.00	0	81.8	70	130			
Chlorobenzene	17	1.0	20.00	0	83.2	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	100ng lcs3		SampType: LCS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW		Batch ID: R24833		RunNo: 24833					
Prep Date:			Analysis Date: 3/14/2015		SeqNo: 731505		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	18	1.0	20.00	0	90.9	75.6	144			
Trichloroethene (TCE)	15	1.0	20.00	0	76.9	70	130			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.6	70	130			
Surr: 4-Bromofluorobenzene	8.7		10.00		87.3	70	130			
Surr: Dibromofluoromethane	8.8		10.00		88.1	70	130			
Surr: Toluene-d8	9.3		10.00		92.7	70	130			

Sample ID	5mL-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R24859			RunNo: 24859					
Prep Date:		Analysis Date: 3/16/2015			SeqNo: 732227		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	5mL-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R24859			RunNo: 24859					
Prep Date:		Analysis Date: 3/16/2015			SeqNo: 732227		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.4		10.00		84.3	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	5mL-rb		SampType: MBLK		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW		Batch ID: R24859		RunNo: 24859					
Prep Date:			Analysis Date: 3/16/2015		SeqNo: 732227		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	9.3		10.00		92.6	70	130			
Surr: Dibromofluoromethane	8.9		10.00		89.3	70	130			
Surr: Toluene-d8	11		10.00		106	70	130			

Sample ID	100ng lcs		SampType: LCS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW		Batch ID: R24859		RunNo: 24859					
Prep Date:			Analysis Date: 3/16/2015		SeqNo: 732237		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	70	130			
Toluene	20	1.0	20.00	0	99.9	70	130			
Chlorobenzene	19	1.0	20.00	0	94.2	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	112	75.6	144			
Trichloroethene (TCE)	19	1.0	20.00	0	95.0	70	130			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.9	70	130			
Surr: 4-Bromofluorobenzene	8.8		10.00		87.5	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.5	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID	b2	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R24859			RunNo: 24859					
Prep Date:		Analysis Date: 3/16/2015			SeqNo: 732274		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								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	b2	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R24859	RunNo:	24859					
Prep Date:		Analysis Date:	3/16/2015	SeqNo:	732274	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
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								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID b2	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R24859			RunNo: 24859						
Prep Date:	Analysis Date: 3/16/2015			SeqNo: 732274		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.7	70	130			
Surr: 4-Bromofluorobenzene	8.8		10.00		87.8	70	130			
Surr: Dibromofluoromethane	9.9		10.00		98.6	70	130			
Surr: Toluene-d8	11		10.00		105	70	130			

Sample ID 100ng lcs2	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSW	Batch ID: R24859			RunNo: 24859						
Prep Date:	Analysis Date: 3/16/2015			SeqNo: 732276		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	107	70	130			
Toluene	18	1.0	20.00	0	92.2	70	130			
Chlorobenzene	18	1.0	20.00	0	91.0	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	111	75.6	144			
Trichloroethene (TCE)	18	1.0	20.00	0	89.5	70	130			
Surr: 1,2-Dichloroethane-d4	8.6		10.00		86.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	9.4		10.00		93.5	70	130			
Surr: Toluene-d8	9.7		10.00		97.4	70	130			

Sample ID 5mL-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R24887			RunNo: 24887						
Prep Date:	Analysis Date: 3/17/2015			SeqNo: 733209		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	5mL-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R24887	RunNo:	24887					
Prep Date:		Analysis Date:	3/17/2015	SeqNo:	733209	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	5mL-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R24887	RunNo:	24887					
Prep Date:		Analysis Date:	3/17/2015	SeqNo:	733209	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.0	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		99.7	70	130			
Surr: Toluene-d8	8.9		10.00		89.5	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID:	R24887	RunNo:	24887					
Prep Date:		Analysis Date:	3/17/2015	SeqNo:	733211	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	19	1.0	20.00	0	92.8	70	130			
Chlorobenzene	19	1.0	20.00	0	95.3	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	109	75.6	144			
Trichloroethene (TCE)	19	1.0	20.00	0	95.3	70	130			
Surr: 1,2-Dichloroethane-d4	8.4		10.00		83.8	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	9.1		10.00		91.1	70	130			
Surr: Toluene-d8	9.4		10.00		94.0	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R24923			RunNo: 24923					
Prep Date:		Analysis Date: 3/19/2015			SeqNo: 734333		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acetone	ND	10								
Surr: 1,2-Dichloroethane-d4	8.5		10.00		85.2	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		93.8	70	130			
Surr: Dibromofluoromethane	9.6		10.00		95.9	70	130			
Surr: Toluene-d8	9.8		10.00		97.7	70	130			

Sample ID		100nglcs200nganxs			SampType: LCS		TestCode: EPA Method 8260B: VOLATILES				
Client ID:		LCSW			Batch ID: R24923		RunNo: 24923				
Prep Date:		Analysis Date: 3/19/2015			SeqNo: 734335		Units: %REC				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: 1,2-Dichloroethane-d4	8.0		10.00		80.1	70	130				
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130				
Surr: Dibromofluoromethane	9.7		10.00		97.1	70	130				
Surr: Toluene-d8	9.8		10.00		97.9	70	130				

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	mb-18138	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	18138	RunNo:	24891					
Prep Date:	3/16/2015	Analysis Date:	3/17/2015	SeqNo:	733319	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	mb-18138		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 18138		RunNo: 24891					
Prep Date:	3/16/2015		Analysis Date: 3/17/2015		SeqNo: 733319		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	150		200.0		75.5	17.6	104			
Surr: Phenol-d5	140		200.0		69.4	17.7	89.9			
Surr: 2,4,6-Tribromophenol	170		200.0		86.6	16.3	122			
Surr: Nitrobenzene-d5	70		100.0		70.1	45.3	117			
Surr: 2-Fluorobiphenyl	73		100.0		73.1	43	113			
Surr: 4-Terphenyl-d14	100		100.0		100	47.6	122			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	lcs-18138		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 18138		RunNo: 24891					
Prep Date:	3/16/2015		Analysis Date: 3/17/2015		SeqNo: 733321		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	76	10	100.0	0	75.9	47.9	114			
4-Chloro-3-methylphenol	160	10	200.0	0	82.1	51.7	122			
2-Chlorophenol	150	10	200.0	0	74.2	40.7	113			
1,4-Dichlorobenzene	71	10	100.0	0	71.0	39.6	99.9			
2,4-Dinitrotoluene	66	10	100.0	0	66.1	40.8	113			
N-Nitrosodi-n-propylamine	79	10	100.0	0	79.3	51.2	111			
4-Nitrophenol	140	10	200.0	0	70.9	15.7	86.9			
Pentachlorophenol	160	20	200.0	0	78.1	21.6	104			
Phenol	150	10	200.0	0	76.4	28.6	71.7			S
Pyrene	110	10	100.0	0	109	54.2	128			
1,2,4-Trichlorobenzene	86	10	100.0	0	86.0	40.9	101			
Surr: 2-Fluorophenol	160		200.0		80.5	17.6	104			
Surr: Phenol-d5	160		200.0		80.5	17.7	89.9			
Surr: 2,4,6-Tribromophenol	200		200.0		101	16.3	122			
Surr: Nitrobenzene-d5	74		100.0		73.7	45.3	117			
Surr: 2-Fluorobiphenyl	82		100.0		82.3	43	113			
Surr: 4-Terphenyl-d14	120		100.0		117	47.6	122			

Sample ID	lcsd-18138		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 18138		RunNo: 24891					
Prep Date:	3/16/2015		Analysis Date: 3/17/2015		SeqNo: 733322		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	83	10	100.0	0	83.3	47.9	114	9.40	27.2	
4-Chloro-3-methylphenol	170	10	200.0	0	82.8	51.7	122	0.910	25.9	
2-Chlorophenol	150	10	200.0	0	74.9	40.7	113	1.01	22.5	
1,4-Dichlorobenzene	77	10	100.0	0	77.0	39.6	99.9	8.14	24.6	
2,4-Dinitrotoluene	79	10	100.0	0	79.4	40.8	113	18.3	25.3	
N-Nitrosodi-n-propylamine	83	10	100.0	0	83.4	51.2	111	5.04	23.6	
4-Nitrophenol	170	10	200.0	0	85.9	15.7	86.9	19.1	34.7	
Pentachlorophenol	160	20	200.0	0	80.1	21.6	104	2.49	32.8	
Phenol	160	10	200.0	0	80.2	28.6	71.7	4.75	25.5	S
Pyrene	110	10	100.0	0	108	54.2	128	1.27	31.4	
1,2,4-Trichlorobenzene	90	10	100.0	0	90.5	40.9	101	5.08	25.9	
Surr: 2-Fluorophenol	170		200.0		82.6	17.6	104	0	0	
Surr: Phenol-d5	160		200.0		82.2	17.7	89.9	0	0	
Surr: 2,4,6-Tribromophenol	200		200.0		101	16.3	122	0	0	
Surr: Nitrobenzene-d5	77		100.0		76.9	45.3	117	0	0	
Surr: 2-Fluorobiphenyl	88		100.0		87.9	43	113	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
 E Value above quantitation range
 J Analyte detected below quantitation limits
 O RSD is greater than RSDlimit
 R RPD outside accepted recovery limits
 S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503556

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	lcsd-18138		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 18138		RunNo: 24891					
Prep Date:	3/16/2015		Analysis Date: 3/17/2015		SeqNo: 733322		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	110		100.0		107	47.6	122	0	0	

Sample ID	mb-18139		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 18139		RunNo: 24913					
Prep Date:	3/16/2015		Analysis Date: 3/18/2015		SeqNo: 734001		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	130		200.0		66.2	17.6	104			
Surr: Phenol-d5	130		200.0		66.3	17.7	89.9			
Surr: 2,4,6-Tribromophenol	170		200.0		83.2	16.3	122			
Surr: Nitrobenzene-d5	64		100.0		64.2	45.3	117			
Surr: 2-Fluorobiphenyl	74		100.0		73.9	43	113			
Surr: 4-Terphenyl-d14	110		100.0		106	47.6	122			

Sample ID	lcs-18139		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 18139		RunNo: 24913					
Prep Date:	3/16/2015		Analysis Date: 3/18/2015		SeqNo: 734002		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	150		200.0		73.7	17.6	104			
Surr: Phenol-d5	160		200.0		78.0	17.7	89.9			
Surr: 2,4,6-Tribromophenol	190		200.0		95.6	16.3	122			
Surr: Nitrobenzene-d5	69		100.0		68.9	45.3	117			
Surr: 2-Fluorobiphenyl	78		100.0		77.8	43	113			
Surr: 4-Terphenyl-d14	110		100.0		109	47.6	122			

Sample ID	lcsd-18139		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 18139		RunNo: 24913					
Prep Date:	3/16/2015		Analysis Date: 3/18/2015		SeqNo: 734003		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	160		200.0		82.2	17.6	104	0	0	
Surr: Phenol-d5	170		200.0		84.3	17.7	89.9	0	0	
Surr: 2,4,6-Tribromophenol	190		200.0		93.2	16.3	122	0	0	
Surr: Nitrobenzene-d5	75		100.0		74.9	45.3	117	0	0	
Surr: 2-Fluorobiphenyl	87		100.0		86.9	43	113	0	0	
Surr: 4-Terphenyl-d14	110		100.0		111	47.6	122	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

Sample Log-In Check List

Client Name: **Western Refining Gallup**

Work Order Number: **1503556**

RcptNo: **1**

Received by/date:

Logged By: **Lindsay Mangin**

3/12/2015 4:00:00 PM

Completed By: **Lindsay Mangin**

3/13/2015 7:39:57 AM

Reviewed By:

Chain of Custody

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

Adjusted?

Checked by:

Special Handling (if applicable)

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

Person Notified:

Date:

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.0	Good	Yes			

Chain-of-Custody Record

Client: Western Refining Company

GALLUP REFINERY

Mailing Address:

92 GIANT CROSSING ROAD, GALLUP, NM 87301

Phone #: 505-722-3833

Email or Fax#: 505-863-0930

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP

☐ EDD (Type)

☐ Matrix ☐ Other

Sample Request ID

Time

Matrix

Sample Request ID

Time

Matrix

Sample Request ID

Time

Matrix

Sample Request ID

Time

Matrix

Sample Request ID

Time

Matrix

Sample Request ID

Time

Matrix

Sample Request ID

Time

Matrix

Sample Request ID

Time

Matrix

Sample Request ID

Time

Matrix

Sample Request ID

Time

Matrix

Turn-Around Time:

X Standard ☐ Rush

Project Name:

2015 1ST QTR (MKTF)

PO #20825205

Project Manager:

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

Sampler: C. JOHNSON

On Site: ☒ Yes ☐ No

Sample Temperature: 3.0

Container Type and #

Preservative Type

HEAL No.

3-40ML VOA

HCL

MISC

MISC

MISC

MISC

MISC

MISC

MISC

MISC

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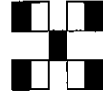
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**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	8260+MTBE	8015B EXTENDED	8270 + Phenols	WQCC Metals - Total	WQCC Metals - Dissolved (Filtered)	Air Bubbles (Y or N)
3/11/2015	700	AQUEOUS	FIELD BLANK	3-40ML VOA	HCL	15035560	X					
3/11/2015	825	AQUEOUS	MKTF-27	MISC	MISC	-001	X	X	X	X	X	
3/11/2015	855	AQUEOUS	MKTF-28	MISC	MISC	-002	X	X	X	X	X	
3/11/2015	925	AQUEOUS	MKTF-30	MISC	MISC	-003	X	X	X	X	X	
3/11/2015	950	AQUEOUS	MKTF-29	MISC	MISC	-004	X	X	X	X	X	
3/11/2015	1036	AQUEOUS	MKTF-26	MISC	MISC	-005	X	X	X	X	X	
3/11/2015	1156	AQUEOUS	MKTF-24	MISC	MISC	-006	X	X	X	X	X	
3/11/2015	1230	AQUEOUS	MKTF-1	MISC	MISC	-007	X	X	X	X	X	
3/11/2015	1315	AQUEOUS	MKTF-2	MISC	MISC	-008	X	X	X	X	X	
3/11/2015	1410	AQUEOUS	MKTF-25	MISC	MISC	-009	X	X	X	X	X	
3/11/2015	1436	AQUEOUS	MKTF-31	MISC	MISC	-010	X	X	X	X	X	
3/11/2015	1505	AQUEOUS	MKTF-40	MISC	MISC	-011	X	X	X	X	X	
3/11/2015	1536	AQUEOUS	MKTF-43	MISC	MISC	-012	X	X	X	X	X	
3/11/2015	1607	AQUEOUS	MKTF-42	MISC	MISC	-013	X	X	X	X	X	
3/11/2015		AQUEOUS	BLANK DUPLICATE	1L AMBER	NONE	-014	X	X	X	X	X	
3/11/2015		AQUEOUS	TRIP BLANK	3-40ML VOA	HCL	-015	X	X	X	X	X	
3/11/2015		AQUEOUS				-016	X	X	X	X	X	

Remarks:

Received by: [Signature] Date: 3/15/15 Time: 1315

Received by: [Signature] Date: 3/12/15 Time: 1600

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



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

April 06, 2015

Cheryl Johnson

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

RE: 2015 1ST QTR (MKTF)

OrderNo.: 1503557

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 9 sample(s) on 3/12/2015 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', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 7:00:00 AM

Lab ID: 1503557-001

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
Benzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Toluene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Ethylbenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Naphthalene	ND	2.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
2-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Acetone	ND	10		µg/L	1	3/13/2015 8:25:51 PM	R24836
Bromobenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Bromodichloromethane	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Bromoform	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Bromomethane	ND	3.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
2-Butanone	ND	10		µg/L	1	3/13/2015 8:25:51 PM	R24836
Carbon disulfide	ND	10		µg/L	1	3/13/2015 8:25:51 PM	R24836
Carbon Tetrachloride	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Chlorobenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Chloroethane	ND	2.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Chloroform	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Chloromethane	ND	3.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
2-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
4-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
cis-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Dibromochloromethane	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Dibromomethane	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,1-Dichloroethane	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,1-Dichloroethene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,2-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,3-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
2,2-Dichloropropane	ND	2.0		µg/L	1	3/13/2015 8:25:51 PM	R24836

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 7:00:00 AM

Lab ID: 1503557-001

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Hexachlorobutadiene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
2-Hexanone	ND	10		µg/L	1	3/13/2015 8:25:51 PM	R24836
Isopropylbenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
4-Isopropyltoluene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
4-Methyl-2-pentanone	ND	10		µg/L	1	3/13/2015 8:25:51 PM	R24836
Methylene Chloride	ND	3.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
n-Butylbenzene	ND	3.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
n-Propylbenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
sec-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Styrene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
tert-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
trans-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Trichlorofluoromethane	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Vinyl chloride	ND	1.0		µg/L	1	3/13/2015 8:25:51 PM	R24836
Xylenes, Total	ND	1.5		µg/L	1	3/13/2015 8:25:51 PM	R24836
Surr: 1,2-Dichloroethane-d4	78.3	70-130		%REC	1	3/13/2015 8:25:51 PM	R24836
Surr: 4-Bromofluorobenzene	98.2	70-130		%REC	1	3/13/2015 8:25:51 PM	R24836
Surr: Dibromofluoromethane	97.8	70-130		%REC	1	3/13/2015 8:25:51 PM	R24836
Surr: Toluene-d8	93.8	70-130		%REC	1	3/13/2015 8:25:51 PM	R24836

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-41

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 8:31:00 AM

Lab ID: 1503557-002

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/13/2015 8:05:38 PM	18123
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/13/2015 8:05:38 PM	18123
Surr: DNOP	171	76.5-150	S	%REC	1	3/13/2015 8:05:38 PM	18123
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/16/2015 9:01:58 PM	R24858
Surr: BFB	85.2	80-120		%REC	1	3/16/2015 9:01:58 PM	R24858
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.081	0.0020		mg/L	1	3/25/2015 9:13:27 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:13:27 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 9:13:27 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:13:27 PM	R25072
Iron	0.20	0.020		mg/L	1	3/25/2015 9:13:27 PM	R25072
Manganese	0.024	0.0020		mg/L	1	3/25/2015 9:13:27 PM	R25072
Silver	ND	0.0050		mg/L	1	3/25/2015 9:13:27 PM	R25072
Zinc	0.013	0.010		mg/L	1	3/25/2015 9:13:27 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.19	0.0020		mg/L	1	3/24/2015 4:34:39 PM	18270
Cadmium	ND	0.0020		mg/L	1	3/24/2015 4:34:39 PM	18270
Chromium	0.0075	0.0060		mg/L	1	3/24/2015 4:34:39 PM	18270
Copper	ND	0.0060		mg/L	1	3/24/2015 4:34:39 PM	18270
Iron	8.4	0.20	*	mg/L	10	3/24/2015 5:08:56 PM	18270
Manganese	0.22	0.0020	*	mg/L	1	3/24/2015 4:34:39 PM	18270
Silver	ND	0.0050		mg/L	1	3/24/2015 4:34:39 PM	18270
Zinc	0.024	0.010		mg/L	1	3/24/2015 4:34:39 PM	18270
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/30/2015 2:38:34 PM	R25155
Lead	ND	0.0010		mg/L	1	3/26/2015 7:49:21 PM	R25105
Selenium	0.059	0.010	*	mg/L	10	3/30/2015 2:38:34 PM	R25155
Uranium	0.034	0.0010	*	mg/L	1	3/26/2015 7:49:21 PM	R25105
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/25/2015 3:46:29 PM	18270
Lead	0.0061	0.0010		mg/L	1	3/24/2015 3:13:37 PM	18270
Selenium	0.059	0.010	*	mg/L	10	3/25/2015 3:46:29 PM	18270
Uranium	0.034	0.0010	*	mg/L	1	3/24/2015 3:13:37 PM	18270
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/17/2015 8:51:10 AM	18156

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-41

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 8:31:00 AM

Lab ID: 1503557-002

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Acenaphthylene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Aniline	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Anthracene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Azobenzene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Benzoic acid	ND	20		µg/L	1	3/18/2015 11:25:24 AM	18138
Benzyl alcohol	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Carbazole	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
4-Chloroaniline	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
2-Chlorophenol	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Chrysene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Dibenzofuran	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Diethyl phthalate	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/18/2015 11:25:24 AM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/18/2015 11:25:24 AM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/18/2015 11:25:24 AM	18138

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 4 of 57
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-41

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 8:31:00 AM

Lab ID: 1503557-002

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Fluoranthene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Fluorene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Hexachloroethane	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Isophorone	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
2-Methylphenol	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Naphthalene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
2-Nitroaniline	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
3-Nitroaniline	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
4-Nitroaniline	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Nitrobenzene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
2-Nitrophenol	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
4-Nitrophenol	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Pentachlorophenol	ND	20		µg/L	1	3/18/2015 11:25:24 AM	18138
Phenanthrene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Phenol	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Pyrene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Pyridine	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/18/2015 11:25:24 AM	18138
Surr: 2-Fluorophenol	68.0	17.6-104		%REC	1	3/18/2015 11:25:24 AM	18138
Surr: Phenol-d5	62.6	17.7-89.9		%REC	1	3/18/2015 11:25:24 AM	18138
Surr: 2,4,6-Tribromophenol	92.3	16.3-122		%REC	1	3/18/2015 11:25:24 AM	18138
Surr: Nitrobenzene-d5	73.3	45.3-117		%REC	1	3/18/2015 11:25:24 AM	18138
Surr: 2-Fluorobiphenyl	78.3	43-113		%REC	1	3/18/2015 11:25:24 AM	18138
Surr: 4-Terphenyl-d14	101	47.6-122		%REC	1	3/18/2015 11:25:24 AM	18138

EPA METHOD 8260B: VOLATILES

Analyst: **DJF**

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-41

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 8:31:00 AM

Lab ID: 1503557-002

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: DJF	
Benzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Toluene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Ethylbenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,2-Dichloroethane (EDC)	1.3	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Naphthalene	ND	2.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
2-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Acetone	ND	10		µg/L	1	3/13/2015 8:53:10 PM	R24836
Bromobenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Bromodichloromethane	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Bromoform	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Bromomethane	ND	3.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
2-Butanone	ND	10		µg/L	1	3/13/2015 8:53:10 PM	R24836
Carbon disulfide	ND	10		µg/L	1	3/13/2015 8:53:10 PM	R24836
Carbon Tetrachloride	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Chlorobenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Chloroethane	ND	2.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Chloroform	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Chloromethane	ND	3.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
2-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
4-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
cis-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Dibromochloromethane	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Dibromomethane	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,1-Dichloroethane	1.8	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,1-Dichloroethene	1.6	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,2-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,3-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
2,2-Dichloropropane	ND	2.0		µg/L	1	3/13/2015 8:53:10 PM	R24836

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-41

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 8:31:00 AM

Lab ID: 1503557-002

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Hexachlorobutadiene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
2-Hexanone	ND	10		µg/L	1	3/13/2015 8:53:10 PM	R24836
Isopropylbenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
4-Isopropyltoluene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
4-Methyl-2-pentanone	ND	10		µg/L	1	3/13/2015 8:53:10 PM	R24836
Methylene Chloride	ND	3.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
n-Butylbenzene	ND	3.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
n-Propylbenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
sec-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Styrene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
tert-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
trans-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Trichlorofluoromethane	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Vinyl chloride	ND	1.0		µg/L	1	3/13/2015 8:53:10 PM	R24836
Xylenes, Total	ND	1.5		µg/L	1	3/13/2015 8:53:10 PM	R24836
Surr: 1,2-Dichloroethane-d4	83.0	70-130		%REC	1	3/13/2015 8:53:10 PM	R24836
Surr: 4-Bromofluorobenzene	99.4	70-130		%REC	1	3/13/2015 8:53:10 PM	R24836
Surr: Dibromofluoromethane	98.2	70-130		%REC	1	3/13/2015 8:53:10 PM	R24836
Surr: Toluene-d8	94.8	70-130		%REC	1	3/13/2015 8:53:10 PM	R24836

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Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 7 of 57
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-32

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 9:05:00 AM

Lab ID: 1503557-003

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/13/2015 9:26:50 PM	18123
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/13/2015 9:26:50 PM	18123
Surr: DNOP	140	76.5-150		%REC	1	3/13/2015 9:26:50 PM	18123
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.46	0.050		mg/L	1	3/16/2015 9:31:12 PM	R24858
Surr: BFB	90.3	80-120		%REC	1	3/16/2015 9:31:12 PM	R24858
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.057	0.0020		mg/L	1	3/25/2015 9:15:33 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:15:33 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 9:15:33 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:15:33 PM	R25072
Iron	0.18	0.020		mg/L	1	3/25/2015 9:15:33 PM	R25072
Manganese	0.080	0.0020	*	mg/L	1	3/25/2015 9:15:33 PM	R25072
Silver	ND	0.0050		mg/L	1	3/25/2015 9:15:33 PM	R25072
Zinc	0.014	0.010		mg/L	1	3/25/2015 9:15:33 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.085	0.0020		mg/L	1	3/24/2015 4:36:25 PM	18270
Cadmium	ND	0.0020		mg/L	1	3/24/2015 4:36:25 PM	18270
Chromium	ND	0.0060		mg/L	1	3/24/2015 4:36:25 PM	18270
Copper	ND	0.0060		mg/L	1	3/24/2015 4:36:25 PM	18270
Iron	1.6	0.10	*	mg/L	5	3/24/2015 5:10:54 PM	18270
Manganese	0.12	0.0020	*	mg/L	1	3/24/2015 4:36:25 PM	18270
Silver	ND	0.0050		mg/L	1	3/24/2015 4:36:25 PM	18270
Zinc	ND	0.010		mg/L	1	3/24/2015 4:36:25 PM	18270
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/30/2015 3:27:37 PM	R25155
Lead	ND	0.0010		mg/L	1	3/26/2015 7:55:28 PM	R25105
Selenium	ND	0.020		mg/L	20	3/30/2015 4:50:14 PM	R25155
Uranium	0.068	0.010	*	mg/L	10	3/30/2015 3:27:37 PM	R25155
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/25/2015 3:49:40 PM	18270
Lead	0.0018	0.0010		mg/L	1	3/24/2015 3:16:48 PM	18270
Selenium	0.010	0.010		mg/L	10	3/25/2015 3:49:40 PM	18270
Uranium	0.067	0.010	*	mg/L	10	3/25/2015 3:49:40 PM	18270
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/17/2015 8:52:56 AM	18156

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-32

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 9:05:00 AM

Lab ID: 1503557-003

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Acenaphthylene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Aniline	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Anthracene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Azobenzene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Benzoic acid	ND	20		µg/L	1	3/18/2015 11:53:18 AM	18138
Benzyl alcohol	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Carbazole	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
4-Chloroaniline	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
2-Chlorophenol	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Chrysene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Dibenzofuran	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Diethyl phthalate	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/18/2015 11:53:18 AM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/18/2015 11:53:18 AM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/18/2015 11:53:18 AM	18138

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 9 of 57
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-32

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 9:05:00 AM

Lab ID: 1503557-003

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Fluoranthene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Fluorene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Hexachloroethane	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Isophorone	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
2-Methylphenol	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Naphthalene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
2-Nitroaniline	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
3-Nitroaniline	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
4-Nitroaniline	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Nitrobenzene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
2-Nitrophenol	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
4-Nitrophenol	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Pentachlorophenol	ND	20		µg/L	1	3/18/2015 11:53:18 AM	18138
Phenanthrene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Phenol	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Pyrene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Pyridine	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/18/2015 11:53:18 AM	18138
Surr: 2-Fluorophenol	74.3	17.6-104		%REC	1	3/18/2015 11:53:18 AM	18138
Surr: Phenol-d5	68.8	17.7-89.9		%REC	1	3/18/2015 11:53:18 AM	18138
Surr: 2,4,6-Tribromophenol	103	16.3-122		%REC	1	3/18/2015 11:53:18 AM	18138
Surr: Nitrobenzene-d5	85.7	45.3-117		%REC	1	3/18/2015 11:53:18 AM	18138
Surr: 2-Fluorobiphenyl	93.9	43-113		%REC	1	3/18/2015 11:53:18 AM	18138
Surr: 4-Terphenyl-d14	131	47.6-122	S	%REC	1	3/18/2015 11:53:18 AM	18138

EPA METHOD 8260B: VOLATILES

Analyst: **DJF**

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-32

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 9:05:00 AM

Lab ID: 1503557-003

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Toluene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Ethylbenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Methyl tert-butyl ether (MTBE)	540	20		µg/L	20	3/13/2015 11:37:15 PM	R24836
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,2-Dichloroethane (EDC)	25	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Naphthalene	ND	2.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1-Methylnaphthalene	ND	4.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
2-Methylnaphthalene	ND	4.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Acetone	ND	10		µg/L	1	3/14/2015 12:04:40 AM	R24836
Bromobenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Bromodichloromethane	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Bromoform	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Bromomethane	ND	3.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
2-Butanone	ND	10		µg/L	1	3/14/2015 12:04:40 AM	R24836
Carbon disulfide	ND	10		µg/L	1	3/14/2015 12:04:40 AM	R24836
Carbon Tetrachloride	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Chlorobenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Chloroethane	ND	2.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Chloroform	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Chloromethane	ND	3.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
2-Chlorotoluene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
4-Chlorotoluene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
cis-1,2-DCE	1.3	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Dibromochloromethane	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Dibromomethane	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,1-Dichloroethane	19	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,1-Dichloroethene	48	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,2-Dichloropropane	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,3-Dichloropropane	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
2,2-Dichloropropane	ND	2.0		µg/L	1	3/14/2015 12:04:40 AM	R24836

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-32

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 9:05:00 AM

Lab ID: 1503557-003

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloropropene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Hexachlorobutadiene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
2-Hexanone	ND	10		µg/L	1	3/14/2015 12:04:40 AM	R24836
Isopropylbenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
4-Isopropyltoluene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
4-Methyl-2-pentanone	ND	10		µg/L	1	3/14/2015 12:04:40 AM	R24836
Methylene Chloride	ND	3.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
n-Butylbenzene	ND	3.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
n-Propylbenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
sec-Butylbenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Styrene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
tert-Butylbenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
trans-1,2-DCE	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,1,1-Trichloroethane	1.1	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,1,2-Trichloroethane	1.7	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Trichlorofluoromethane	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Vinyl chloride	ND	1.0		µg/L	1	3/14/2015 12:04:40 AM	R24836
Xylenes, Total	ND	1.5		µg/L	1	3/14/2015 12:04:40 AM	R24836
Surr: 1,2-Dichloroethane-d4	86.5	70-130		%REC	1	3/14/2015 12:04:40 AM	R24836
Surr: 4-Bromofluorobenzene	91.9	70-130		%REC	1	3/14/2015 12:04:40 AM	R24836
Surr: Dibromofluoromethane	96.6	70-130		%REC	1	3/14/2015 12:04:40 AM	R24836
Surr: Toluene-d8	96.8	70-130		%REC	1	3/14/2015 12:04:40 AM	R24836

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-33

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 9:30:00 AM

Lab ID: 1503557-004

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/13/2015 9:53:50 PM	18123
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/13/2015 9:53:50 PM	18123
Surr: DNOP	137	76.5-150		%REC	1	3/13/2015 9:53:50 PM	18123
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.35	0.050		mg/L	1	3/16/2015 10:00:23 PM	R24858
Surr: BFB	83.1	80-120		%REC	1	3/16/2015 10:00:23 PM	R24858
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.061	0.0020		mg/L	1	3/25/2015 9:17:29 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:17:29 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 9:17:29 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:17:29 PM	R25072
Iron	0.026	0.020		mg/L	1	3/25/2015 9:17:29 PM	R25072
Manganese	0.28	0.0020	*	mg/L	1	3/25/2015 9:17:29 PM	R25072
Silver	ND	0.0050		mg/L	1	3/25/2015 9:17:29 PM	R25072
Zinc	0.017	0.010		mg/L	1	3/25/2015 9:17:29 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.25	0.0020		mg/L	1	3/24/2015 4:38:30 PM	18270
Cadmium	ND	0.0020		mg/L	1	3/24/2015 4:38:30 PM	18270
Chromium	0.0062	0.0060		mg/L	1	3/24/2015 4:38:30 PM	18270
Copper	ND	0.0060		mg/L	1	3/24/2015 4:38:30 PM	18270
Iron	3.7	0.10	*	mg/L	5	3/24/2015 5:12:51 PM	18270
Manganese	0.68	0.0020	*	mg/L	1	3/24/2015 4:38:30 PM	18270
Silver	ND	0.0050		mg/L	1	3/24/2015 4:38:30 PM	18270
Zinc	0.014	0.010		mg/L	1	3/24/2015 4:38:30 PM	18270
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/30/2015 3:30:40 PM	R25155
Lead	ND	0.0010		mg/L	1	3/26/2015 7:58:31 PM	R25105
Selenium	ND	0.010		mg/L	10	3/30/2015 3:30:40 PM	R25155
Uranium	0.045	0.0010	*	mg/L	1	3/26/2015 7:58:31 PM	R25105
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	3/25/2015 3:52:51 PM	18270
Lead	0.0059	0.0010		mg/L	1	3/24/2015 3:20:00 PM	18270
Selenium	0.0041	0.0010		mg/L	1	3/24/2015 3:20:00 PM	18270
Uranium	0.045	0.0010	*	mg/L	1	3/24/2015 3:20:00 PM	18270
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/17/2015 8:54:42 AM	18156

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-33

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 9:30:00 AM

Lab ID: 1503557-004

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Aniline	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Anthracene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Azobenzene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Benzoic acid	ND	20		µg/L	1	3/18/2015 12:21:13 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Carbazole	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Chrysene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/18/2015 12:21:13 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/18/2015 12:21:13 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/18/2015 12:21:13 PM	18138

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-33

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 9:30:00 AM

Lab ID: 1503557-004

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Fluoranthene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Fluorene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Isophorone	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Naphthalene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/18/2015 12:21:13 PM	18138
Phenanthrene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Phenol	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Pyrene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Pyridine	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/18/2015 12:21:13 PM	18138
Surr: 2-Fluorophenol	79.0	17.6-104		%REC	1	3/18/2015 12:21:13 PM	18138
Surr: Phenol-d5	68.2	17.7-89.9		%REC	1	3/18/2015 12:21:13 PM	18138
Surr: 2,4,6-Tribromophenol	101	16.3-122		%REC	1	3/18/2015 12:21:13 PM	18138
Surr: Nitrobenzene-d5	95.5	45.3-117		%REC	1	3/18/2015 12:21:13 PM	18138
Surr: 2-Fluorobiphenyl	97.9	43-113		%REC	1	3/18/2015 12:21:13 PM	18138
Surr: 4-Terphenyl-d14	126	47.6-122	S	%REC	1	3/18/2015 12:21:13 PM	18138

EPA METHOD 8260B: VOLATILES

Analyst: **DJF**

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-33

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 9:30:00 AM

Lab ID: 1503557-004

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Toluene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Ethylbenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Methyl tert-butyl ether (MTBE)	480	20		µg/L	20	3/14/2015 12:32:07 AM	R24836
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Naphthalene	ND	2.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1-Methylnaphthalene	ND	4.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
2-Methylnaphthalene	ND	4.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Acetone	ND	10		µg/L	1	3/14/2015 12:59:34 AM	R24836
Bromobenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Bromodichloromethane	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Bromoform	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Bromomethane	ND	3.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
2-Butanone	ND	10		µg/L	1	3/14/2015 12:59:34 AM	R24836
Carbon disulfide	ND	10		µg/L	1	3/14/2015 12:59:34 AM	R24836
Carbon Tetrachloride	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Chlorobenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Chloroethane	ND	2.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Chloroform	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Chloromethane	ND	3.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
2-Chlorotoluene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
4-Chlorotoluene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
cis-1,2-DCE	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Dibromochloromethane	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Dibromomethane	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,1-Dichloroethane	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,1-Dichloroethene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,2-Dichloropropane	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,3-Dichloropropane	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
2,2-Dichloropropane	ND	2.0		µg/L	1	3/14/2015 12:59:34 AM	R24836

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-33

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 9:30:00 AM

Lab ID: 1503557-004

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloropropene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Hexachlorobutadiene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
2-Hexanone	ND	10		µg/L	1	3/14/2015 12:59:34 AM	R24836
Isopropylbenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
4-Isopropyltoluene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
4-Methyl-2-pentanone	ND	10		µg/L	1	3/14/2015 12:59:34 AM	R24836
Methylene Chloride	ND	3.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
n-Butylbenzene	ND	3.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
n-Propylbenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
sec-Butylbenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Styrene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
tert-Butylbenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
trans-1,2-DCE	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Trichlorofluoromethane	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Vinyl chloride	ND	1.0		µg/L	1	3/14/2015 12:59:34 AM	R24836
Xylenes, Total	ND	1.5		µg/L	1	3/14/2015 12:59:34 AM	R24836
Surr: 1,2-Dichloroethane-d4	82.6	70-130		%REC	1	3/14/2015 12:59:34 AM	R24836
Surr: 4-Bromofluorobenzene	95.9	70-130		%REC	1	3/14/2015 12:59:34 AM	R24836
Surr: Dibromofluoromethane	98.1	70-130		%REC	1	3/14/2015 12:59:34 AM	R24836
Surr: Toluene-d8	96.8	70-130		%REC	1	3/14/2015 12:59:34 AM	R24836

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-23

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 10:15:00 AM

Lab ID: 1503557-005

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	14	1.0		mg/L	1	3/16/2015 5:19:55 PM	18123
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/16/2015 5:19:55 PM	18123
Surr: DNOP	141	76.5-150		%REC	1	3/16/2015 5:19:55 PM	18123
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	35	1.0		mg/L	20	3/16/2015 10:29:34 PM	R24858
Surr: BFB	108	80-120		%REC	20	3/16/2015 10:29:34 PM	R24858
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.61	0.0020		mg/L	1	3/25/2015 9:19:26 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:19:26 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 9:19:26 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:19:26 PM	R25072
Iron	4.4	0.10	*	mg/L	5	3/26/2015 3:08:41 PM	R25095
Manganese	1.9	0.010	*	mg/L	5	3/26/2015 3:08:41 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 9:19:26 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 9:19:26 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.64	0.010		mg/L	5	3/24/2015 5:14:45 PM	18270
Cadmium	ND	0.0020		mg/L	1	3/24/2015 4:40:19 PM	18270
Chromium	ND	0.0060		mg/L	1	3/24/2015 4:40:19 PM	18270
Copper	ND	0.0060		mg/L	1	3/24/2015 4:40:19 PM	18270
Iron	5.2	0.20	*	mg/L	10	3/24/2015 5:20:48 PM	18270
Manganese	1.8	0.010	*	mg/L	5	3/24/2015 5:14:45 PM	18270
Silver	ND	0.0050		mg/L	1	3/24/2015 4:40:19 PM	18270
Zinc	0.011	0.010		mg/L	1	3/24/2015 4:40:19 PM	18270
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	0.013	0.010	*	mg/L	10	3/30/2015 3:33:43 PM	R25155
Lead	ND	0.0010		mg/L	1	3/26/2015 8:07:45 PM	R25105
Selenium	ND	0.020		mg/L	20	3/30/2015 4:53:17 PM	R25155
Uranium	0.0045	0.0010		mg/L	1	3/26/2015 8:07:45 PM	R25105
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.013	0.010	*	mg/L	10	3/25/2015 3:56:04 PM	18270
Lead	0.0035	0.0010		mg/L	1	3/24/2015 3:29:37 PM	18270
Selenium	0.010	0.010		mg/L	10	3/25/2015 3:56:04 PM	18270
Uranium	0.0062	0.0010		mg/L	1	3/24/2015 3:29:37 PM	18270
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/17/2015 9:00:10 AM	18156

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-23

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 10:15:00 AM

Lab ID: 1503557-005

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Aniline	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Anthracene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Azobenzene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Benzoic acid	ND	20		µg/L	1	3/18/2015 12:49:10 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Carbazole	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Chrysene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/18/2015 12:49:10 PM	18138
2,4-Dimethylphenol	94	10		µg/L	1	3/18/2015 12:49:10 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/18/2015 12:49:10 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/18/2015 12:49:10 PM	18138

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-23

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 10:15:00 AM

Lab ID: 1503557-005

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Fluoranthene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Fluorene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Isophorone	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
1-Methylnaphthalene	79	10		µg/L	1	3/18/2015 12:49:10 PM	18138
2-Methylnaphthalene	82	10		µg/L	1	3/18/2015 12:49:10 PM	18138
2-Methylphenol	42	10		µg/L	1	3/18/2015 12:49:10 PM	18138
3+4-Methylphenol	63	10		µg/L	1	3/18/2015 12:49:10 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Naphthalene	150	10		µg/L	1	3/18/2015 12:49:10 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/18/2015 12:49:10 PM	18138
Phenanthrene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Phenol	21	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Pyrene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Pyridine	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/18/2015 12:49:10 PM	18138
Surr: 2-Fluorophenol	18.8	17.6-104		%REC	1	3/18/2015 12:49:10 PM	18138
Surr: Phenol-d5	45.2	17.7-89.9		%REC	1	3/18/2015 12:49:10 PM	18138
Surr: 2,4,6-Tribromophenol	67.8	16.3-122		%REC	1	3/18/2015 12:49:10 PM	18138
Surr: Nitrobenzene-d5	61.0	45.3-117		%REC	1	3/18/2015 12:49:10 PM	18138
Surr: 2-Fluorobiphenyl	67.9	43-113		%REC	1	3/18/2015 12:49:10 PM	18138
Surr: 4-Terphenyl-d14	80.2	47.6-122		%REC	1	3/18/2015 12:49:10 PM	18138

EPA METHOD 8260B: VOLATILES

Analyst: **DJF**

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-23

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 10:15:00 AM

Lab ID: 1503557-005

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
Benzene	3300	100		µg/L	100	3/14/2015 1:26:57 AM	R24836
Toluene	4800	100		µg/L	100	3/14/2015 1:26:57 AM	R24836
Ethylbenzene	600	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Methyl tert-butyl ether (MTBE)	1100	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,2,4-Trimethylbenzene	1400	100		µg/L	100	3/14/2015 1:26:57 AM	R24836
1,3,5-Trimethylbenzene	380	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Naphthalene	300	20		µg/L	10	3/14/2015 1:54:11 AM	R24836
1-Methylnaphthalene	97	40		µg/L	10	3/14/2015 1:54:11 AM	R24836
2-Methylnaphthalene	140	40		µg/L	10	3/14/2015 1:54:11 AM	R24836
Acetone	ND	100		µg/L	10	3/14/2015 1:54:11 AM	R24836
Bromobenzene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Bromodichloromethane	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Bromoform	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Bromomethane	ND	30		µg/L	10	3/14/2015 1:54:11 AM	R24836
2-Butanone	ND	100		µg/L	10	3/14/2015 1:54:11 AM	R24836
Carbon disulfide	ND	100		µg/L	10	3/14/2015 1:54:11 AM	R24836
Carbon Tetrachloride	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Chlorobenzene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Chloroethane	ND	20		µg/L	10	3/14/2015 1:54:11 AM	R24836
Chloroform	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Chloromethane	ND	30		µg/L	10	3/14/2015 1:54:11 AM	R24836
2-Chlorotoluene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
4-Chlorotoluene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
cis-1,2-DCE	55	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
cis-1,3-Dichloropropene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	3/14/2015 1:54:11 AM	R24836
Dibromochloromethane	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Dibromomethane	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,2-Dichlorobenzene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,3-Dichlorobenzene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,4-Dichlorobenzene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Dichlorodifluoromethane	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,1-Dichloroethane	120	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,1-Dichloroethene	53	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,2-Dichloropropane	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,3-Dichloropropane	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
2,2-Dichloropropane	ND	20		µg/L	10	3/14/2015 1:54:11 AM	R24836

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-23

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 10:15:00 AM

Lab ID: 1503557-005

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloropropene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Hexachlorobutadiene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
2-Hexanone	ND	100		µg/L	10	3/14/2015 1:54:11 AM	R24836
Isopropylbenzene	44	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
4-Isopropyltoluene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
4-Methyl-2-pentanone	ND	100		µg/L	10	3/14/2015 1:54:11 AM	R24836
Methylene Chloride	ND	30		µg/L	10	3/14/2015 1:54:11 AM	R24836
n-Butylbenzene	ND	30		µg/L	10	3/14/2015 1:54:11 AM	R24836
n-Propylbenzene	93	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
sec-Butylbenzene	10	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Styrene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
tert-Butylbenzene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	3/14/2015 1:54:11 AM	R24836
Tetrachloroethene (PCE)	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
trans-1,2-DCE	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
trans-1,3-Dichloropropene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,2,3-Trichlorobenzene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,2,4-Trichlorobenzene	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,1,1-Trichloroethane	49	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,1,2-Trichloroethane	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Trichloroethene (TCE)	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Trichlorofluoromethane	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
1,2,3-Trichloropropane	ND	20		µg/L	10	3/14/2015 1:54:11 AM	R24836
Vinyl chloride	ND	10		µg/L	10	3/14/2015 1:54:11 AM	R24836
Xylenes, Total	8100	150		µg/L	100	3/14/2015 1:26:57 AM	R24836
Surr: 1,2-Dichloroethane-d4	89.3	70-130		%REC	10	3/14/2015 1:54:11 AM	R24836
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	10	3/14/2015 1:54:11 AM	R24836
Surr: Dibromofluoromethane	97.7	70-130		%REC	10	3/14/2015 1:54:11 AM	R24836
Surr: Toluene-d8	91.1	70-130		%REC	10	3/14/2015 1:54:11 AM	R24836

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-22

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 10:50:00 AM

Lab ID: 1503557-006

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	2.5	1.0		mg/L	1	3/16/2015 5:41:39 PM	18123
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/16/2015 5:41:39 PM	18123
Surr: DNOP	140	76.5-150		%REC	1	3/16/2015 5:41:39 PM	18123
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	13	0.50		mg/L	10	3/16/2015 10:58:45 PM	R24858
Surr: BFB	97.9	80-120		%REC	10	3/16/2015 10:58:45 PM	R24858
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	1.3	0.020		mg/L	10	3/26/2015 3:10:20 PM	R25095
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:21:07 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 9:21:07 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:21:07 PM	R25072
Iron	7.5	0.20	*	mg/L	10	3/26/2015 3:10:20 PM	R25095
Manganese	2.3	0.020	*	mg/L	10	3/26/2015 3:10:20 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 9:21:07 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 9:21:07 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	2.1	0.010	*	mg/L	5	3/24/2015 5:22:54 PM	18270
Cadmium	ND	0.0020		mg/L	1	3/24/2015 4:57:30 PM	18270
Chromium	0.018	0.0060		mg/L	1	3/24/2015 4:57:30 PM	18270
Copper	0.015	0.0060		mg/L	1	3/24/2015 4:57:30 PM	18270
Iron	21	1.0	*	mg/L	50	3/24/2015 5:24:52 PM	18270
Manganese	3.5	0.010	*	mg/L	5	3/24/2015 5:22:54 PM	18270
Silver	ND	0.0050		mg/L	1	3/24/2015 4:57:30 PM	18270
Zinc	0.038	0.010		mg/L	1	3/24/2015 4:57:30 PM	18270
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	0.0031	0.0010		mg/L	1	3/26/2015 8:10:48 PM	R25105
Lead	0.0016	0.0010		mg/L	1	3/26/2015 8:10:48 PM	R25105
Selenium	0.0067	0.0010		mg/L	1	3/26/2015 8:10:48 PM	R25105
Uranium	0.0032	0.0010		mg/L	1	3/26/2015 8:10:48 PM	R25105
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/25/2015 3:59:16 PM	18270
Lead	0.035	0.0010	*	mg/L	1	3/24/2015 3:32:48 PM	18270
Selenium	ND	0.010		mg/L	10	3/25/2015 3:59:16 PM	18270
Uranium	0.0047	0.0010		mg/L	1	3/24/2015 3:32:48 PM	18270
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/17/2015 9:01:55 AM	18156

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-22

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 10:50:00 AM

Lab ID: 1503557-006

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Aniline	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Anthracene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Azobenzene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Benzoic acid	ND	20		µg/L	1	3/18/2015 1:17:17 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Carbazole	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Chrysene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/18/2015 1:17:17 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/18/2015 1:17:17 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/18/2015 1:17:17 PM	18138

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-22

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 10:50:00 AM

Lab ID: 1503557-006

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Fluoranthene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Fluorene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Isophorone	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
1-Methylnaphthalene	66	10		µg/L	1	3/18/2015 1:17:17 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Naphthalene	16	10		µg/L	1	3/18/2015 1:17:17 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/18/2015 1:17:17 PM	18138
Phenanthrene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Phenol	14	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Pyrene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Pyridine	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/18/2015 1:17:17 PM	18138
Surr: 2-Fluorophenol	64.5	17.6-104		%REC	1	3/18/2015 1:17:17 PM	18138
Surr: Phenol-d5	57.1	17.7-89.9		%REC	1	3/18/2015 1:17:17 PM	18138
Surr: 2,4,6-Tribromophenol	89.5	16.3-122		%REC	1	3/18/2015 1:17:17 PM	18138
Surr: Nitrobenzene-d5	72.2	45.3-117		%REC	1	3/18/2015 1:17:17 PM	18138
Surr: 2-Fluorobiphenyl	84.1	43-113		%REC	1	3/18/2015 1:17:17 PM	18138
Surr: 4-Terphenyl-d14	110	47.6-122		%REC	1	3/18/2015 1:17:17 PM	18138

EPA METHOD 8260B: VOLATILES

Analyst: **DJF**

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-22

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 10:50:00 AM

Lab ID: 1503557-006

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
Benzene	2600	200		µg/L	200	3/14/2015 2:49:03 AM	R24836
Toluene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Ethylbenzene	250	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Methyl tert-butyl ether (MTBE)	5100	200		µg/L	200	3/14/2015 2:49:03 AM	R24836
1,2,4-Trimethylbenzene	58	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,3,5-Trimethylbenzene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,2-Dichloroethane (EDC)	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,2-Dibromoethane (EDB)	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Naphthalene	ND	40		µg/L	20	3/14/2015 3:16:26 AM	R24836
1-Methylnaphthalene	99	80		µg/L	20	3/14/2015 3:16:26 AM	R24836
2-Methylnaphthalene	ND	80		µg/L	20	3/14/2015 3:16:26 AM	R24836
Acetone	ND	200		µg/L	20	3/14/2015 3:16:26 AM	R24836
Bromobenzene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Bromodichloromethane	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Bromoform	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Bromomethane	ND	60		µg/L	20	3/14/2015 3:16:26 AM	R24836
2-Butanone	ND	200		µg/L	20	3/14/2015 3:16:26 AM	R24836
Carbon disulfide	ND	200		µg/L	20	3/14/2015 3:16:26 AM	R24836
Carbon Tetrachloride	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Chlorobenzene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Chloroethane	ND	40		µg/L	20	3/14/2015 3:16:26 AM	R24836
Chloroform	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Chloromethane	ND	60		µg/L	20	3/14/2015 3:16:26 AM	R24836
2-Chlorotoluene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
4-Chlorotoluene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
cis-1,2-DCE	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
cis-1,3-Dichloropropene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,2-Dibromo-3-chloropropane	ND	40		µg/L	20	3/14/2015 3:16:26 AM	R24836
Dibromochloromethane	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Dibromomethane	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,2-Dichlorobenzene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,3-Dichlorobenzene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,4-Dichlorobenzene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Dichlorodifluoromethane	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,1-Dichloroethane	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,1-Dichloroethene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,2-Dichloropropane	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,3-Dichloropropane	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
2,2-Dichloropropane	ND	40		µg/L	20	3/14/2015 3:16:26 AM	R24836

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-22

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 10:50:00 AM

Lab ID: 1503557-006

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloropropene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Hexachlorobutadiene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
2-Hexanone	ND	200		µg/L	20	3/14/2015 3:16:26 AM	R24836
Isopropylbenzene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
4-Isopropyltoluene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
4-Methyl-2-pentanone	ND	200		µg/L	20	3/14/2015 3:16:26 AM	R24836
Methylene Chloride	ND	60		µg/L	20	3/14/2015 3:16:26 AM	R24836
n-Butylbenzene	ND	60		µg/L	20	3/14/2015 3:16:26 AM	R24836
n-Propylbenzene	31	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
sec-Butylbenzene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Styrene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
tert-Butylbenzene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,1,1,2-Tetrachloroethane	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,1,2,2-Tetrachloroethane	ND	40		µg/L	20	3/14/2015 3:16:26 AM	R24836
Tetrachloroethene (PCE)	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
trans-1,2-DCE	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
trans-1,3-Dichloropropene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,2,3-Trichlorobenzene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,2,4-Trichlorobenzene	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,1,1-Trichloroethane	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,1,2-Trichloroethane	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Trichloroethene (TCE)	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Trichlorofluoromethane	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
1,2,3-Trichloropropane	ND	40		µg/L	20	3/14/2015 3:16:26 AM	R24836
Vinyl chloride	ND	20		µg/L	20	3/14/2015 3:16:26 AM	R24836
Xylenes, Total	ND	30		µg/L	20	3/14/2015 3:16:26 AM	R24836
Surr: 1,2-Dichloroethane-d4	79.8	70-130		%REC	20	3/14/2015 3:16:26 AM	R24836
Surr: 4-Bromofluorobenzene	96.6	70-130		%REC	20	3/14/2015 3:16:26 AM	R24836
Surr: Dibromofluoromethane	96.3	70-130		%REC	20	3/14/2015 3:16:26 AM	R24836
Surr: Toluene-d8	93.3	70-130		%REC	20	3/14/2015 3:16:26 AM	R24836

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-44

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 11:45:00 AM

Lab ID: 1503557-007

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/13/2015 11:14:56 PM	18123
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/13/2015 11:14:56 PM	18123
Surr: DNOP	179	76.5-150	S	%REC	1	3/13/2015 11:14:56 PM	18123
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/16/2015 11:27:55 PM	R24858
Surr: BFB	84.7	80-120		%REC	1	3/16/2015 11:27:55 PM	R24858
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.070	0.0020		mg/L	1	3/25/2015 9:22:47 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:22:47 PM	R25072
Chromium	0.0072	0.0060		mg/L	1	3/25/2015 9:22:47 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:22:47 PM	R25072
Iron	0.85	0.020	*	mg/L	1	3/25/2015 9:22:47 PM	R25072
Manganese	0.079	0.0020	*	mg/L	1	3/25/2015 9:22:47 PM	R25072
Silver	ND	0.0050		mg/L	1	3/25/2015 9:22:47 PM	R25072
Zinc	0.011	0.010		mg/L	1	3/25/2015 9:22:47 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.22	0.0020		mg/L	1	3/24/2015 4:59:24 PM	18270
Cadmium	ND	0.0020		mg/L	1	3/24/2015 4:59:24 PM	18270
Chromium	0.023	0.0060		mg/L	1	3/24/2015 4:59:24 PM	18270
Copper	0.0079	0.0060		mg/L	1	3/24/2015 4:59:24 PM	18270
Iron	16	0.40	*	mg/L	20	3/24/2015 5:32:39 PM	18270
Manganese	0.34	0.0020	*	mg/L	1	3/24/2015 4:59:24 PM	18270
Silver	ND	0.0050		mg/L	1	3/24/2015 4:59:24 PM	18270
Zinc	0.056	0.010		mg/L	1	3/24/2015 4:59:24 PM	18270
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/30/2015 3:36:47 PM	R25155
Lead	0.0031	0.0010		mg/L	1	3/26/2015 8:13:51 PM	R25105
Selenium	0.017	0.0010		mg/L	1	3/26/2015 8:13:51 PM	R25105
Uranium	0.22	0.010	*	mg/L	10	3/30/2015 3:36:47 PM	R25155
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/25/2015 4:08:53 PM	18270
Lead	0.016	0.0010	*	mg/L	1	3/24/2015 3:35:59 PM	18270
Selenium	0.015	0.0010		mg/L	1	3/24/2015 3:35:59 PM	18270
Uranium	0.22	0.010	*	mg/L	10	3/25/2015 4:08:53 PM	18270
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/17/2015 9:03:42 AM	18156

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-44

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 11:45:00 AM

Lab ID: 1503557-007

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
Acenaphthene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Acenaphthylene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Aniline	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Anthracene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Azobenzene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Benz(a)anthracene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Benzo(a)pyrene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Benzo(b)fluoranthene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Benzo(k)fluoranthene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Benzoic acid	ND	20		µg/L	1	3/18/2015 1:45:31 PM	18138
Benzyl alcohol	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Butyl benzyl phthalate	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Carbazole	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
4-Chloroaniline	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
2-Chloronaphthalene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
2-Chlorophenol	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Chrysene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Di-n-butyl phthalate	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Di-n-octyl phthalate	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Dibenzofuran	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
1,2-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
1,3-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
1,4-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Diethyl phthalate	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Dimethyl phthalate	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
2,4-Dichlorophenol	ND	20		µg/L	1	3/18/2015 1:45:31 PM	18138
2,4-Dimethylphenol	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/18/2015 1:45:31 PM	18138
2,4-Dinitrophenol	ND	20		µg/L	1	3/18/2015 1:45:31 PM	18138

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-44

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 11:45:00 AM

Lab ID: 1503557-007

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
2,6-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Fluoranthene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Fluorene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Hexachlorobenzene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Hexachlorobutadiene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Hexachloroethane	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Isophorone	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
1-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
2-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
2-Methylphenol	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
3+4-Methylphenol	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
N-Nitrosodimethylamine	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Naphthalene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
2-Nitroaniline	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
3-Nitroaniline	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
4-Nitroaniline	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Nitrobenzene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
2-Nitrophenol	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
4-Nitrophenol	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Pentachlorophenol	ND	20		µg/L	1	3/18/2015 1:45:31 PM	18138
Phenanthrene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Phenol	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Pyrene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Pyridine	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/18/2015 1:45:31 PM	18138
Surr: 2-Fluorophenol	77.3	17.6-104		%REC	1	3/18/2015 1:45:31 PM	18138
Surr: Phenol-d5	67.1	17.7-89.9		%REC	1	3/18/2015 1:45:31 PM	18138
Surr: 2,4,6-Tribromophenol	95.8	16.3-122		%REC	1	3/18/2015 1:45:31 PM	18138
Surr: Nitrobenzene-d5	81.9	45.3-117		%REC	1	3/18/2015 1:45:31 PM	18138
Surr: 2-Fluorobiphenyl	84.9	43-113		%REC	1	3/18/2015 1:45:31 PM	18138
Surr: 4-Terphenyl-d14	105	47.6-122		%REC	1	3/18/2015 1:45:31 PM	18138

EPA METHOD 8260B: VOLATILES

Analyst: **DJF**

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-44

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 11:45:00 AM

Lab ID: 1503557-007

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Toluene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Ethylbenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Methyl tert-butyl ether (MTBE)	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,2,4-Trimethylbenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,3,5-Trimethylbenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,2-Dichloroethane (EDC)	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Naphthalene	ND	4.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1-Methylnaphthalene	ND	8.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
2-Methylnaphthalene	ND	8.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Acetone	ND	20		µg/L	2	3/14/2015 4:11:13 AM	R24836
Bromobenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Bromodichloromethane	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Bromoform	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Bromomethane	ND	6.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
2-Butanone	ND	20		µg/L	2	3/14/2015 4:11:13 AM	R24836
Carbon disulfide	ND	20		µg/L	2	3/14/2015 4:11:13 AM	R24836
Carbon Tetrachloride	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Chlorobenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Chloroethane	ND	4.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Chloroform	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Chloromethane	ND	6.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
2-Chlorotoluene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
4-Chlorotoluene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
cis-1,2-DCE	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Dibromochloromethane	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Dibromomethane	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,2-Dichlorobenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,3-Dichlorobenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,4-Dichlorobenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Dichlorodifluoromethane	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,1-Dichloroethane	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,1-Dichloroethene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,2-Dichloropropane	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,3-Dichloropropane	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
2,2-Dichloropropane	ND	4.0		µg/L	2	3/14/2015 4:11:13 AM	R24836

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-44

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 11:45:00 AM

Lab ID: 1503557-007

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloropropene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Hexachlorobutadiene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
2-Hexanone	ND	20		µg/L	2	3/14/2015 4:11:13 AM	R24836
Isopropylbenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
4-Isopropyltoluene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
4-Methyl-2-pentanone	ND	20		µg/L	2	3/14/2015 4:11:13 AM	R24836
Methylene Chloride	ND	6.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
n-Butylbenzene	ND	6.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
n-Propylbenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
sec-Butylbenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Styrene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
tert-Butylbenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
trans-1,2-DCE	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,1,1-Trichloroethane	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,1,2-Trichloroethane	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Trichloroethene (TCE)	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Trichlorofluoromethane	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
1,2,3-Trichloropropane	ND	4.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Vinyl chloride	ND	2.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Xylenes, Total	ND	3.0		µg/L	2	3/14/2015 4:11:13 AM	R24836
Surr: 1,2-Dichloroethane-d4	81.4	70-130		%REC	2	3/14/2015 4:11:13 AM	R24836
Surr: 4-Bromofluorobenzene	95.4	70-130		%REC	2	3/14/2015 4:11:13 AM	R24836
Surr: Dibromofluoromethane	101	70-130		%REC	2	3/14/2015 4:11:13 AM	R24836
Surr: Toluene-d8	98.1	70-130		%REC	2	3/14/2015 4:11:13 AM	R24836

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Blind Duplicate

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015

Lab ID: 1503557-008

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Acenaphthylene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Aniline	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Anthracene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Azobenzene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Benz(a)anthracene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Benzo(a)pyrene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Benzo(b)fluoranthene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Benzo(k)fluoranthene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Benzoic acid	ND	20		µg/L	1	3/18/2015 2:13:54 PM	18139
Benzyl alcohol	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Butyl benzyl phthalate	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Carbazole	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
4-Chloroaniline	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
2-Chloronaphthalene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
2-Chlorophenol	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Chrysene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Di-n-butyl phthalate	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Di-n-octyl phthalate	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Dibenzofuran	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
1,2-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
1,3-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
1,4-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Diethyl phthalate	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Dimethyl phthalate	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
2,4-Dichlorophenol	ND	20		µg/L	1	3/18/2015 2:13:54 PM	18139
2,4-Dimethylphenol	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/18/2015 2:13:54 PM	18139
2,4-Dinitrophenol	ND	20		µg/L	1	3/18/2015 2:13:54 PM	18139

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Blind Duplicate

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015

Lab ID: 1503557-008

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
2,4-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
2,6-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Fluoranthene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Fluorene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Hexachlorobenzene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Hexachlorobutadiene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Hexachloroethane	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Isophorone	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
1-Methylnaphthalene	87	10		µg/L	1	3/18/2015 2:13:54 PM	18139
2-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
2-Methylphenol	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
3+4-Methylphenol	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
N-Nitrosodimethylamine	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Naphthalene	20	10		µg/L	1	3/18/2015 2:13:54 PM	18139
2-Nitroaniline	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
3-Nitroaniline	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
4-Nitroaniline	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Nitrobenzene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
2-Nitrophenol	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
4-Nitrophenol	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Pentachlorophenol	ND	20		µg/L	1	3/18/2015 2:13:54 PM	18139
Phenanthrene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Phenol	16	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Pyrene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Pyridine	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/18/2015 2:13:54 PM	18139
Surr: 2-Fluorophenol	69.4	17.6-104		%REC	1	3/18/2015 2:13:54 PM	18139
Surr: Phenol-d5	64.6	17.7-89.9		%REC	1	3/18/2015 2:13:54 PM	18139
Surr: 2,4,6-Tribromophenol	96.8	16.3-122		%REC	1	3/18/2015 2:13:54 PM	18139
Surr: Nitrobenzene-d5	77.6	45.3-117		%REC	1	3/18/2015 2:13:54 PM	18139
Surr: 2-Fluorobiphenyl	86.1	43-113		%REC	1	3/18/2015 2:13:54 PM	18139
Surr: 4-Terphenyl-d14	117	47.6-122		%REC	1	3/18/2015 2:13:54 PM	18139

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Trip Blank

Project: 2015 1ST QTR (MKTF)

Collection Date:

Lab ID: 1503557-009

Matrix: TRIP BLANK

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/16/2015 11:57:03 PM	R24858
Surr: BFB	83.8	80-120		%REC	1	3/16/2015 11:57:03 PM	R24858
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Toluene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Ethylbenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Naphthalene	ND	2.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1-Methylnaphthalene	ND	4.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
2-Methylnaphthalene	ND	4.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Acetone	ND	10		µg/L	1	3/14/2015 4:38:36 AM	R24836
Bromobenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Bromodichloromethane	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Bromoform	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Bromomethane	ND	3.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
2-Butanone	ND	10		µg/L	1	3/14/2015 4:38:36 AM	R24836
Carbon disulfide	ND	10		µg/L	1	3/14/2015 4:38:36 AM	R24836
Carbon Tetrachloride	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Chlorobenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Chloroethane	ND	2.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Chloroform	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Chloromethane	ND	3.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
2-Chlorotoluene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
4-Chlorotoluene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
cis-1,2-DCE	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Dibromochloromethane	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Dibromomethane	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,1-Dichloroethane	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,1-Dichloroethene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503557

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Trip Blank

Project: 2015 1ST QTR (MKTF)

Collection Date:

Lab ID: 1503557-009

Matrix: TRIP BLANK

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,2-Dichloropropane	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,3-Dichloropropane	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
2,2-Dichloropropane	ND	2.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,1-Dichloropropene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Hexachlorobutadiene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
2-Hexanone	ND	10		µg/L	1	3/14/2015 4:38:36 AM	R24836
Isopropylbenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
4-Isopropyltoluene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
4-Methyl-2-pentanone	ND	10		µg/L	1	3/14/2015 4:38:36 AM	R24836
Methylene Chloride	ND	3.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
n-Butylbenzene	ND	3.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
n-Propylbenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
sec-Butylbenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Styrene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
tert-Butylbenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
trans-1,2-DCE	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Trichlorofluoromethane	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Vinyl chloride	ND	1.0		µg/L	1	3/14/2015 4:38:36 AM	R24836
Xylenes, Total	ND	1.5		µg/L	1	3/14/2015 4:38:36 AM	R24836
Surr: 1,2-Dichloroethane-d4	82.0	70-130		%REC	1	3/14/2015 4:38:36 AM	R24836
Surr: 4-Bromofluorobenzene	97.3	70-130		%REC	1	3/14/2015 4:38:36 AM	R24836
Surr: Dibromofluoromethane	97.6	70-130		%REC	1	3/14/2015 4:38:36 AM	R24836
Surr: Toluene-d8	94.0	70-130		%REC	1	3/14/2015 4:38:36 AM	R24836

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503557

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R25072			RunNo: 25072					
Prep Date:		Analysis Date: 3/25/2015			SeqNo: 739895		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25072		RunNo: 25072					
Prep Date:			Analysis Date: 3/25/2015		SeqNo: 739896		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.7	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.3	85	115			
Chromium	0.49	0.0060	0.5000	0	97.5	85	115			
Copper	0.49	0.0060	0.5000	0	97.2	85	115			
Iron	0.48	0.020	0.5000	0	95.1	85	115			
Manganese	0.47	0.0020	0.5000	0	94.7	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.48	0.010	0.5000	0	96.8	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R25072			RunNo: 25072					
Prep Date:		Analysis Date: 3/25/2015			SeqNo: 739897		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503557

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25072		RunNo: 25072					
Prep Date:			Analysis Date: 3/25/2015		SeqNo: 739898		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	97.2	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.9	85	115			
Chromium	0.49	0.0060	0.5000	0	97.9	85	115			
Copper	0.49	0.0060	0.5000	0	97.0	85	115			
Iron	0.48	0.020	0.5000	0	96.7	85	115			
Manganese	0.48	0.0020	0.5000	0	95.0	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.49	0.010	0.5000	0	97.2	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R25095			RunNo: 25095					
Prep Date:		Analysis Date: 3/26/2015			SeqNo: 740730		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25095		RunNo: 25095					
Prep Date:			Analysis Date: 3/26/2015		SeqNo: 740731		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.2	85	115			
Iron	0.52	0.020	0.5000	0	104	85	115			
Manganese	0.47	0.0020	0.5000	0	94.8	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503557

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB-18270		SampType:	MBLK		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	PBW		Batch ID:	18270		RunNo:	25031			
Prep Date:	3/23/2015		Analysis Date:	3/24/2015		SeqNo:	738189		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-18270		SampType:	LCS		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	LCSW		Batch ID:	18270		RunNo:	25031			
Prep Date:	3/23/2015		Analysis Date:	3/24/2015		SeqNo:	738190		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.51	0.0020	0.5000	0	102	85	115			
Cadmium	0.53	0.0020	0.5000	0	107	85	115			
Chromium	0.51	0.0060	0.5000	0	101	85	115			
Copper	0.50	0.0060	0.5000	0	99.2	85	115			
Iron	0.54	0.020	0.5000	0	109	85	115			
Manganese	0.49	0.0020	0.5000	0	97.2	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.50	0.010	0.5000	0	100	85	115			

Sample ID	1503557-005EMS		SampType:	MS		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	MKTF-23		Batch ID:	18270		RunNo:	25031			
Prep Date:	3/23/2015		Analysis Date:	3/24/2015		SeqNo:	738716		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.52	0.0020	0.5000	0	105	70	130			
Chromium	0.51	0.0060	0.5000	0.003900	102	70	130			
Copper	0.51	0.0060	0.5000	0	102	70	130			
Silver	0.096	0.0050	0.1000	0	95.9	70	130			
Zinc	0.52	0.010	0.5000	0.01121	101	70	130			

Sample ID	1503557-005EMSD		SampType:	MSD		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	MKTF-23		Batch ID:	18270		RunNo:	25031			
Prep Date:	3/23/2015		Analysis Date:	3/24/2015		SeqNo:	738717		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.52	0.0020	0.5000	0	105	70	130	0.250	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503557

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	1503557-005EMSD		SampType: MSD		TestCode: EPA Method 200.7: Total Metals					
Client ID:	MKTF-23		Batch ID: 18270		RunNo: 25031					
Prep Date:	3/23/2015		Analysis Date: 3/24/2015		SeqNo: 738717		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.52	0.0060	0.5000	0.003900	102	70	130	0.278	20	
Copper	0.51	0.0060	0.5000	0	102	70	130	0.263	20	
Silver	0.094	0.0050	0.1000	0	93.9	70	130	2.14	20	
Zinc	0.52	0.010	0.5000	0.01121	101	70	130	0.130	20	

Sample ID	1503557-005EMS		SampType: MS		TestCode: EPA Method 200.7: Total Metals					
Client ID:	MKTF-23		Batch ID: 18270		RunNo: 25031					
Prep Date:	3/23/2015		Analysis Date: 3/24/2015		SeqNo: 738734		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	1.2	0.010	0.5000	0.6360	116	70	130			
Manganese	2.3	0.010	0.5000	1.761	111	70	130			

Sample ID	1503557-005EMSD		SampType: MSD		TestCode: EPA Method 200.7: Total Metals					
Client ID:	MKTF-23		Batch ID: 18270		RunNo: 25031					
Prep Date:	3/23/2015		Analysis Date: 3/24/2015		SeqNo: 738735		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	1.2	0.010	0.5000	0.6360	109	70	130	3.15	20	
Manganese	2.2	0.010	0.5000	1.761	96.5	70	130	3.20	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503557

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	1503557-002FMS		SampType: MS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	MKTF-41		Batch ID: R25105		RunNo: 25105					
Prep Date:			Analysis Date: 3/26/2015		SeqNo: 741182		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.030	0.0010	0.02500	0.0007946	116	70	130			
Uranium	0.065	0.0010	0.02500	0.03422	124	70	130			E

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25105		RunNo: 25105					
Prep Date:			Analysis Date: 3/26/2015		SeqNo: 741199		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	96.8	85	115			
Lead	0.024	0.0010	0.02500	0	94.3	85	115			
Selenium	0.024	0.0010	0.02500	0	96.7	85	115			
Uranium	0.024	0.0010	0.02500	0	96.5	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25105		RunNo: 25105					
Prep Date:			Analysis Date: 3/26/2015		SeqNo: 741200		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	95.0	85	115			
Lead	0.024	0.0010	0.02500	0	95.1	85	115			
Selenium	0.023	0.0010	0.02500	0	93.9	85	115			
Uranium	0.024	0.0010	0.02500	0	95.2	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25105		RunNo: 25105					
Prep Date:			Analysis Date: 3/26/2015		SeqNo: 741201		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	96.8	85	115			
Lead	0.023	0.0010	0.02500	0	91.2	85	115			
Selenium	0.024	0.0010	0.02500	0	96.4	85	115			
Uranium	0.023	0.0010	0.02500	0	90.3	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R25105			RunNo: 25105					
Prep Date:		Analysis Date: 3/26/2015			SeqNo: 741202		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503557

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R25105			RunNo: 25105					
Prep Date:		Analysis Date: 3/26/2015			SeqNo: 741202		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R25105			RunNo: 25105					
Prep Date:		Analysis Date: 3/26/2015			SeqNo: 741203			Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R25105			RunNo: 25105					
Prep Date:		Analysis Date: 3/26/2015			SeqNo: 741204			Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	LCS	SampType: LCS			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW	Batch ID: R25155			RunNo: 25155					
Prep Date:		Analysis Date: 3/30/2015			SeqNo: 743933			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	99.2	85	115			
Selenium	0.025	0.0010	0.02500	0	100	85	115			
Uranium	0.025	0.0010	0.02500	0	102	85	115			

Sample ID	LCS	SampType: LCS			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW	Batch ID: R25155			RunNo: 25155					
Prep Date:		Analysis Date: 3/30/2015			SeqNo: 743934			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	97.2	85	115			
Selenium	0.025	0.0010	0.02500	0	98.0	85	115			
Uranium	0.026	0.0010	0.02500	0	102	85	115			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503557

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25155		RunNo: 25155					
Prep Date:			Analysis Date: 3/30/2015		SeqNo: 743935		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	99.0	85	115			
Selenium	0.024	0.0010	0.02500	0	97.6	85	115			
Uranium	0.025	0.0010	0.02500	0	101	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R25155			RunNo: 25155					
Prep Date:		Analysis Date: 3/30/2015			SeqNo: 743936		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R25155			RunNo: 25155					
Prep Date:		Analysis Date: 3/30/2015			SeqNo: 743937		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R25155			RunNo: 25155					
Prep Date:		Analysis Date: 3/30/2015			SeqNo: 743938		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503557

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	LLLCS-18270		SampType: LCSLL		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	BatchQC		Batch ID: 18270		RunNo: 25044					
Prep Date:	3/23/2015		Analysis Date: 3/24/2015		SeqNo: 738817		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	99.3	85	115			
Lead	0.025	0.0010	0.02500	0	98.8	85	115			
Selenium	0.024	0.0010	0.02500	0	97.1	85	115			
Uranium	0.025	0.0010	0.02500	0	99.0	85	115			

Sample ID	MB-18270		SampType: MBLK		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	PBW		Batch ID: 18270		RunNo: 25044					
Prep Date:	3/23/2015		Analysis Date: 3/24/2015		SeqNo: 738820		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010	-381.8	0	0	0	0			
Lead	ND	0.0010	366.8	0	0	0	0			
Selenium	ND	0.0010	54.17	0	0	0	0			
Uranium	ND	0.0010	58.17	0	0	0	0			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503557

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB-18156		SampType: MBLK		TestCode: EPA Method 245.1: Mercury					
Client ID:	PBW		Batch ID: 18156		RunNo: 24865					
Prep Date:	3/16/2015		Analysis Date: 3/17/2015		SeqNo: 732460		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.00020								

Sample ID	LCS-18156		SampType: LCS		TestCode: EPA Method 245.1: Mercury					
Client ID:	LCSW		Batch ID: 18156		RunNo: 24865					
Prep Date:	3/16/2015		Analysis Date: 3/17/2015		SeqNo: 732461		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	99.9	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503557

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB-18123		SampType: MBLK		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	PBW		Batch ID: 18123		RunNo: 24810					
Prep Date:	3/13/2015		Analysis Date: 3/13/2015		SeqNo: 731809		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	1.5		1.000		146	76.5	150			

Sample ID	1503557-002CMSD		SampType: MSD		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	MKTF-41		Batch ID: 18123		RunNo: 24810					
Prep Date:	3/13/2015		Analysis Date: 3/13/2015		SeqNo: 731813		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.0	1.0	5.000	0	120	75.9	164	1.08	22.1	
Surr: DNOP	0.66		0.5000		132	76.5	150	0	0	

Sample ID	LCS-18123		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	LCSW		Batch ID: 18123		RunNo: 24848					
Prep Date:	3/13/2015		Analysis Date: 3/16/2015		SeqNo: 731923		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.9	1.0	5.000	0	138	60.1	156			
Surr: DNOP	0.89		0.5000		177	76.5	150			S

Sample ID	1503557-002CMS		SampType: MS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	MKTF-41		Batch ID: 18123		RunNo: 24843					
Prep Date:	3/13/2015		Analysis Date: 3/16/2015		SeqNo: 732213		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.9	1.0	5.000	0	137	75.9	164			
Surr: DNOP	0.75		0.5000		151	76.5	150			S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503557

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	5ML RB		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBW		Batch ID: R24858		RunNo: 24858					
Prep Date:			Analysis Date: 3/16/2015		SeqNo: 732143		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		87.6	80	120			

Sample ID	2.5UG GRO LCS		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSW		Batch ID: R24858		RunNo: 24858					
Prep Date:			Analysis Date: 3/16/2015		SeqNo: 732146		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.41	0.050	0.5000	0	81.5	80	120			
Surr: BFB	19		20.00		96.2	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503557

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R24836			RunNo: 24836					
Prep Date:		Analysis Date: 3/13/2015			SeqNo: 731572	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503557

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	5ml rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R24836	RunNo:	24836					
Prep Date:		Analysis Date:	3/13/2015	SeqNo:	731572	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.3		10.00		83.3	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.4	70	130			
Surr: Dibromofluoromethane	9.3		10.00		92.9	70	130			
Surr: Toluene-d8	9.4		10.00		94.3	70	130			

Sample ID	100nglcs200nganxl	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID:	R24836	RunNo:	24836					
Prep Date:		Analysis Date:	3/13/2015	SeqNo:	731574	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	108	70	130			
Toluene	21	1.0	20.00	0	105	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503557

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	100nglcs200nganxl		SampType: LCS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW		Batch ID: R24836		RunNo: 24836					
Prep Date:			Analysis Date: 3/13/2015		SeqNo: 731574		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	24	1.0	20.00	0	122	75.6	144			
Trichloroethene (TCE)	20	1.0	20.00	0	100	70	130			
Surr: 1,2-Dichloroethane-d4	7.9		10.00		79.1	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		96.3	70	130			
Surr: Dibromofluoromethane	9.9		10.00		98.8	70	130			
Surr: Toluene-d8	9.6		10.00		95.8	70	130			

Sample ID	1503557-002ams	SampType: MS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	MKTF-41	Batch ID: R24836			RunNo: 24836					
Prep Date:		Analysis Date: 3/13/2015			SeqNo: 731599		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	21	1.0	20.00	0	103	70	130			
Chlorobenzene	20	1.0	20.00	0	97.8	70	130			
1,1-Dichloroethene	22	1.0	20.00	1.629	103	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	94.7	70	130			
Surr: 1,2-Dichloroethane-d4	8.1		10.00		81.2	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		94.4	70	130			
Surr: Dibromofluoromethane	9.5		10.00		95.4	70	130			
Surr: Toluene-d8	9.7		10.00		97.0	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503557

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	mb-18138	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	18138	RunNo:	24891					
Prep Date:	3/16/2015	Analysis Date:	3/17/2015	SeqNo:	733319	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503557

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	mb-18138	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	18138	RunNo:	24891					
Prep Date:	3/16/2015	Analysis Date:	3/17/2015	SeqNo:	733319	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	150		200.0		75.5	17.6	104			
Surr: Phenol-d5	140		200.0		69.4	17.7	89.9			
Surr: 2,4,6-Tribromophenol	170		200.0		86.6	16.3	122			
Surr: Nitrobenzene-d5	70		100.0		70.1	45.3	117			
Surr: 2-Fluorobiphenyl	73		100.0		73.1	43	113			
Surr: 4-Terphenyl-d14	100		100.0		100	47.6	122			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503557

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	lcs-18138		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 18138		RunNo: 24891					
Prep Date:	3/16/2015		Analysis Date: 3/17/2015		SeqNo: 733321		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	76	10	100.0	0	75.9	47.9	114			
4-Chloro-3-methylphenol	160	10	200.0	0	82.1	51.7	122			
2-Chlorophenol	150	10	200.0	0	74.2	40.7	113			
1,4-Dichlorobenzene	71	10	100.0	0	71.0	39.6	99.9			
2,4-Dinitrotoluene	66	10	100.0	0	66.1	40.8	113			
N-Nitrosodi-n-propylamine	79	10	100.0	0	79.3	51.2	111			
4-Nitrophenol	140	10	200.0	0	70.9	15.7	86.9			
Pentachlorophenol	160	20	200.0	0	78.1	21.6	104			
Phenol	150	10	200.0	0	76.4	28.6	71.7			S
Pyrene	110	10	100.0	0	109	54.2	128			
1,2,4-Trichlorobenzene	86	10	100.0	0	86.0	40.9	101			
Surr: 2-Fluorophenol	160		200.0		80.5	17.6	104			
Surr: Phenol-d5	160		200.0		80.5	17.7	89.9			
Surr: 2,4,6-Tribromophenol	200		200.0		101	16.3	122			
Surr: Nitrobenzene-d5	74		100.0		73.7	45.3	117			
Surr: 2-Fluorobiphenyl	82		100.0		82.3	43	113			
Surr: 4-Terphenyl-d14	120		100.0		117	47.6	122			

Sample ID	lcsd-18138		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 18138		RunNo: 24891					
Prep Date:	3/16/2015		Analysis Date: 3/17/2015		SeqNo: 733322		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	83	10	100.0	0	83.3	47.9	114	9.40	27.2	
4-Chloro-3-methylphenol	170	10	200.0	0	82.8	51.7	122	0.910	25.9	
2-Chlorophenol	150	10	200.0	0	74.9	40.7	113	1.01	22.5	
1,4-Dichlorobenzene	77	10	100.0	0	77.0	39.6	99.9	8.14	24.6	
2,4-Dinitrotoluene	79	10	100.0	0	79.4	40.8	113	18.3	25.3	
N-Nitrosodi-n-propylamine	83	10	100.0	0	83.4	51.2	111	5.04	23.6	
4-Nitrophenol	170	10	200.0	0	85.9	15.7	86.9	19.1	34.7	
Pentachlorophenol	160	20	200.0	0	80.1	21.6	104	2.49	32.8	
Phenol	160	10	200.0	0	80.2	28.6	71.7	4.75	25.5	S
Pyrene	110	10	100.0	0	108	54.2	128	1.27	31.4	
1,2,4-Trichlorobenzene	90	10	100.0	0	90.5	40.9	101	5.08	25.9	
Surr: 2-Fluorophenol	170		200.0		82.6	17.6	104	0	0	
Surr: Phenol-d5	160		200.0		82.2	17.7	89.9	0	0	
Surr: 2,4,6-Tribromophenol	200		200.0		101	16.3	122	0	0	
Surr: Nitrobenzene-d5	77		100.0		76.9	45.3	117	0	0	
Surr: 2-Fluorobiphenyl	88		100.0		87.9	43	113	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503557

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	lcsd-18138		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 18138		RunNo: 24891					
Prep Date:	3/16/2015		Analysis Date: 3/17/2015		SeqNo: 733322		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	110		100.0		107	47.6	122	0	0	

Sample ID	mb-18139		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 18139		RunNo: 24913					
Prep Date:	3/16/2015		Analysis Date: 3/18/2015		SeqNo: 734001		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503557

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	mb-18139		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 18139		RunNo: 24913					
Prep Date:	3/16/2015		Analysis Date: 3/18/2015		SeqNo: 734001		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503557

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	mb-18139		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 18139		RunNo: 24913					
Prep Date:	3/16/2015		Analysis Date: 3/18/2015		SeqNo: 734001		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	130		200.0		66.2	17.6	104			
Surr: Phenol-d5	130		200.0		66.3	17.7	89.9			
Surr: 2,4,6-Tribromophenol	170		200.0		83.2	16.3	122			
Surr: Nitrobenzene-d5	64		100.0		64.2	45.3	117			
Surr: 2-Fluorobiphenyl	74		100.0		73.9	43	113			
Surr: 4-Terphenyl-d14	110		100.0		106	47.6	122			

Sample ID	lcs-18139		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 18139		RunNo: 24913					
Prep Date:	3/16/2015		Analysis Date: 3/18/2015		SeqNo: 734002		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	73	10	100.0	0	72.7	47.8	99.7			
4-Chloro-3-methylphenol	150	10	200.0	0	74.4	58.1	103			
2-Chlorophenol	130	10	200.0	0	66.8	49.5	96.8			
1,4-Dichlorobenzene	69	10	100.0	0	69.3	40.4	89.4			
2,4-Dinitrotoluene	62	10	100.0	0	61.7	38.6	91.3			
N-Nitrosodi-n-propylamine	73	10	100.0	0	73.0	53.9	95.6			
4-Nitrophenol	130	10	200.0	0	67.2	26.4	108			
Pentachlorophenol	130	20	200.0	0	67.4	36.5	86.6			
Phenol	150	10	200.0	0	73.1	29.3	108			
Pyrene	92	10	100.0	0	92.1	45.7	100			
1,2,4-Trichlorobenzene	77	10	100.0	0	76.6	39.3	94.5			
Surr: 2-Fluorophenol	150		200.0		73.7	17.6	104			
Surr: Phenol-d5	160		200.0		78.0	17.7	89.9			
Surr: 2,4,6-Tribromophenol	190		200.0		95.6	16.3	122			
Surr: Nitrobenzene-d5	69		100.0		68.9	45.3	117			
Surr: 2-Fluorobiphenyl	78		100.0		77.8	43	113			
Surr: 4-Terphenyl-d14	110		100.0		109	47.6	122			

Sample ID	lcsd-18139		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 18139		RunNo: 24913					
Prep Date:	3/16/2015		Analysis Date: 3/18/2015		SeqNo: 734003		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	80	10	100.0	0	79.8	47.8	99.7	9.31	28.2	
4-Chloro-3-methylphenol	160	10	200.0	0	81.1	58.1	103	8.59	24.4	
2-Chlorophenol	150	10	200.0	0	75.9	49.5	96.8	12.8	28.1	
1,4-Dichlorobenzene	77	10	100.0	0	77.3	40.4	89.4	10.9	31.2	
2,4-Dinitrotoluene	73	10	100.0	0	73.4	38.6	91.3	17.4	44.4	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503557

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	Icsd-18139		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 18139		RunNo: 24913					
Prep Date:	3/16/2015		Analysis Date: 3/18/2015		SeqNo: 734003		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Nitrosodi-n-propylamine	83	10	100.0	0	83.2	53.9	95.6	13.0	24.2	S
4-Nitrophenol	160	10	200.0	0	77.6	26.4	108	14.3	36.6	
Pentachlorophenol	150	20	200.0	0	76.0	36.5	86.6	12.0	29.5	
Phenol	160	10	200.0	0	80.7	29.3	108	9.97	30	
Pyrene	110	10	100.0	0	109	45.7	100	16.7	31	
1,2,4-Trichlorobenzene	79	10	100.0	0	79.1	39.3	94.5	3.21	24	
Surr: 2-Fluorophenol	160		200.0		82.2	17.6	104	0	0	
Surr: Phenol-d5	170		200.0		84.3	17.7	89.9	0	0	
Surr: 2,4,6-Tribromophenol	190		200.0		93.2	16.3	122	0	0	
Surr: Nitrobenzene-d5	75		100.0		74.9	45.3	117	0	0	
Surr: 2-Fluorobiphenyl	87		100.0		86.9	43	113	0	0	
Surr: 4-Terphenyl-d14	110		100.0		111	47.6	122	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

Sample Log-In Check List

Client Name: **Western Refining Gallup**

Work Order Number: **1503557**

RcptNo: **1**

Received by/date:

Logged By: **Lindsay Mangin**

03/12/15
3/12/2015 4:00:00 PM

Completed By: **Lindsay Mangin**

3/13/2015 7:59:52 AM

Reviewed By:

ja

03/13/15

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:

Adjusted? *OK*

Checked by: *W*

Special Handling (if applicable)

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

Person Notified:

Date:

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.0	Good	Yes			

Chain-of-Custody Record

Client: Western Refining Company

GALLUP REFINERY

Mailing Address:

92 GIANT CROSSING ROAD, GALLUP, NM 87301

Phone #: 505-722-3833

Email or Fax#: 505-863-0930

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:

X Standard ☐ Rush

Project Name:

2015 1ST QTR (MKTF)

PO #20825205

Project Manager:

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

Sampler: C. JOHNSON

On ice: ☒ Yes ☐ No

Sample Temperature: 30

Container Type and #

3-40ML VOA

HEAL No. 157355-7

Preservative Type

HCL

MISC

MISC

MISC

MISC

MISC

MISC

MISC

MISC

MISC

MISC

MISC

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MISC

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Container Type and #

3-40ML VOA

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Preservative Type

HCL

MISC

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

April 02, 2015

Cheryl Johnson

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

RE: 2015-1ST QTR

OrderNo.: 1503558

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 6 sample(s) on 3/12/2015 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', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503558

Date Reported: 4/2/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-1

Project: 2015-1ST QTR

Collection Date: 3/10/2015 1:40:00 PM

Lab ID: 1503558-001

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/13/2015 11:41:44 PM	18123
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/13/2015 11:41:44 PM	18123
Surr: DNOP	154	76.5-150	S	%REC	1	3/13/2015 11:41:44 PM	18123
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/13/2015 12:27:04 PM	R24831
Surr: BFB	85.4	80-120		%REC	1	3/13/2015 12:27:04 PM	R24831
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	3/13/2015 12:27:04 PM	R24831
Benzene	ND	1.0		µg/L	1	3/13/2015 12:27:04 PM	R24831
Toluene	ND	1.0		µg/L	1	3/13/2015 12:27:04 PM	R24831
Ethylbenzene	ND	1.0		µg/L	1	3/13/2015 12:27:04 PM	R24831
Xylenes, Total	ND	2.0		µg/L	1	3/13/2015 12:27:04 PM	R24831
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 12:27:04 PM	R24831
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 12:27:04 PM	R24831
Surr: 4-Bromofluorobenzene	99.4	80-120		%REC	1	3/13/2015 12:27:04 PM	R24831
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	0.35	0.10		mg/L	1	3/18/2015 5:02:48 AM	R24893
Chloride	82	10		mg/L	20	3/18/2015 5:15:13 AM	R24893
Bromide	1.4	0.10		mg/L	1	3/18/2015 5:02:48 AM	R24893
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	3/18/2015 5:02:48 AM	R24893
Sulfate	75	10		mg/L	20	3/18/2015 5:15:13 AM	R24893
Nitrate+Nitrite as N	5.6	1.0		mg/L	5	3/21/2015 6:24:33 PM	R24978
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.11	0.0020		mg/L	1	3/25/2015 9:24:55 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:24:55 PM	R25072
Calcium	89	1.0		mg/L	1	3/25/2015 9:24:55 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 9:24:55 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:24:55 PM	R25072
Iron	ND	0.020		mg/L	1	3/25/2015 9:24:55 PM	R25072
Magnesium	16	1.0		mg/L	1	3/25/2015 9:24:55 PM	R25072
Manganese	0.067	0.0020	*	mg/L	1	3/25/2015 9:24:55 PM	R25072
Potassium	ND	1.0		mg/L	1	3/25/2015 9:24:55 PM	R25072
Silver	ND	0.0050		mg/L	1	3/25/2015 9:24:55 PM	R25072
Sodium	310	5.0		mg/L	5	3/26/2015 3:11:59 PM	R25095
Zinc	ND	0.010		mg/L	1	3/25/2015 9:24:55 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.13	0.0020		mg/L	1	3/25/2015 7:56:26 PM	18307

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503558

Date Reported: 4/2/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-1

Project: 2015-1ST QTR

Collection Date: 3/10/2015 1:40:00 PM

Lab ID: 1503558-001

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Cadmium	ND	0.0020		mg/L	1	3/25/2015 7:56:26 PM	18307
Chromium	ND	0.0060		mg/L	1	3/25/2015 7:56:26 PM	18307
Copper	ND	0.0060		mg/L	1	3/25/2015 7:56:26 PM	18307
Iron	0.46	0.020	*	mg/L	1	3/25/2015 7:56:26 PM	18307
Manganese	0.20	0.0020	*	mg/L	1	3/25/2015 7:56:26 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 7:56:26 PM	18307
Zinc	ND	0.010		mg/L	1	3/25/2015 7:56:26 PM	18307
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/30/2015 3:39:50 PM	R25155
Lead	ND	0.0010		mg/L	1	3/26/2015 8:16:55 PM	R25105
Selenium	ND	0.020		mg/L	20	3/30/2015 4:56:20 PM	R25155
Uranium	0.013	0.0010		mg/L	1	3/26/2015 8:16:55 PM	R25105
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/25/2015 6:19:47 PM	18307
Lead	ND	0.0010		mg/L	1	3/25/2015 4:12:04 PM	18307
Selenium	ND	0.010		mg/L	10	3/25/2015 6:19:47 PM	18307
Uranium	0.013	0.0010		mg/L	1	3/25/2015 4:12:04 PM	18307
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/24/2015 3:15:54 PM	18286
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Acenaphthylene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Aniline	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Anthracene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Azobenzene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Benz(a)anthracene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Benzo(a)pyrene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Benzo(b)fluoranthene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Benzo(k)fluoranthene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Benzoic acid	ND	20		µg/L	1	3/18/2015 4:06:55 PM	18139
Benzyl alcohol	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 2 of 43
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503558

Date Reported: 4/2/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-1

Project: 2015-1ST QTR

Collection Date: 3/10/2015 1:40:00 PM

Lab ID: 1503558-001

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Butyl benzyl phthalate	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Carbazole	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
4-Chloroaniline	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
2-Chloronaphthalene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
2-Chlorophenol	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Chrysene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Di-n-butyl phthalate	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Di-n-octyl phthalate	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Dibenzofuran	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
1,2-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
1,3-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
1,4-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Diethyl phthalate	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Dimethyl phthalate	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
2,4-Dichlorophenol	ND	20		µg/L	1	3/18/2015 4:06:55 PM	18139
2,4-Dimethylphenol	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/18/2015 4:06:55 PM	18139
2,4-Dinitrophenol	ND	20		µg/L	1	3/18/2015 4:06:55 PM	18139
2,4-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
2,6-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Fluoranthene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Fluorene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Hexachlorobenzene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Hexachlorobutadiene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Hexachloroethane	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Isophorone	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
1-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
2-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
2-Methylphenol	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
3+4-Methylphenol	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
N-Nitrosodimethylamine	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 3 of 43
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503558

Date Reported: 4/2/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-1

Project: 2015-1ST QTR

Collection Date: 3/10/2015 1:40:00 PM

Lab ID: 1503558-001

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: DAM	
Naphthalene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
2-Nitroaniline	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
3-Nitroaniline	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
4-Nitroaniline	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Nitrobenzene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
2-Nitrophenol	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
4-Nitrophenol	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Pentachlorophenol	ND	20		µg/L	1	3/18/2015 4:06:55 PM	18139
Phenanthrene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Phenol	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Pyrene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Pyridine	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/18/2015 4:06:55 PM	18139
Surr: 2-Fluorophenol	56.8	17.6-104		%REC	1	3/18/2015 4:06:55 PM	18139
Surr: Phenol-d5	57.5	17.7-89.9		%REC	1	3/18/2015 4:06:55 PM	18139
Surr: 2,4,6-Tribromophenol	72.2	16.3-122		%REC	1	3/18/2015 4:06:55 PM	18139
Surr: Nitrobenzene-d5	70.1	45.3-117		%REC	1	3/18/2015 4:06:55 PM	18139
Surr: 2-Fluorobiphenyl	77.0	43-113		%REC	1	3/18/2015 4:06:55 PM	18139
Surr: 4-Terphenyl-d14	103	47.6-122		%REC	1	3/18/2015 4:06:55 PM	18139

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503558

Date Reported: 4/2/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EAST LDU

Project: 2015-1ST QTR

Collection Date: 3/10/2015 2:10:00 PM

Lab ID: 1503558-002

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	26	1.0		mg/L	1	3/16/2015 6:03:17 PM	18123
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/16/2015 6:03:17 PM	18123
Surr: DNOP	130	76.5-150		%REC	1	3/16/2015 6:03:17 PM	18123
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	9.4	1.0		mg/L	20	3/16/2015 3:11:11 PM	R24858
Surr: BFB	113	80-120		%REC	20	3/16/2015 3:11:11 PM	R24858
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	20	3/16/2015 3:11:11 PM	R24858
Benzene	1300	20		µg/L	20	3/16/2015 3:11:11 PM	R24858
Toluene	460	20		µg/L	20	3/16/2015 3:11:11 PM	R24858
Ethylbenzene	470	20		µg/L	20	3/16/2015 3:11:11 PM	R24858
Xylenes, Total	1900	40		µg/L	20	3/16/2015 3:11:11 PM	R24858
1,2,4-Trimethylbenzene	1100	20		µg/L	20	3/16/2015 3:11:11 PM	R24858
1,3,5-Trimethylbenzene	370	20		µg/L	20	3/16/2015 3:11:11 PM	R24858
Surr: 4-Bromofluorobenzene	132	80-120	S	%REC	20	3/16/2015 3:11:11 PM	R24858
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.14	0.0020		mg/L	1	3/25/2015 9:26:50 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:26:50 PM	R25072
Chromium	0.80	0.0060	*	mg/L	1	3/25/2015 9:26:50 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:26:50 PM	R25072
Iron	0.50	0.020	*	mg/L	1	3/25/2015 9:26:50 PM	R25072
Manganese	6.4	0.020	*	mg/L	10	3/26/2015 3:13:39 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 9:26:50 PM	R25072
Zinc	0.028	0.010		mg/L	1	3/25/2015 9:26:50 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.16	0.0020		mg/L	1	3/25/2015 7:58:24 PM	18307
Cadmium	ND	0.0020		mg/L	1	3/25/2015 7:58:24 PM	18307
Chromium	0.85	0.0060	*	mg/L	1	3/25/2015 7:58:24 PM	18307
Copper	ND	0.0060		mg/L	1	3/25/2015 7:58:24 PM	18307
Iron	3.0	0.20	*	mg/L	10	3/26/2015 2:33:29 PM	18307
Manganese	6.5	0.020	*	mg/L	10	3/26/2015 2:33:29 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 7:58:24 PM	18307
Zinc	0.054	0.010		mg/L	1	3/25/2015 7:58:24 PM	18307
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	0.0037	0.0020		mg/L	2	3/26/2015 8:19:58 PM	R25105
Lead	ND	0.0020		mg/L	2	3/26/2015 8:19:58 PM	R25105
Selenium	0.0030	0.0020		mg/L	2	3/26/2015 8:19:58 PM	R25105

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503558

Date Reported: 4/2/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EAST LDU

Project: 2015-1ST QTR

Collection Date: 3/10/2015 2:10:00 PM

Lab ID: 1503558-002

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Uranium	ND	0.0020		mg/L	2	3/26/2015 8:19:58 PM	R25105
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.0047	0.0010		mg/L	1	3/25/2015 4:21:38 PM	18307
Lead	ND	0.0010		mg/L	1	3/25/2015 4:21:38 PM	18307
Selenium	0.0024	0.0010		mg/L	1	3/25/2015 4:21:38 PM	18307
Uranium	0.0013	0.0010		mg/L	1	3/25/2015 4:21:38 PM	18307
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/24/2015 3:17:44 PM	18286

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 6 of 43
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503558

Date Reported: 4/2/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: WEST LDU

Project: 2015-1ST QTR

Collection Date: 3/10/2015 2:30:00 PM

Lab ID: 1503558-003

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	12	1.0		mg/L	1	3/16/2015 6:25:05 PM	18123
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/16/2015 6:25:05 PM	18123
Surr: DNOP	134	76.5-150		%REC	1	3/16/2015 6:25:05 PM	18123
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	2.7	0.25		mg/L	5	3/16/2015 1:43:38 PM	R24858
Surr: BFB	122	80-120	S	%REC	5	3/16/2015 1:43:38 PM	R24858
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	12		µg/L	5	3/16/2015 1:43:38 PM	R24858
Benzene	450	5.0		µg/L	5	3/16/2015 1:43:38 PM	R24858
Toluene	86	5.0		µg/L	5	3/16/2015 1:43:38 PM	R24858
Ethylbenzene	85	5.0		µg/L	5	3/16/2015 1:43:38 PM	R24858
Xylenes, Total	200	10		µg/L	5	3/16/2015 1:43:38 PM	R24858
1,2,4-Trimethylbenzene	91	5.0		µg/L	5	3/16/2015 1:43:38 PM	R24858
1,3,5-Trimethylbenzene	37	5.0		µg/L	5	3/16/2015 1:43:38 PM	R24858
Surr: 4-Bromofluorobenzene	133	80-120	S	%REC	5	3/16/2015 1:43:38 PM	R24858
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.27	0.0020		mg/L	1	3/25/2015 9:37:11 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:37:11 PM	R25072
Chromium	0.66	0.0060	*	mg/L	1	3/25/2015 9:37:11 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:37:11 PM	R25072
Iron	0.42	0.020	*	mg/L	1	3/25/2015 9:37:11 PM	R25072
Manganese	1.3	0.010	*	mg/L	5	3/26/2015 3:15:19 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 9:37:11 PM	R25072
Zinc	0.033	0.010		mg/L	1	3/25/2015 9:37:11 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.43	0.0020		mg/L	1	3/25/2015 8:00:13 PM	18307
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:00:13 PM	18307
Chromium	0.76	0.0060	*	mg/L	1	3/25/2015 8:00:13 PM	18307
Copper	ND	0.0060		mg/L	1	3/25/2015 8:00:13 PM	18307
Iron	7.1	0.20	*	mg/L	10	3/26/2015 2:35:09 PM	18307
Manganese	3.3	0.020	*	mg/L	10	3/26/2015 2:35:09 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 8:00:13 PM	18307
Zinc	0.21	0.010		mg/L	1	3/25/2015 8:00:13 PM	18307
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	0.0033	0.0020		mg/L	2	3/26/2015 8:29:09 PM	R25105
Lead	ND	0.0050		mg/L	5	3/30/2015 3:42:53 PM	R25155
Selenium	0.0052	0.0020		mg/L	2	3/26/2015 8:29:09 PM	R25105

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503558

Date Reported: 4/2/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: WEST LDU

Project: 2015-1ST QTR

Collection Date: 3/10/2015 2:30:00 PM

Lab ID: 1503558-003

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Uranium	ND	0.0050		mg/L	5	3/30/2015 3:42:53 PM	R25155
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.0046	0.0010		mg/L	1	3/25/2015 4:24:49 PM	18307
Lead	0.0016	0.0010		mg/L	1	3/25/2015 4:24:49 PM	18307
Selenium	0.0046	0.0010		mg/L	1	3/25/2015 4:24:49 PM	18307
Uranium	0.0012	0.0010		mg/L	1	3/25/2015 4:24:49 PM	18307
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/24/2015 3:19:26 PM	18286

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 8 of 43
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503558

Date Reported: 4/2/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: STP1-NW

Project: 2015-1ST QTR

Collection Date: 3/10/2015 2:58:00 PM

Lab ID: 1503558-004

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/14/2015 1:01:52 AM	18123
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/14/2015 1:01:52 AM	18123
Surr: DNOP	139	76.5-150		%REC	1	3/14/2015 1:01:52 AM	18123
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/13/2015 4:49:58 PM	R24831
Surr: BFB	85.9	80-120		%REC	1	3/13/2015 4:49:58 PM	R24831
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	ND	0.10		mg/L	1	3/18/2015 5:27:38 AM	R24893
Chloride	2400	100		mg/L	200	3/25/2015 2:34:52 AM	R25049
Bromide	3.9	0.10		mg/L	1	3/18/2015 5:27:38 AM	R24893
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	3/18/2015 5:27:38 AM	R24893
Sulfate	150	10		mg/L	20	3/18/2015 5:40:03 AM	R24893
Nitrate+Nitrite as N	22	2.0	*	mg/L	10	3/21/2015 7:14:12 PM	R24978
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.18	0.0020		mg/L	1	3/25/2015 9:39:08 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:39:08 PM	R25072
Calcium	95	1.0		mg/L	1	3/25/2015 9:39:08 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 9:39:08 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:39:08 PM	R25072
Iron	0.091	0.020		mg/L	1	3/25/2015 9:39:08 PM	R25072
Magnesium	13	1.0		mg/L	1	3/25/2015 9:39:08 PM	R25072
Manganese	0.0039	0.0020		mg/L	1	3/26/2015 3:16:57 PM	R25095
Potassium	6.7	1.0		mg/L	1	3/25/2015 9:39:08 PM	R25072
Silver	ND	0.0050		mg/L	1	3/25/2015 9:39:08 PM	R25072
Sodium	1300	50		mg/L	50	3/26/2015 3:18:44 PM	R25095
Zinc	0.034	0.010		mg/L	1	3/25/2015 9:39:08 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.23	0.0020		mg/L	1	3/25/2015 8:01:54 PM	18307
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:01:54 PM	18307
Chromium	ND	0.0060		mg/L	1	3/25/2015 8:01:54 PM	18307
Copper	ND	0.0060		mg/L	1	3/25/2015 8:01:54 PM	18307
Iron	4.3	0.20	*	mg/L	10	3/26/2015 2:41:55 PM	18307
Manganese	0.075	0.0020	*	mg/L	1	3/25/2015 8:01:54 PM	18307
Silver	ND	0.0050		mg/L	1	3/25/2015 8:01:54 PM	18307
Zinc	0.089	0.010		mg/L	1	3/25/2015 8:01:54 PM	18307
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.050		mg/L	50	3/30/2015 5:05:34 PM	R25155

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503558

Date Reported: 4/2/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: STP1-NW

Project: 2015-1ST QTR

Collection Date: 3/10/2015 2:58:00 PM

Lab ID: 1503558-004

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Lead	ND	0.0010		mg/L	1	3/26/2015 8:44:28 PM	R25105
Selenium	ND	0.050		mg/L	50	3/30/2015 5:05:34 PM	R25155
Uranium	0.023	0.0010		mg/L	1	3/26/2015 8:44:28 PM	R25105
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/27/2015 3:29:21 PM	18307
Lead	ND	0.010		mg/L	10	3/25/2015 6:29:24 PM	18307
Selenium	0.026	0.010		mg/L	10	3/25/2015 6:29:24 PM	18307
Uranium	0.020	0.010		mg/L	10	3/25/2015 6:29:24 PM	18307
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/24/2015 3:21:10 PM	18286
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Acenaphthylene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Aniline	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Anthracene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Azobenzene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Benz(a)anthracene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Benzo(a)pyrene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Benzo(b)fluoranthene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Benzo(k)fluoranthene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Benzoic acid	ND	20		µg/L	1	3/19/2015 4:38:17 PM	18139
Benzyl alcohol	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Butyl benzyl phthalate	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Carbazole	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
4-Chloroaniline	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
2-Chloronaphthalene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
2-Chlorophenol	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Chrysene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Di-n-butyl phthalate	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Di-n-octyl phthalate	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503558

Date Reported: 4/2/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: STP1-NW

Project: 2015-1ST QTR

Collection Date: 3/10/2015 2:58:00 PM

Lab ID: 1503558-004

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Dibenzofuran	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
1,2-Dichlorobenzene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
1,3-Dichlorobenzene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
1,4-Dichlorobenzene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Diethyl phthalate	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Dimethyl phthalate	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
2,4-Dichlorophenol	ND	20		µg/L	1	3/19/2015 4:38:17 PM	18139
2,4-Dimethylphenol	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/19/2015 4:38:17 PM	18139
2,4-Dinitrophenol	ND	20		µg/L	1	3/19/2015 4:38:17 PM	18139
2,4-Dinitrotoluene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
2,6-Dinitrotoluene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Fluoranthene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Fluorene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Hexachlorobenzene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Hexachlorobutadiene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Hexachloroethane	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Isophorone	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
1-Methylnaphthalene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
2-Methylnaphthalene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
2-Methylphenol	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
3+4-Methylphenol	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
N-Nitrosodimethylamine	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Naphthalene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
2-Nitroaniline	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
3-Nitroaniline	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
4-Nitroaniline	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Nitrobenzene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
2-Nitrophenol	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
4-Nitrophenol	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Pentachlorophenol	ND	20		µg/L	1	3/19/2015 4:38:17 PM	18139
Phenanthrene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Phenol	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503558

Date Reported: 4/2/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: STP1-NW

Project: 2015-1ST QTR

Collection Date: 3/10/2015 2:58:00 PM

Lab ID: 1503558-004

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Pyrene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Pyridine	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/19/2015 4:38:17 PM	18139
Surr: 2-Fluorophenol	61.0	17.6-104		%REC	1	3/19/2015 4:38:17 PM	18139
Surr: Phenol-d5	46.9	17.7-89.9		%REC	1	3/19/2015 4:38:17 PM	18139
Surr: 2,4,6-Tribromophenol	83.2	16.3-122		%REC	1	3/19/2015 4:38:17 PM	18139
Surr: Nitrobenzene-d5	75.3	45.3-117		%REC	1	3/19/2015 4:38:17 PM	18139
Surr: 2-Fluorobiphenyl	77.3	43-113		%REC	1	3/19/2015 4:38:17 PM	18139
Surr: 4-Terphenyl-d14	94.6	47.6-122		%REC	1	3/19/2015 4:38:17 PM	18139
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
Toluene	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
Ethylbenzene	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
Naphthalene	ND	2.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
1-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
2-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
Acetone	ND	10		µg/L	1	3/13/2015 12:03:12 PM	R24834
Bromobenzene	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
Bromodichloromethane	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
Bromoform	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
Bromomethane	ND	3.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
2-Butanone	ND	10		µg/L	1	3/13/2015 12:03:12 PM	R24834
Carbon disulfide	ND	10		µg/L	1	3/13/2015 12:03:12 PM	R24834
Carbon Tetrachloride	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
Chlorobenzene	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
Chloroethane	ND	2.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
Chloroform	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
Chloromethane	ND	3.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
2-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
4-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
cis-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503558

Date Reported: 4/2/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: STP1-NW

Project: 2015-1ST QTR

Collection Date: 3/10/2015 2:58:00 PM

Lab ID: 1503558-004

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
Dibromochloromethane	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
Dibromomethane	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
1,1-Dichloroethane	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
1,1-Dichloroethene	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
1,2-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
1,3-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
2,2-Dichloropropane	ND	2.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
1,1-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
Hexachlorobutadiene	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
2-Hexanone	ND	10		µg/L	1	3/13/2015 12:03:12 PM	R24834
Isopropylbenzene	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
4-Isopropyltoluene	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
4-Methyl-2-pentanone	ND	10		µg/L	1	3/13/2015 12:03:12 PM	R24834
Methylene Chloride	ND	3.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
n-Butylbenzene	ND	3.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
n-Propylbenzene	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
sec-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
Styrene	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
tert-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
trans-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
Trichlorofluoromethane	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
Vinyl chloride	ND	1.0		µg/L	1	3/13/2015 12:03:12 PM	R24834
Xylenes, Total	ND	1.5		µg/L	1	3/13/2015 12:03:12 PM	R24834
Surr: 1,2-Dichloroethane-d4	92.8	70-130		%REC	1	3/13/2015 12:03:12 PM	R24834

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.
	E Value above quantitation range
	J Analyte detected below quantitation limits
	O RSD is greater than RSDlimit
	R RPD outside accepted recovery limits
	S Spike Recovery outside accepted recovery limits

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503558

Date Reported: 4/2/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: STP1-NW

Project: 2015-1ST QTR

Collection Date: 3/10/2015 2:58:00 PM

Lab ID: 1503558-004

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: cadg	
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	3/13/2015 12:03:12 PM	R24834
Surr: Dibromofluoromethane	100	70-130		%REC	1	3/13/2015 12:03:12 PM	R24834
Surr: Toluene-d8	95.5	70-130		%REC	1	3/13/2015 12:03:12 PM	R24834

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 14 of 43
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503558

Date Reported: 4/2/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015-1ST QTR

Collection Date: 3/10/2015

Lab ID: 1503558-005

Matrix: AQUEOUS

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: KJH	
Benzene	ND	1.0		µg/L	1	3/19/2015 7:11:29 PM	R24939
Toluene	ND	1.0		µg/L	1	3/19/2015 7:11:29 PM	R24939
Ethylbenzene	ND	1.0		µg/L	1	3/19/2015 7:11:29 PM	R24939
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/19/2015 7:11:29 PM	R24939
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/19/2015 7:11:29 PM	R24939
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/19/2015 7:11:29 PM	R24939
Xylenes, Total	ND	1.5		µg/L	1	3/19/2015 7:11:29 PM	R24939
Surr: 1,2-Dichloroethane-d4	83.3	70-130		%REC	1	3/19/2015 7:11:29 PM	R24939
Surr: 4-Bromofluorobenzene	91.7	70-130		%REC	1	3/19/2015 7:11:29 PM	R24939
Surr: Dibromofluoromethane	88.5	70-130		%REC	1	3/19/2015 7:11:29 PM	R24939
Surr: Toluene-d8	104	70-130		%REC	1	3/19/2015 7:11:29 PM	R24939

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 15 of 43
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503558

Date Reported: 4/2/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Trip Blank

Project: 2015-1ST QTR

Collection Date:

Lab ID: 1503558-006

Matrix: TRIP BLANK

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/13/2015 5:19:15 PM	R24831
Surr: BFB	87.0	80-120		%REC	1	3/13/2015 5:19:15 PM	R24831
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	3/13/2015 5:19:15 PM	R24831
Benzene	ND	1.0		µg/L	1	3/13/2015 5:19:15 PM	R24831
Toluene	ND	1.0		µg/L	1	3/13/2015 5:19:15 PM	R24831
Ethylbenzene	ND	1.0		µg/L	1	3/13/2015 5:19:15 PM	R24831
Xylenes, Total	ND	2.0		µg/L	1	3/13/2015 5:19:15 PM	R24831
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 5:19:15 PM	R24831
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 5:19:15 PM	R24831
Surr: 4-Bromofluorobenzene	101	80-120		%REC	1	3/13/2015 5:19:15 PM	R24831
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
Toluene	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
Ethylbenzene	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
Naphthalene	ND	2.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
1-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
2-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
Acetone	ND	10		µg/L	1	3/13/2015 1:29:31 PM	R24834
Bromobenzene	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
Bromodichloromethane	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
Bromoform	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
Bromomethane	ND	3.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
2-Butanone	ND	10		µg/L	1	3/13/2015 1:29:31 PM	R24834
Carbon disulfide	ND	10		µg/L	1	3/13/2015 1:29:31 PM	R24834
Carbon Tetrachloride	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
Chlorobenzene	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
Chloroethane	ND	2.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
Chloroform	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
Chloromethane	ND	3.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
2-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
4-Chlorotoluene	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
cis-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503558

Date Reported: 4/2/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Trip Blank

Project: 2015-1ST QTR

Collection Date:

Lab ID: 1503558-006

Matrix: TRIP BLANK

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
Dibromochloromethane	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
Dibromomethane	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
1,1-Dichloroethane	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
1,1-Dichloroethene	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
1,2-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
1,3-Dichloropropane	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
2,2-Dichloropropane	ND	2.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
1,1-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
Hexachlorobutadiene	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
2-Hexanone	ND	10		µg/L	1	3/13/2015 1:29:31 PM	R24834
Isopropylbenzene	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
4-Isopropyltoluene	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
4-Methyl-2-pentanone	ND	10		µg/L	1	3/13/2015 1:29:31 PM	R24834
Methylene Chloride	ND	3.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
n-Butylbenzene	ND	3.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
n-Propylbenzene	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
sec-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
Styrene	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
tert-Butylbenzene	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
trans-1,2-DCE	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
Trichlorofluoromethane	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
Vinyl chloride	ND	1.0		µg/L	1	3/13/2015 1:29:31 PM	R24834
Xylenes, Total	ND	1.5		µg/L	1	3/13/2015 1:29:31 PM	R24834

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503558

Date Reported: 4/2/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Trip Blank

Project: 2015-1ST QTR

Collection Date:

Lab ID: 1503558-006

Matrix: TRIP BLANK

Received Date: 3/12/2015 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: cadg	
Surr: 1,2-Dichloroethane-d4	91.6	70-130		%REC	1	3/13/2015 1:29:31 PM	R24834
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	3/13/2015 1:29:31 PM	R24834
Surr: Dibromofluoromethane	99.1	70-130		%REC	1	3/13/2015 1:29:31 PM	R24834
Surr: Toluene-d8	94.7	70-130		%REC	1	3/13/2015 1:29:31 PM	R24834

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 18 of 43
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503558

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1ST QTR

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID:	R25072	RunNo:	25072					
Prep Date:		Analysis Date:	3/25/2015	SeqNo:	739895	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	SampType:	LCS	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW	Batch ID:	R25072	RunNo:	25072					
Prep Date:		Analysis Date:	3/25/2015	SeqNo:	739896	Units:	mg/L			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.7	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.3	85	115			
Calcium	51	1.0	50.00	0	101	85	115			
Chromium	0.49	0.0060	0.5000	0	97.5	85	115			
Copper	0.49	0.0060	0.5000	0	97.2	85	115			
Iron	0.48	0.020	0.5000	0	95.1	85	115			
Magnesium	50	1.0	50.00	0	101	85	115			
Manganese	0.47	0.0020	0.5000	0	94.7	85	115			
Potassium	49	1.0	50.00	0	97.8	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.48	0.010	0.5000	0	96.8	85	115			

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID:	R25072	RunNo:	25072					
Prep Date:		Analysis Date:	3/25/2015	SeqNo:	739897	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								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503558

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1ST QTR

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID:	R25072	RunNo:	25072					
Prep Date:		Analysis Date:	3/25/2015	SeqNo:	739897	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW	Batch ID:	R25072	RunNo:	25072					
Prep Date:		Analysis Date:	3/25/2015	SeqNo:	739898	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	97.2	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.9	85	115			
Calcium	50	1.0	50.00	0	101	85	115			
Chromium	0.49	0.0060	0.5000	0	97.9	85	115			
Copper	0.49	0.0060	0.5000	0	97.0	85	115			
Iron	0.48	0.020	0.5000	0	96.7	85	115			
Magnesium	50	1.0	50.00	0	100	85	115			
Manganese	0.48	0.0020	0.5000	0	95.0	85	115			
Potassium	49	1.0	50.00	0	97.4	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.49	0.010	0.5000	0	97.2	85	115			

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID:	R25095	RunNo:	25095					
Prep Date:		Analysis Date:	3/26/2015	SeqNo:	740730	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	ND	0.0020								
Sodium	ND	1.0								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW	Batch ID:	R25095	RunNo:	25095					
Prep Date:		Analysis Date:	3/26/2015	SeqNo:	740731	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	0.47	0.0020	0.5000	0	94.8	85	115			
Sodium	49	1.0	50.00	0	97.8	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503558

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1ST QTR

Sample ID	MB-18307		SampType: MBLK		TestCode: EPA Method 200.7: Total Metals					
Client ID:	PBW		Batch ID: 18307		RunNo: 25072					
Prep Date:	3/24/2015		Analysis Date: 3/25/2015		SeqNo: 739891		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-18307		SampType: LCS		TestCode: EPA Method 200.7: Total Metals					
Client ID:	LCSW		Batch ID: 18307		RunNo: 25072					
Prep Date:	3/24/2015		Analysis Date: 3/25/2015		SeqNo: 739892		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	97.4	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.0	85	115			
Chromium	0.49	0.0060	0.5000	0	98.2	85	115			
Copper	0.49	0.0060	0.5000	0	97.8	85	115			
Iron	0.49	0.020	0.5000	0	98.1	85	115			
Manganese	0.48	0.0020	0.5000	0	95.4	85	115			
Silver	0.11	0.0050	0.1000	0	106	85	115			
Zinc	0.48	0.010	0.5000	0	97.0	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503558

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1ST QTR

Sample ID	LCS		SampType: LCS			TestCode: EPA 200.8: Dissolved Metals				
Client ID:	LCSW		Batch ID: R25105			RunNo: 25105				
Prep Date:			Analysis Date: 3/26/2015			SeqNo: 741199		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	96.8	85	115			
Lead	0.024	0.0010	0.02500	0	94.3	85	115			
Selenium	0.024	0.0010	0.02500	0	96.7	85	115			
Uranium	0.024	0.0010	0.02500	0	96.5	85	115			

Sample ID	LCS		SampType: LCS			TestCode: EPA 200.8: Dissolved Metals				
Client ID:	LCSW		Batch ID: R25105			RunNo: 25105				
Prep Date:			Analysis Date: 3/26/2015			SeqNo: 741200		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	95.0	85	115			
Lead	0.024	0.0010	0.02500	0	95.1	85	115			
Selenium	0.023	0.0010	0.02500	0	93.9	85	115			
Uranium	0.024	0.0010	0.02500	0	95.2	85	115			

Sample ID	LCS		SampType: LCS			TestCode: EPA 200.8: Dissolved Metals				
Client ID:	LCSW		Batch ID: R25105			RunNo: 25105				
Prep Date:			Analysis Date: 3/26/2015			SeqNo: 741201		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	96.8	85	115			
Lead	0.023	0.0010	0.02500	0	91.2	85	115			
Selenium	0.024	0.0010	0.02500	0	96.4	85	115			
Uranium	0.023	0.0010	0.02500	0	90.3	85	115			

Sample ID	MB		SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals				
Client ID:	PBW		Batch ID: R25105			RunNo: 25105				
Prep Date:			Analysis Date: 3/26/2015			SeqNo: 741202		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	MB		SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals				
Client ID:	PBW		Batch ID: R25105			RunNo: 25105				
Prep Date:			Analysis Date: 3/26/2015			SeqNo: 741203		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
E Value above quantitation range	H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit	P Sample pH Not In Range
R RPD outside accepted recovery limits	RL Reporting Detection Limit
S Spike Recovery outside accepted recovery limits	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503558

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1ST QTR

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R25105			RunNo: 25105					
Prep Date:		Analysis Date: 3/26/2015			SeqNo: 741203		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R25105			RunNo: 25105					
Prep Date:		Analysis Date: 3/26/2015			SeqNo: 741204		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	1503558-003EMS			SampType:	MS		TestCode:	EPA 200.8: Dissolved Metals			
Client ID:	WEST LDU			Batch ID:	R25105		RunNo:	25105			
Prep Date:				Analysis Date:	3/26/2015		SeqNo:	741213		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Arsenic	0.051	0.0020	0.05000	0.003296	96.3	70	130				
Selenium	0.046	0.0020	0.05000	0.005207	81.7	70	130				

Sample ID	1503558-003EMSD		SampType: MSD		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	WEST LDU		Batch ID: R25105		RunNo: 25105					
Prep Date:			Analysis Date: 3/26/2015		SeqNo: 741214		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.054	0.0020	0.05000	0.003296	102	70	130	5.10	20	
Selenium	0.050	0.0020	0.05000	0.005207	89.0	70	130	7.63	20	

Sample ID	1503558-003EMS		SampType: MS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	WEST LDU		Batch ID: R25155		RunNo: 25155					
Prep Date:			Analysis Date: 3/30/2015		SeqNo: 743898		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.13	0.0050	0.1250	0	107	70	130			
Uranium	0.15	0.0050	0.1250	0.0005993	118	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503558

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1ST QTR

Sample ID	1503558-003EMSD		SampType: MSD		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	WEST LDU		Batch ID: R25155		RunNo: 25155					
Prep Date:			Analysis Date: 3/30/2015		SeqNo: 743899		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.13	0.0050	0.1250	0	103	70	130	3.68	20	
Uranium	0.14	0.0050	0.1250	0.0005993	114	70	130	3.35	20	

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25155		RunNo: 25155					
Prep Date:			Analysis Date: 3/30/2015		SeqNo: 743933		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	99.2	85	115			
Lead	0.025	0.0010	0.02500	0	99.7	85	115			
Selenium	0.025	0.0010	0.02500	0	100	85	115			
Uranium	0.025	0.0010	0.02500	0	102	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25155		RunNo: 25155					
Prep Date:			Analysis Date: 3/30/2015		SeqNo: 743934		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	97.2	85	115			
Lead	0.025	0.0010	0.02500	0	99.8	85	115			
Selenium	0.025	0.0010	0.02500	0	98.0	85	115			
Uranium	0.026	0.0010	0.02500	0	102	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25155		RunNo: 25155					
Prep Date:			Analysis Date: 3/30/2015		SeqNo: 743935		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	99.0	85	115			
Lead	0.025	0.0010	0.02500	0	99.2	85	115			
Selenium	0.024	0.0010	0.02500	0	97.6	85	115			
Uranium	0.025	0.0010	0.02500	0	101	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R25155			RunNo: 25155					
Prep Date:		Analysis Date: 3/30/2015			SeqNo: 743936		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503558

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1ST QTR

Sample ID	MB	SampType:	MBLK	TestCode:	EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID:	R25155	RunNo:	25155					
Prep Date:		Analysis Date:	3/30/2015	SeqNo:	743936	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	MB	SampType:	MBLK	TestCode:	EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID:	R25155	RunNo:	25155					
Prep Date:		Analysis Date:	3/30/2015	SeqNo:	743937	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	MB	SampType:	MBLK	TestCode:	EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID:	R25155	RunNo:	25155					
Prep Date:		Analysis Date:	3/30/2015	SeqNo:	743938	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503558

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1ST QTR

Sample ID	1503558-001FMSDL		SampType:	MSDLL		TestCode:	200.8 ICPMS Metals:Total				
Client ID:	NAPIS-1		Batch ID:	18307		RunNo:	25061				
Prep Date:	3/24/2015		Analysis Date:	3/25/2015		SeqNo:	740148		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Lead	0.028	0.0010	0.02500	0.0006167	109	70	130	0.604	20		
Uranium	0.042	0.0010	0.02500	0.01301	116	70	130	1.61	20		

Sample ID	1503558-001FMSLL		SampType: MSLL		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	NAPIS-1		Batch ID: 18307		RunNo: 25061					
Prep Date:	3/24/2015		Analysis Date: 3/25/2015		SeqNo: 740149		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.028	0.0010	0.02500	0.0006167	110	70	130			
Uranium	0.043	0.0010	0.02500	0.01301	119	70	130			

Sample ID	LLLCS-18307		SampType: LCSLL		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	BatchQC		Batch ID: 18307		RunNo: 25061					
Prep Date:	3/24/2015		Analysis Date: 3/25/2015		SeqNo: 740312		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	99.8	85	115			
Lead	0.026	0.0010	0.02500	0	103	85	115			
Selenium	0.024	0.0010	0.02500	0	95.1	85	115			
Uranium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID	MB-18307	SampType:	MBLK		TestCode:	200.8 ICPMS Metals:Total				
Client ID:	PBW	Batch ID:	18307		RunNo:	25061				
Prep Date:	3/24/2015	Analysis Date:	3/25/2015		SeqNo:	740314	Units:	mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503558

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1ST QTR

Sample ID	MB-18286	SampType:	MBLK	TestCode:	EPA Method 245.1: Mercury					
Client ID:	PBW	Batch ID:	18286	RunNo:	25035					
Prep Date:	3/23/2015	Analysis Date:	3/24/2015	SeqNo:	738271	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	LCS-18286	SampType:	LCS	TestCode:	EPA Method 245.1: Mercury					
Client ID:	LCSW	Batch ID:	18286	RunNo:	25035					
Prep Date:	3/23/2015	Analysis Date:	3/24/2015	SeqNo:	738272	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0054	0.00020	0.005000	0	108	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503558

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1ST QTR

Sample ID MB	SampType: MBLK		TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch ID: R24893		RunNo: 24893							
Prep Date:	Analysis Date: 3/17/2015		SeqNo: 733357		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								

Sample ID LCS	SampType: LCS		TestCode: EPA Method 300.0: Anions							
Client ID: LCSW	Batch ID: R24893		RunNo: 24893							
Prep Date:	Analysis Date: 3/17/2015		SeqNo: 733358		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	4.9	0.50	5.000	0	97.7	90	110			
Bromide	2.5	0.10	2.500	0	101	90	110			
Phosphorus, Orthophosphate (As P	5.1	0.50	5.000	0	102	90	110			
Sulfate	10	0.50	10.00	0	99.7	90	110			

Sample ID MB	SampType: MBLK		TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch ID: R24978		RunNo: 24978							
Prep Date:	Analysis Date: 3/20/2015		SeqNo: 736997		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: R24978		RunNo: 24978							
Prep Date:	Analysis Date: 3/20/2015		SeqNo: 736998		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	103	90	110			

Sample ID MB	SampType: MBLK		TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch ID: R24978		RunNo: 24978							
Prep Date:	Analysis Date: 3/20/2015		SeqNo: 737046		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.
 E Value above quantitation range
 J Analyte detected below quantitation limits
 O RSD is greater than RSDlimit
 R RPD outside accepted recovery limits
 S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503558

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1ST QTR

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSW		Batch ID: R24978		RunNo: 24978					
Prep Date:			Analysis Date: 3/20/2015		SeqNo: 737047		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: R24978		RunNo: 24978					
Prep Date:			Analysis Date: 3/21/2015		SeqNo: 737100		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: R24978		RunNo: 24978					
Prep Date:			Analysis Date: 3/21/2015		SeqNo: 737101		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	103	90	110			

Sample ID	MB		SampType: MBLK		TestCode: EPA Method 300.0: Anions					
Client ID:	PBW		Batch ID: R25049		RunNo: 25049					
Prep Date:			Analysis Date: 3/24/2015		SeqNo: 739054		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSW		Batch ID: R25049		RunNo: 25049					
Prep Date:			Analysis Date: 3/24/2015		SeqNo: 739055		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.9	0.50	5.000	0	98.4	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503558

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1ST QTR

Sample ID	MB-18123		SampType: MBLK		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	PBW		Batch ID: 18123		RunNo: 24810					
Prep Date:	3/13/2015		Analysis Date: 3/13/2015		SeqNo: 731809		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	1.5		1.000		146	76.5	150			

Sample ID	LCS-18123		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	LCSW		Batch ID: 18123		RunNo: 24848					
Prep Date:	3/13/2015		Analysis Date: 3/16/2015		SeqNo: 731923		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.9	1.0	5.000	0	138	60.1	156			
Surr: DNOP	0.89		0.5000		177	76.5	150			S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503558

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1ST QTR

Sample ID 5ML RB	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBW	Batch ID: R24831		RunNo: 24831							
Prep Date:	Analysis Date: 3/13/2015		SeqNo: 731426		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		88.8	80	120			

Sample ID 2.5UG GRO LCS	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSW	Batch ID: R24831		RunNo: 24831							
Prep Date:	Analysis Date: 3/13/2015		SeqNo: 731427		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0	92.2	80	120			
Surr: BFB	19		20.00		97.2	80	120			

Sample ID 5ML RB	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBW	Batch ID: R24858		RunNo: 24858							
Prep Date:	Analysis Date: 3/16/2015		SeqNo: 732143		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		87.6	80	120			

Sample ID 2.5UG GRO LCS	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSW	Batch ID: R24858		RunNo: 24858							
Prep Date:	Analysis Date: 3/16/2015		SeqNo: 732146		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.41	0.050	0.5000	0	81.5	80	120			
Surr: BFB	19		20.00		96.2	80	120			

Sample ID 1503558-002BMS	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: EAST LDU	Batch ID: R24858		RunNo: 24858							
Prep Date:	Analysis Date: 3/16/2015		SeqNo: 732182		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	1.0	10.00	9.416	89.0	51	131			
Surr: BFB	490		400.0		123	80	120			S

Sample ID 1503558-002BMSD	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: EAST LDU	Batch ID: R24858		RunNo: 24858							
Prep Date:	Analysis Date: 3/16/2015		SeqNo: 732183		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503558

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1ST QTR

Sample ID 1503558-002BMSD		SampType: MSD			TestCode: EPA Method 8015D: Gasoline Range					
Client ID: EAST LDU		Batch ID: R24858			RunNo: 24858					
Prep Date:		Analysis Date: 3/16/2015			SeqNo: 732183		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	1.0	10.00	9.416	86.8	51	131	1.23	20	
Surr: BFB	490		400.0		122	80	120	0	0	S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503558

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1ST QTR

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBW	Batch ID:	R24831	RunNo:	24831					
Prep Date:		Analysis Date:	3/13/2015	SeqNo:	731454	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5								
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
Surr: 4-Bromofluorobenzene	22		20.00		110	80	120			

Sample ID	100NG BTEX LCS	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSW	Batch ID:	R24831	RunNo:	24831					
Prep Date:		Analysis Date:	3/13/2015	SeqNo:	731455	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	19	2.5	20.00	0	93.0	72.5	125			
Benzene	22	1.0	20.00	0	109	80	120			
Toluene	21	1.0	20.00	0	107	80	120			
Ethylbenzene	21	1.0	20.00	0	105	80	120			
Xylenes, Total	63	2.0	60.00	0	105	80	120			
1,2,4-Trimethylbenzene	21	1.0	20.00	0	107	80	120			
1,3,5-Trimethylbenzene	21	1.0	20.00	0	106	80	120			
Surr: 4-Bromofluorobenzene	24		20.00		121	80	120			S

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBW	Batch ID:	R24858	RunNo:	24858					
Prep Date:		Analysis Date:	3/16/2015	SeqNo:	732206	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5								
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
Surr: 4-Bromofluorobenzene	22		20.00		110	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503558

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1ST QTR

Sample ID	100NG BTEX LCS		SampType: LCS			TestCode: EPA Method 8021B: Volatiles				
Client ID:	LCSW		Batch ID: R24858			RunNo: 24858				
Prep Date:			Analysis Date: 3/16/2015			SeqNo: 732207		Units: µg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	21	2.5	20.00	0	105	72.5	125			
Benzene	22	1.0	20.00	0	109	80	120			
Toluene	21	1.0	20.00	0	106	80	120			
Ethylbenzene	21	1.0	20.00	0	104	80	120			
Xylenes, Total	62	2.0	60.00	0	103	80	120			
1,2,4-Trimethylbenzene	22	1.0	20.00	0	108	80	120			
1,3,5-Trimethylbenzene	21	1.0	20.00	0	105	80	120			
Surr: 4-Bromofluorobenzene	24		20.00		119	80	120			

Sample ID	1503558-003AMS		SampType: MS			TestCode: EPA Method 8021B: Volatiles				
Client ID:	WEST LDU		Batch ID: R24858			RunNo: 24858				
Prep Date:			Analysis Date: 3/16/2015			SeqNo: 732210		Units: µg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	150	12	100.0	7.670	141	64.7	132			S
Benzene	530	5.0	100.0	447.1	87.4	77.5	121			E
Toluene	190	5.0	100.0	86.47	102	78.6	122			
Ethylbenzene	190	5.0	100.0	84.83	101	78.1	128			
Xylenes, Total	500	10	300.0	196.5	99.6	80	120			
1,2,4-Trimethylbenzene	190	5.0	100.0	91.35	103	79.1	128			
1,3,5-Trimethylbenzene	140	5.0	100.0	36.96	107	80	120			
Surr: 4-Bromofluorobenzene	140		100.0		137	80	120			S

Sample ID	1503558-003AMSD		SampType: MSD			TestCode: EPA Method 8021B: Volatiles				
Client ID:	WEST LDU		Batch ID: R24858			RunNo: 24858				
Prep Date:			Analysis Date: 3/16/2015			SeqNo: 732211		Units: µg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	150	12	100.0	7.670	140	64.7	132	0.619	20	S
Benzene	530	5.0	100.0	447.1	80.3	77.5	121	1.34	20	E
Toluene	180	5.0	100.0	86.47	97.3	78.6	122	2.40	20	
Ethylbenzene	180	5.0	100.0	84.83	99.2	78.1	128	0.984	20	
Xylenes, Total	490	10	300.0	196.5	96.8	80	120	1.74	20	
1,2,4-Trimethylbenzene	190	5.0	100.0	91.35	102	79.1	128	0.609	20	
1,3,5-Trimethylbenzene	140	5.0	100.0	36.96	104	80	120	2.20	20	
Surr: 4-Bromofluorobenzene	130		100.0		135	80	120	0	0	S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503558

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1ST QTR

Sample ID b2	SampType: MBLK			TestCode: EPA Method 8260: Volatiles Short List						
Client ID: PBW	Batch ID: R24939			RunNo: 24939						
Prep Date:	Analysis Date: 3/19/2015			SeqNo: 734991		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								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.6		10.00		85.5	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130			
Surr: Dibromofluoromethane	8.9		10.00		89.1	70	130			
Surr: Toluene-d8	9.9		10.00		99.4	70	130			

Sample ID 100ng lcs	SampType: LCS			TestCode: EPA Method 8260: Volatiles Short List						
Client ID: LCSW	Batch ID: R24939			RunNo: 24939						
Prep Date:	Analysis Date: 3/19/2015			SeqNo: 734992		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.1	70	130			
Toluene	19	1.0	20.00	0	94.9	70	130			
Surr: 1,2-Dichloroethane-d4	8.2		10.00		82.3	70	130			
Surr: 4-Bromofluorobenzene	9.3		10.00		92.6	70	130			
Surr: Dibromofluoromethane	9.0		10.00		90.1	70	130			
Surr: Toluene-d8	9.1		10.00		91.0	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503558

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1ST QTR

Sample ID	5mL rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R24834			RunNo: 24834					
Prep Date:		Analysis Date: 3/13/2015			SeqNo: 731512	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503558

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1ST QTR

Sample ID	5mL rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R24834			RunNo: 24834					
Prep Date:		Analysis Date: 3/13/2015			SeqNo: 731512		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.1	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	9.7		10.00		96.8	70	130			

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R24834			RunNo: 24834					
Prep Date:		Analysis Date: 3/13/2015			SeqNo: 731514		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.4	70	130			
Toluene	20	1.0	20.00	0	101	70	130			
Chlorobenzene	19	1.0	20.00	0	95.9	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503558

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1ST QTR

Sample ID 100ng lcs	SampType: LCS				TestCode: EPA Method 8260B: VOLATILES					
Client ID: LCSW	Batch ID: R24834				RunNo: 24834					
Prep Date:	Analysis Date: 3/13/2015				SeqNo: 731514		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	21	1.0	20.00	0	103	75.6	144			
Trichloroethene (TCE)	18	1.0	20.00	0	89.4	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		97.2	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	9.9		10.00		99.5	70	130			

Sample ID 1503558-004a ms	SampType: MS				TestCode: EPA Method 8260B: VOLATILES					
Client ID: STP1-NW	Batch ID: R24834				RunNo: 24834					
Prep Date:	Analysis Date: 3/13/2015				SeqNo: 731519		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	97.0	70	130			
Toluene	19	1.0	20.00	0	96.1	70	130			
Chlorobenzene	19	1.0	20.00	0.1416	92.2	70	130			
1,1-Dichloroethene	21	1.0	20.00	0.1702	102	70	130			
Trichloroethene (TCE)	15	1.0	20.00	0	77.1	70	130			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		92.0	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	9.8		10.00		97.7	70	130			

Sample ID 1503558-004a msd	SampType: MSD				TestCode: EPA Method 8260B: VOLATILES					
Client ID: STP1-NW	Batch ID: R24834				RunNo: 24834					
Prep Date:	Analysis Date: 3/13/2015				SeqNo: 731520		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	91.2	70	130	6.09	20	
Toluene	18	1.0	20.00	0	90.5	70	130	6.00	20	
Chlorobenzene	19	1.0	20.00	0.1416	93.8	70	130	1.67	20	
1,1-Dichloroethene	18	1.0	20.00	0.1702	91.2	70	130	11.0	20	
Trichloroethene (TCE)	14	1.0	20.00	0	72.3	70	130	6.45	20	
Surr: 1,2-Dichloroethane-d4	8.9		10.00		88.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	10		10.00		99.8	70	130	0	0	
Surr: Dibromofluoromethane	9.5		10.00		95.2	70	130	0	0	
Surr: Toluene-d8	9.5		10.00		95.4	70	130	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503558

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1ST QTR

Sample ID	5mL-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R24939	RunNo:	24939					
Prep Date:		Analysis Date:	3/19/2015	SeqNo:	734919	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								
Tetrachloroethene (PCE)	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	7.5		10.00		75.1	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.2	70	130			
Surr: Dibromofluoromethane	7.9		10.00		79.2	70	130			
Surr: Toluene-d8	9.2		10.00		91.6	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID:	R24939	RunNo:	24939					
Prep Date:		Analysis Date:	3/19/2015	SeqNo:	734921	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	110	70	130			
Toluene	21	1.0	20.00	0	107	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	96.5	70	130			
Surr: 1,2-Dichloroethane-d4	8.2		10.00		82.4	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		96.2	70	130			
Surr: Dibromofluoromethane	9.0		10.00		90.0	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503558

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1ST QTR

Sample ID	mb-18139	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	18139	RunNo:	24913					
Prep Date:	3/16/2015	Analysis Date:	3/18/2015	SeqNo:	734001	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503558

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1ST QTR

Sample ID	mb-18139	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	18139	RunNo:	24913					
Prep Date:	3/16/2015	Analysis Date:	3/18/2015	SeqNo:	734001	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	130		200.0		66.2	17.6	104			
Surr: Phenol-d5	130		200.0		66.3	17.7	89.9			
Surr: 2,4,6-Tribromophenol	170		200.0		83.2	16.3	122			
Surr: Nitrobenzene-d5	64		100.0		64.2	45.3	117			
Surr: 2-Fluorobiphenyl	74		100.0		73.9	43	113			
Surr: 4-Terphenyl-d14	110		100.0		106	47.6	122			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503558

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1ST QTR

Sample ID	lcs-18139		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 18139		RunNo: 24913					
Prep Date:	3/16/2015		Analysis Date: 3/18/2015		SeqNo: 734002		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	73	10	100.0	0	72.7	47.8	99.7			
4-Chloro-3-methylphenol	150	10	200.0	0	74.4	58.1	103			
2-Chlorophenol	130	10	200.0	0	66.8	49.5	96.8			
1,4-Dichlorobenzene	69	10	100.0	0	69.3	40.4	89.4			
2,4-Dinitrotoluene	62	10	100.0	0	61.7	38.6	91.3			
N-Nitrosodi-n-propylamine	73	10	100.0	0	73.0	53.9	95.6			
4-Nitrophenol	130	10	200.0	0	67.2	26.4	108			
Pentachlorophenol	130	20	200.0	0	67.4	36.5	86.6			
Phenol	150	10	200.0	0	73.1	29.3	108			
Pyrene	92	10	100.0	0	92.1	45.7	100			
1,2,4-Trichlorobenzene	77	10	100.0	0	76.6	39.3	94.5			
Surr: 2-Fluorophenol	150		200.0		73.7	17.6	104			
Surr: Phenol-d5	160		200.0		78.0	17.7	89.9			
Surr: 2,4,6-Tribromophenol	190		200.0		95.6	16.3	122			
Surr: Nitrobenzene-d5	69		100.0		68.9	45.3	117			
Surr: 2-Fluorobiphenyl	78		100.0		77.8	43	113			
Surr: 4-Terphenyl-d14	110		100.0		109	47.6	122			

Sample ID	lcsd-18139		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 18139		RunNo: 24913					
Prep Date:	3/16/2015		Analysis Date: 3/18/2015		SeqNo: 734003		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	80	10	100.0	0	79.8	47.8	99.7	9.31	28.2	
4-Chloro-3-methylphenol	160	10	200.0	0	81.1	58.1	103	8.59	24.4	
2-Chlorophenol	150	10	200.0	0	75.9	49.5	96.8	12.8	28.1	
1,4-Dichlorobenzene	77	10	100.0	0	77.3	40.4	89.4	10.9	31.2	
2,4-Dinitrotoluene	73	10	100.0	0	73.4	38.6	91.3	17.4	44.4	
N-Nitrosodi-n-propylamine	83	10	100.0	0	83.2	53.9	95.6	13.0	24.2	
4-Nitrophenol	160	10	200.0	0	77.6	26.4	108	14.3	36.6	
Pentachlorophenol	150	20	200.0	0	76.0	36.5	86.6	12.0	29.5	
Phenol	160	10	200.0	0	80.7	29.3	108	9.97	30	
Pyrene	110	10	100.0	0	109	45.7	100	16.7	31	S
1,2,4-Trichlorobenzene	79	10	100.0	0	79.1	39.3	94.5	3.21	24	
Surr: 2-Fluorophenol	160		200.0		82.2	17.6	104	0	0	
Surr: Phenol-d5	170		200.0		84.3	17.7	89.9	0	0	
Surr: 2,4,6-Tribromophenol	190		200.0		93.2	16.3	122	0	0	
Surr: Nitrobenzene-d5	75		100.0		74.9	45.3	117	0	0	
Surr: 2-Fluorobiphenyl	87		100.0		86.9	43	113	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503558

02-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015-1ST QTR

Sample ID	lcscd-18139	SampType:	LCSD	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02	Batch ID:	18139	RunNo:	24913					
Prep Date:	3/16/2015	Analysis Date:	3/18/2015	SeqNo:	734003	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	110		100.0		111	47.6	122	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

Sample Log-In Check List

Client Name: **Western Refining Gallup**

Work Order Number: **1503558**

RcptNo: **1**

Received by/date:

Logged By: **Lindsay Mangin**

3/12/2015 4:00:00 PM

Completed By: **Lindsay Mangin**

3/13/2015 8:09:53 AM

Reviewed By:

Chain of Custody

1. Custody seals intact on sample bottles?

Yes ☒

No ☐

Not Present ☐

2. Is Chain of Custody complete?

Yes ☒

No ☐

Not Present ☐

3. How was the sample delivered?

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 ☐

FOR METALS ANALYSIS: ADDED 1 mL HNO_3 TO 100 mL + COOL FOR ACCEPTABLE pH. 3 HOURS IN LOG IN FOR 24 HOURS
FOR ALL OTHER METALS ANALYSIS: ADDED 0.4 mL HNO_3 TO 100 mL + COOL FOR ACCEPTABLE pH. 3 HOURS IN LOG IN FOR 24 HOURS
10. VOA vials have zero headspace?

Yes ☒

No ☐

No VOA Vials ☐

AFTER PRESERVATION

11. Were any sample containers received broken?

Yes ☐

No ☒

12. Does paperwork match bottle labels?

Yes ☒

No ☐

(Note discrepancies on chain of custody)

13. Are matrices correctly identified on Chain of Custody?

Yes ☒

No ☐

14. Is it clear what analyses were requested?

Yes ☒

No ☐

15. Were all holding times able to be met?

Yes ☒

No ☐

(If no, notify customer for authorization.)

of preserved
bottles checked
for pH:

10

Adjusted?

(<2 or >12 unless noted)

YES

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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.0	Good	Yes			



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

April 06, 2015

Cheryl Johnson

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

RE: 2015 1ST QTR (MKTF)

OrderNo.: 1503570

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 6 sample(s) on 3/13/2015 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', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503570

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 2:00:00 PM

Lab ID: 1503570-001

Matrix: AQUEOUS

Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: cadg	
Benzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Toluene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Ethylbenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Naphthalene	ND	2.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1-Methylnaphthalene	ND	4.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
2-Methylnaphthalene	ND	4.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Acetone	ND	10		µg/L	1	3/16/2015 11:18:24 PM	R24857
Bromobenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Bromodichloromethane	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Bromoform	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Bromomethane	ND	3.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
2-Butanone	ND	10		µg/L	1	3/16/2015 11:18:24 PM	R24857
Carbon disulfide	ND	10		µg/L	1	3/16/2015 11:18:24 PM	R24857
Carbon Tetrachloride	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Chlorobenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Chloroethane	ND	2.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Chloroform	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Chloromethane	ND	3.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
2-Chlorotoluene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
4-Chlorotoluene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
cis-1,2-DCE	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Dibromochloromethane	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Dibromomethane	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,1-Dichloroethane	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,1-Dichloroethene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,2-Dichloropropane	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,3-Dichloropropane	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
2,2-Dichloropropane	ND	2.0		µg/L	1	3/16/2015 11:18:24 PM	R24857

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 1 of 44
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503570

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 2:00:00 PM

Lab ID: 1503570-001

Matrix: AQUEOUS

Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
1,1-Dichloropropene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Hexachlorobutadiene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
2-Hexanone	ND	10		µg/L	1	3/16/2015 11:18:24 PM	R24857
Isopropylbenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
4-Isopropyltoluene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
4-Methyl-2-pentanone	ND	10		µg/L	1	3/16/2015 11:18:24 PM	R24857
Methylene Chloride	ND	3.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
n-Butylbenzene	ND	3.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
n-Propylbenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
sec-Butylbenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Styrene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
tert-Butylbenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
trans-1,2-DCE	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Trichlorofluoromethane	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Vinyl chloride	ND	1.0		µg/L	1	3/16/2015 11:18:24 PM	R24857
Xylenes, Total	ND	1.5		µg/L	1	3/16/2015 11:18:24 PM	R24857
Surr: 1,2-Dichloroethane-d4	88.1	70-130		%REC	1	3/16/2015 11:18:24 PM	R24857
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	3/16/2015 11:18:24 PM	R24857
Surr: Dibromofluoromethane	94.3	70-130		%REC	1	3/16/2015 11:18:24 PM	R24857
Surr: Toluene-d8	93.9	70-130		%REC	1	3/16/2015 11:18:24 PM	R24857

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503570

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-34

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 2:30:00 PM

Lab ID: 1503570-002

Matrix: AQUEOUS

Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/16/2015 7:08:15 PM	18160
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/16/2015 7:08:15 PM	18160
Surr: DNOP	123	76.5-150		%REC	1	3/16/2015 7:08:15 PM	18160
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/17/2015 4:39:05 PM	R24888
Surr: BFB	84.0	80-120		%REC	1	3/17/2015 4:39:05 PM	R24888
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.12	0.0020		mg/L	1	3/25/2015 9:41:05 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:41:05 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 9:41:05 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:41:05 PM	R25072
Iron	0.21	0.020		mg/L	1	3/25/2015 9:41:05 PM	R25072
Manganese	0.013	0.0020		mg/L	1	3/26/2015 3:26:46 PM	R25095
Silver	ND	0.0050		mg/L	1	3/30/2015 6:34:41 PM	R25178
Zinc	ND	0.010		mg/L	1	3/25/2015 9:41:05 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.25	0.0020		mg/L	1	3/25/2015 8:03:42 PM	18308
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:03:42 PM	18308
Chromium	ND	0.0060		mg/L	1	3/25/2015 8:03:42 PM	18308
Copper	ND	0.0060		mg/L	1	3/25/2015 8:03:42 PM	18308
Iron	5.2	0.20	*	mg/L	10	3/26/2015 2:43:35 PM	18308
Manganese	0.15	0.0020	*	mg/L	1	3/25/2015 8:03:42 PM	18308
Silver	ND	0.0050		mg/L	1	3/25/2015 8:03:42 PM	18308
Zinc	0.059	0.010		mg/L	1	3/25/2015 8:03:42 PM	18308
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/30/2015 4:01:17 PM	R25155
Lead	ND	0.0010		mg/L	1	3/26/2015 8:47:31 PM	R25105
Selenium	ND	0.050		mg/L	50	3/30/2015 5:08:37 PM	R25155
Uranium	0.025	0.0010		mg/L	1	3/26/2015 8:47:31 PM	R25105
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/25/2015 6:32:35 PM	18308
Lead	0.0045	0.0010		mg/L	1	3/25/2015 4:44:00 PM	18308
Selenium	0.013	0.010		mg/L	10	3/25/2015 6:32:35 PM	18308
Uranium	0.028	0.0010		mg/L	1	3/25/2015 4:44:00 PM	18308
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/24/2015 1:51:58 PM	18285

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503570

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-34

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 2:30:00 PM

Lab ID: 1503570-002

Matrix: AQUEOUS

Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Acenaphthylene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Aniline	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Anthracene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Azobenzene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Benz(a)anthracene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Benzo(a)pyrene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Benzo(b)fluoranthene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Benzo(k)fluoranthene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Benzoic acid	ND	20		µg/L	1	3/18/2015 5:02:43 PM	18139
Benzyl alcohol	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Butyl benzyl phthalate	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Carbazole	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
4-Chloroaniline	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
2-Chloronaphthalene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
2-Chlorophenol	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Chrysene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Di-n-butyl phthalate	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Di-n-octyl phthalate	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Dibenzofuran	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
1,2-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
1,3-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
1,4-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Diethyl phthalate	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Dimethyl phthalate	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
2,4-Dichlorophenol	ND	20		µg/L	1	3/18/2015 5:02:43 PM	18139
2,4-Dimethylphenol	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/18/2015 5:02:43 PM	18139
2,4-Dinitrophenol	ND	20		µg/L	1	3/18/2015 5:02:43 PM	18139

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 4 of 44
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503570

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-34

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 2:30:00 PM

Lab ID: 1503570-002

Matrix: AQUEOUS

Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
2,4-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
2,6-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Fluoranthene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Fluorene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Hexachlorobenzene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Hexachlorobutadiene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Hexachloroethane	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Isophorone	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
1-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
2-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
2-Methylphenol	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
3+4-Methylphenol	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
N-Nitrosodimethylamine	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Naphthalene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
2-Nitroaniline	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
3-Nitroaniline	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
4-Nitroaniline	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Nitrobenzene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
2-Nitrophenol	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
4-Nitrophenol	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Pentachlorophenol	ND	20		µg/L	1	3/18/2015 5:02:43 PM	18139
Phenanthrene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Phenol	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Pyrene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Pyridine	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/18/2015 5:02:43 PM	18139
Surr: 2-Fluorophenol	75.1	17.6-104		%REC	1	3/18/2015 5:02:43 PM	18139
Surr: Phenol-d5	69.0	17.7-89.9		%REC	1	3/18/2015 5:02:43 PM	18139
Surr: 2,4,6-Tribromophenol	105	16.3-122		%REC	1	3/18/2015 5:02:43 PM	18139
Surr: Nitrobenzene-d5	85.9	45.3-117		%REC	1	3/18/2015 5:02:43 PM	18139
Surr: 2-Fluorobiphenyl	87.7	43-113		%REC	1	3/18/2015 5:02:43 PM	18139
Surr: 4-Terphenyl-d14	126	47.6-122	S	%REC	1	3/18/2015 5:02:43 PM	18139

EPA METHOD 8260B: VOLATILES

Analyst: **cadg**

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503570

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-34

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 2:30:00 PM

Lab ID: 1503570-002

Matrix: AQUEOUS

Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Toluene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Ethylbenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Naphthalene	ND	2.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1-Methylnaphthalene	ND	4.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
2-Methylnaphthalene	ND	4.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Acetone	ND	10		µg/L	1	3/16/2015 11:47:10 PM	R24857
Bromobenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Bromodichloromethane	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Bromoform	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Bromomethane	ND	3.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
2-Butanone	ND	10		µg/L	1	3/16/2015 11:47:10 PM	R24857
Carbon disulfide	ND	10		µg/L	1	3/16/2015 11:47:10 PM	R24857
Carbon Tetrachloride	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Chlorobenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Chloroethane	ND	2.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Chloroform	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Chloromethane	ND	3.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
2-Chlorotoluene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
4-Chlorotoluene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
cis-1,2-DCE	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Dibromochloromethane	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Dibromomethane	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,1-Dichloroethane	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,1-Dichloroethene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,2-Dichloropropane	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,3-Dichloropropane	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
2,2-Dichloropropane	ND	2.0		µg/L	1	3/16/2015 11:47:10 PM	R24857

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 6 of 44
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503570

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-34

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 2:30:00 PM

Lab ID: 1503570-002

Matrix: AQUEOUS

Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
1,1-Dichloropropene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Hexachlorobutadiene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
2-Hexanone	ND	10		µg/L	1	3/16/2015 11:47:10 PM	R24857
Isopropylbenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
4-Isopropyltoluene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
4-Methyl-2-pentanone	ND	10		µg/L	1	3/16/2015 11:47:10 PM	R24857
Methylene Chloride	ND	3.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
n-Butylbenzene	ND	3.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
n-Propylbenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
sec-Butylbenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Styrene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
tert-Butylbenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
trans-1,2-DCE	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Trichloroethene (TCE)	1.2	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Trichlorofluoromethane	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Vinyl chloride	ND	1.0		µg/L	1	3/16/2015 11:47:10 PM	R24857
Xylenes, Total	ND	1.5		µg/L	1	3/16/2015 11:47:10 PM	R24857
Surr: 1,2-Dichloroethane-d4	85.8	70-130		%REC	1	3/16/2015 11:47:10 PM	R24857
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	3/16/2015 11:47:10 PM	R24857
Surr: Dibromofluoromethane	85.6	70-130		%REC	1	3/16/2015 11:47:10 PM	R24857
Surr: Toluene-d8	98.8	70-130		%REC	1	3/16/2015 11:47:10 PM	R24857

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503570

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-17

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 3:05:00 PM

Lab ID: 1503570-003

Matrix: AQUEOUS

Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/16/2015 8:13:06 PM	18160
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/16/2015 8:13:06 PM	18160
Surr: DNOP	114	76.5-150		%REC	1	3/16/2015 8:13:06 PM	18160
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.80	0.050		mg/L	1	3/17/2015 5:08:17 PM	R24888
Surr: BFB	97.7	80-120		%REC	1	3/17/2015 5:08:17 PM	R24888
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.13	0.0020		mg/L	1	3/25/2015 9:47:02 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:47:02 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 9:47:02 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:47:02 PM	R25072
Iron	0.57	0.020	*	mg/L	1	3/25/2015 9:47:02 PM	R25072
Manganese	3.0	0.010	*	mg/L	5	3/26/2015 3:32:04 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 9:47:02 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 9:47:02 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.17	0.0020		mg/L	1	3/25/2015 8:05:23 PM	18308
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:05:23 PM	18308
Chromium	ND	0.0060		mg/L	1	3/25/2015 8:05:23 PM	18308
Copper	ND	0.0060		mg/L	1	3/25/2015 8:05:23 PM	18308
Iron	1.8	0.10	*	mg/L	5	3/26/2015 2:45:13 PM	18308
Manganese	3.1	0.010	*	mg/L	5	3/26/2015 2:45:13 PM	18308
Silver	ND	0.0050		mg/L	1	3/25/2015 8:05:23 PM	18308
Zinc	ND	0.010		mg/L	1	3/25/2015 8:05:23 PM	18308
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	0.0062	0.0010		mg/L	1	3/26/2015 8:50:34 PM	R25105
Lead	ND	0.0010		mg/L	1	3/26/2015 8:50:34 PM	R25105
Selenium	0.0058	0.0010		mg/L	1	3/26/2015 8:50:34 PM	R25105
Uranium	0.021	0.0010		mg/L	1	3/26/2015 8:50:34 PM	R25105
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.0057	0.0010		mg/L	1	3/25/2015 4:47:13 PM	18308
Lead	0.0017	0.0010		mg/L	1	3/25/2015 4:47:13 PM	18308
Selenium	0.0023	0.0010		mg/L	1	3/25/2015 4:47:13 PM	18308
Uranium	0.022	0.0010		mg/L	1	3/25/2015 4:47:13 PM	18308
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/24/2015 1:53:45 PM	18285

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503570

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-17

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 3:05:00 PM

Lab ID: 1503570-003

Matrix: AQUEOUS

Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Acenaphthylene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Aniline	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Anthracene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Azobenzene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Benz(a)anthracene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Benzo(a)pyrene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Benzo(b)fluoranthene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Benzo(k)fluoranthene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Benzoic acid	ND	20		µg/L	1	3/18/2015 5:30:47 PM	18139
Benzyl alcohol	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Butyl benzyl phthalate	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Carbazole	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
4-Chloroaniline	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
2-Chloronaphthalene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
2-Chlorophenol	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Chrysene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Di-n-butyl phthalate	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Di-n-octyl phthalate	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Dibenzofuran	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
1,2-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
1,3-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
1,4-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Diethyl phthalate	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Dimethyl phthalate	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
2,4-Dichlorophenol	ND	20		µg/L	1	3/18/2015 5:30:47 PM	18139
2,4-Dimethylphenol	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/18/2015 5:30:47 PM	18139
2,4-Dinitrophenol	ND	20		µg/L	1	3/18/2015 5:30:47 PM	18139

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 9 of 44
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503570

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-17

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 3:05:00 PM

Lab ID: 1503570-003

Matrix: AQUEOUS

Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
2,4-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
2,6-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Fluoranthene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Fluorene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Hexachlorobenzene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Hexachlorobutadiene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Hexachloroethane	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Isophorone	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
1-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
2-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
2-Methylphenol	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
3+4-Methylphenol	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
N-Nitrosodimethylamine	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Naphthalene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
2-Nitroaniline	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
3-Nitroaniline	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
4-Nitroaniline	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Nitrobenzene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
2-Nitrophenol	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
4-Nitrophenol	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Pentachlorophenol	ND	20		µg/L	1	3/18/2015 5:30:47 PM	18139
Phenanthrene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Phenol	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Pyrene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Pyridine	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/18/2015 5:30:47 PM	18139
Surr: 2-Fluorophenol	72.4	17.6-104		%REC	1	3/18/2015 5:30:47 PM	18139
Surr: Phenol-d5	66.3	17.7-89.9		%REC	1	3/18/2015 5:30:47 PM	18139
Surr: 2,4,6-Tribromophenol	97.6	16.3-122		%REC	1	3/18/2015 5:30:47 PM	18139
Surr: Nitrobenzene-d5	84.2	45.3-117		%REC	1	3/18/2015 5:30:47 PM	18139
Surr: 2-Fluorobiphenyl	92.7	43-113		%REC	1	3/18/2015 5:30:47 PM	18139
Surr: 4-Terphenyl-d14	135	47.6-122	S	%REC	1	3/18/2015 5:30:47 PM	18139

EPA METHOD 8260B: VOLATILES

Analyst: **cadg**

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.
	E Value above quantitation range
	J Analyte detected below quantitation limits
	O RSD is greater than RSDlimit
	R RPD outside accepted recovery limits
	S Spike Recovery outside accepted recovery limits

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503570

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-17

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 3:05:00 PM

Lab ID: 1503570-003

Matrix: AQUEOUS

Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	2.8	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Toluene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Ethylbenzene	5.9	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Methyl tert-butyl ether (MTBE)	590	5.0		µg/L	5	3/17/2015 1:41:52 AM	R24857
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Naphthalene	ND	2.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1-Methylnaphthalene	ND	4.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
2-Methylnaphthalene	ND	4.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Acetone	ND	10		µg/L	1	3/17/2015 10:57:50 AM	R24886
Bromobenzene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Bromodichloromethane	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Bromoform	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Bromomethane	ND	3.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
2-Butanone	ND	10		µg/L	1	3/17/2015 10:57:50 AM	R24886
Carbon disulfide	ND	10		µg/L	1	3/17/2015 10:57:50 AM	R24886
Carbon Tetrachloride	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Chlorobenzene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Chloroethane	ND	2.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Chloroform	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Chloromethane	ND	3.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
2-Chlorotoluene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
4-Chlorotoluene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
cis-1,2-DCE	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Dibromochloromethane	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Dibromomethane	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,1-Dichloroethane	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,1-Dichloroethene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,2-Dichloropropane	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,3-Dichloropropane	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
2,2-Dichloropropane	ND	2.0		µg/L	1	3/17/2015 10:57:50 AM	R24886

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503570

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-17

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 3:05:00 PM

Lab ID: 1503570-003

Matrix: AQUEOUS

Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
1,1-Dichloropropene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Hexachlorobutadiene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
2-Hexanone	ND	10		µg/L	1	3/17/2015 10:57:50 AM	R24886
Isopropylbenzene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
4-Isopropyltoluene	1.2	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
4-Methyl-2-pentanone	ND	10		µg/L	1	3/17/2015 10:57:50 AM	R24886
Methylene Chloride	ND	3.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
n-Butylbenzene	ND	3.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
n-Propylbenzene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
sec-Butylbenzene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Styrene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
tert-Butylbenzene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
trans-1,2-DCE	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Trichlorofluoromethane	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Vinyl chloride	ND	1.0		µg/L	1	3/17/2015 10:57:50 AM	R24886
Xylenes, Total	ND	1.5		µg/L	1	3/17/2015 10:57:50 AM	R24886
Surr: 1,2-Dichloroethane-d4	92.7	70-130		%REC	1	3/17/2015 10:57:50 AM	R24886
Surr: 4-Bromofluorobenzene	78.3	70-130		%REC	1	3/17/2015 10:57:50 AM	R24886
Surr: Dibromofluoromethane	93.2	70-130		%REC	1	3/17/2015 10:57:50 AM	R24886
Surr: Toluene-d8	95.7	70-130		%REC	1	3/17/2015 10:57:50 AM	R24886

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503570

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-19

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 3:37:00 PM

Lab ID: 1503570-004

Matrix: AQUEOUS

Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	9.3	1.0		mg/L	1	3/16/2015 8:34:45 PM	18160
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/16/2015 8:34:45 PM	18160
Surr: DNOP	124	76.5-150		%REC	1	3/16/2015 8:34:45 PM	18160
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	14	1.0		mg/L	20	3/18/2015 1:55:14 PM	R24900
Surr: BFB	77.7	80-120	S	%REC	20	3/18/2015 1:55:14 PM	R24900
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	1.6	0.020		mg/L	10	3/26/2015 3:33:46 PM	R25095
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:48:55 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 9:48:55 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:48:55 PM	R25072
Iron	9.5	0.20	*	mg/L	10	3/26/2015 3:33:46 PM	R25095
Manganese	3.1	0.020	*	mg/L	10	3/26/2015 3:33:46 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 9:48:55 PM	R25072
Zinc	0.012	0.010		mg/L	1	3/25/2015 9:48:55 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	2.7	0.010	*	mg/L	5	3/26/2015 2:46:54 PM	18308
Cadmium	ND	0.0020		mg/L	1	3/25/2015 8:14:10 PM	18308
Chromium	0.022	0.0060		mg/L	1	3/25/2015 8:14:10 PM	18308
Copper	0.026	0.0060		mg/L	1	3/25/2015 8:14:10 PM	18308
Iron	33	1.0	*	mg/L	50	3/26/2015 2:48:22 PM	18308
Manganese	4.2	0.010	*	mg/L	5	3/26/2015 2:46:54 PM	18308
Silver	ND	0.0050		mg/L	1	3/25/2015 8:14:10 PM	18308
Zinc	0.078	0.010		mg/L	1	3/25/2015 8:14:10 PM	18308
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	0.021	0.010	*	mg/L	10	3/30/2015 4:04:20 PM	R25155
Lead	0.0017	0.0010		mg/L	1	3/26/2015 8:53:38 PM	R25105
Selenium	ND	0.020		mg/L	20	3/30/2015 5:11:40 PM	R25155
Uranium	ND	0.0010		mg/L	1	3/26/2015 8:53:38 PM	R25105
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.017	0.0010	*	mg/L	1	3/25/2015 4:50:23 PM	18308
Lead	0.052	0.010	*	mg/L	10	3/25/2015 6:35:46 PM	18308
Selenium	ND	0.010		mg/L	10	3/25/2015 6:35:46 PM	18308
Uranium	0.0065	0.0010		mg/L	1	3/25/2015 4:50:23 PM	18308
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/24/2015 1:55:32 PM	18285

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503570

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-19

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 3:37:00 PM

Lab ID: 1503570-004

Matrix: AQUEOUS

Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Acenaphthylene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Aniline	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Anthracene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Azobenzene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Benz(a)anthracene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Benzo(a)pyrene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Benzo(b)fluoranthene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Benzo(k)fluoranthene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Benzoic acid	ND	20		µg/L	1	3/18/2015 5:58:48 PM	18139
Benzyl alcohol	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Butyl benzyl phthalate	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Carbazole	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
4-Chloroaniline	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
2-Chloronaphthalene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
2-Chlorophenol	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Chrysene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Di-n-butyl phthalate	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Di-n-octyl phthalate	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Dibenzofuran	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
1,2-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
1,3-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
1,4-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Diethyl phthalate	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Dimethyl phthalate	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
2,4-Dichlorophenol	ND	20		µg/L	1	3/18/2015 5:58:48 PM	18139
2,4-Dimethylphenol	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/18/2015 5:58:48 PM	18139
2,4-Dinitrophenol	ND	20		µg/L	1	3/18/2015 5:58:48 PM	18139

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503570

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-19

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 3:37:00 PM

Lab ID: 1503570-004

Matrix: AQUEOUS

Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
2,6-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Fluoranthene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Fluorene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Hexachlorobenzene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Hexachlorobutadiene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Hexachloroethane	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Isophorone	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
1-Methylnaphthalene	170	10		µg/L	1	3/18/2015 5:58:48 PM	18139
2-Methylnaphthalene	270	50		µg/L	5	3/19/2015 5:06:12 PM	18139
2-Methylphenol	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
3+4-Methylphenol	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
N-Nitrosodimethylamine	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Naphthalene	340	50		µg/L	5	3/19/2015 5:06:12 PM	18139
2-Nitroaniline	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
3-Nitroaniline	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
4-Nitroaniline	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Nitrobenzene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
2-Nitrophenol	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
4-Nitrophenol	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Pentachlorophenol	ND	20		µg/L	1	3/18/2015 5:58:48 PM	18139
Phenanthrene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Phenol	15	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Pyrene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Pyridine	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/18/2015 5:58:48 PM	18139
Surr: 2-Fluorophenol	65.6	17.6-104		%REC	1	3/18/2015 5:58:48 PM	18139
Surr: Phenol-d5	67.8	17.7-89.9		%REC	1	3/18/2015 5:58:48 PM	18139
Surr: 2,4,6-Tribromophenol	91.7	16.3-122		%REC	1	3/18/2015 5:58:48 PM	18139
Surr: Nitrobenzene-d5	87.1	45.3-117		%REC	1	3/18/2015 5:58:48 PM	18139
Surr: 2-Fluorobiphenyl	89.9	43-113		%REC	1	3/18/2015 5:58:48 PM	18139
Surr: 4-Terphenyl-d14	123	47.6-122	S	%REC	1	3/18/2015 5:58:48 PM	18139

EPA METHOD 8260B: VOLATILES

Analyst: **cadg**

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503570

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-19

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 3:37:00 PM

Lab ID: 1503570-004

Matrix: AQUEOUS

Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: cadg	
Benzene	1400	50		µg/L	50	3/17/2015 3:08:09 AM	R24857
Toluene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Ethylbenzene	430	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Methyl tert-butyl ether (MTBE)	9700	50		µg/L	50	3/17/2015 3:08:09 AM	R24857
1,2,4-Trimethylbenzene	390	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,3,5-Trimethylbenzene	47	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Naphthalene	380	20		µg/L	10	3/17/2015 11:26:28 AM	R24886
1-Methylnaphthalene	170	40		µg/L	10	3/17/2015 11:26:28 AM	R24886
2-Methylnaphthalene	250	40		µg/L	10	3/17/2015 11:26:28 AM	R24886
Acetone	ND	100		µg/L	10	3/17/2015 11:26:28 AM	R24886
Bromobenzene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Bromodichloromethane	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Bromoform	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Bromomethane	ND	30		µg/L	10	3/17/2015 11:26:28 AM	R24886
2-Butanone	ND	100		µg/L	10	3/17/2015 11:26:28 AM	R24886
Carbon disulfide	ND	100		µg/L	10	3/17/2015 11:26:28 AM	R24886
Carbon Tetrachloride	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Chlorobenzene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Chloroethane	ND	20		µg/L	10	3/17/2015 11:26:28 AM	R24886
Chloroform	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Chloromethane	ND	30		µg/L	10	3/17/2015 11:26:28 AM	R24886
2-Chlorotoluene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
4-Chlorotoluene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
cis-1,2-DCE	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
cis-1,3-Dichloropropene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	3/17/2015 11:26:28 AM	R24886
Dibromochloromethane	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Dibromomethane	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,2-Dichlorobenzene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,3-Dichlorobenzene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,4-Dichlorobenzene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Dichlorodifluoromethane	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,1-Dichloroethane	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,1-Dichloroethene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,2-Dichloropropane	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,3-Dichloropropane	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
2,2-Dichloropropane	ND	20		µg/L	10	3/17/2015 11:26:28 AM	R24886

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503570

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-19

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015 3:37:00 PM

Lab ID: 1503570-004

Matrix: AQUEOUS

Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
1,1-Dichloropropene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Hexachlorobutadiene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
2-Hexanone	ND	100		µg/L	10	3/17/2015 11:26:28 AM	R24886
Isopropylbenzene	18	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
4-Isopropyltoluene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
4-Methyl-2-pentanone	ND	100		µg/L	10	3/17/2015 11:26:28 AM	R24886
Methylene Chloride	ND	30		µg/L	10	3/17/2015 11:26:28 AM	R24886
n-Butylbenzene	ND	30		µg/L	10	3/17/2015 11:26:28 AM	R24886
n-Propylbenzene	37	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
sec-Butylbenzene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Styrene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
tert-Butylbenzene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	3/17/2015 11:26:28 AM	R24886
Tetrachloroethene (PCE)	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
trans-1,2-DCE	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
trans-1,3-Dichloropropene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,2,3-Trichlorobenzene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,2,4-Trichlorobenzene	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,1,1-Trichloroethane	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,1,2-Trichloroethane	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Trichloroethene (TCE)	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Trichlorofluoromethane	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
1,2,3-Trichloropropane	ND	20		µg/L	10	3/17/2015 11:26:28 AM	R24886
Vinyl chloride	ND	10		µg/L	10	3/17/2015 11:26:28 AM	R24886
Xylenes, Total	150	15		µg/L	10	3/17/2015 11:26:28 AM	R24886
Surr: 1,2-Dichloroethane-d4	94.1	70-130		%REC	10	3/17/2015 11:26:28 AM	R24886
Surr: 4-Bromofluorobenzene	81.1	70-130		%REC	10	3/17/2015 11:26:28 AM	R24886
Surr: Dibromofluoromethane	98.5	70-130		%REC	10	3/17/2015 11:26:28 AM	R24886
Surr: Toluene-d8	96.7	70-130		%REC	10	3/17/2015 11:26:28 AM	R24886

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503570

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Blind Duplicate

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015

Lab ID: 1503570-005

Matrix: AQUEOUS

Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Acenaphthylene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Aniline	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Anthracene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Azobenzene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Benz(a)anthracene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Benzo(a)pyrene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Benzo(b)fluoranthene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Benzo(k)fluoranthene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Benzoic acid	ND	20		µg/L	1	3/18/2015 6:26:45 PM	18139
Benzyl alcohol	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Butyl benzyl phthalate	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Carbazole	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
4-Chloroaniline	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
2-Chloronaphthalene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
2-Chlorophenol	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Chrysene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Di-n-butyl phthalate	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Di-n-octyl phthalate	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Dibenzofuran	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
1,2-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
1,3-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
1,4-Dichlorobenzene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Diethyl phthalate	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Dimethyl phthalate	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
2,4-Dichlorophenol	ND	20		µg/L	1	3/18/2015 6:26:45 PM	18139
2,4-Dimethylphenol	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/18/2015 6:26:45 PM	18139
2,4-Dinitrophenol	ND	20		µg/L	1	3/18/2015 6:26:45 PM	18139

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503570

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Blind Duplicate

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/12/2015

Lab ID: 1503570-005

Matrix: AQUEOUS

Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
2,4-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
2,6-Dinitrotoluene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Fluoranthene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Fluorene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Hexachlorobenzene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Hexachlorobutadiene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Hexachloroethane	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Isophorone	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
1-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
2-Methylnaphthalene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
2-Methylphenol	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
3+4-Methylphenol	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
N-Nitrosodimethylamine	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Naphthalene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
2-Nitroaniline	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
3-Nitroaniline	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
4-Nitroaniline	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Nitrobenzene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
2-Nitrophenol	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
4-Nitrophenol	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Pentachlorophenol	ND	20		µg/L	1	3/18/2015 6:26:45 PM	18139
Phenanthrene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Phenol	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Pyrene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Pyridine	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/18/2015 6:26:45 PM	18139
Surr: 2-Fluorophenol	68.7	17.6-104		%REC	1	3/18/2015 6:26:45 PM	18139
Surr: Phenol-d5	57.8	17.7-89.9		%REC	1	3/18/2015 6:26:45 PM	18139
Surr: 2,4,6-Tribromophenol	96.7	16.3-122		%REC	1	3/18/2015 6:26:45 PM	18139
Surr: Nitrobenzene-d5	75.9	45.3-117		%REC	1	3/18/2015 6:26:45 PM	18139
Surr: 2-Fluorobiphenyl	83.5	43-113		%REC	1	3/18/2015 6:26:45 PM	18139
Surr: 4-Terphenyl-d14	116	47.6-122		%REC	1	3/18/2015 6:26:45 PM	18139

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503570

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Trip Blank

Project: 2015 1ST QTR (MKTF)

Collection Date:

Lab ID: 1503570-006

Matrix: AQUEOUS

Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/17/2015 5:37:26 PM	R24888
Surr: BFB	85.1	80-120		%REC	1	3/17/2015 5:37:26 PM	R24888
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Toluene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Ethylbenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Naphthalene	ND	2.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1-Methylnaphthalene	ND	4.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
2-Methylnaphthalene	ND	4.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Acetone	ND	10		µg/L	1	3/17/2015 4:05:40 AM	R24857
Bromobenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Bromodichloromethane	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Bromoform	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Bromomethane	ND	3.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
2-Butanone	ND	10		µg/L	1	3/17/2015 4:05:40 AM	R24857
Carbon disulfide	ND	10		µg/L	1	3/17/2015 4:05:40 AM	R24857
Carbon Tetrachloride	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Chlorobenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Chloroethane	ND	2.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Chloroform	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Chloromethane	ND	3.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
2-Chlorotoluene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
4-Chlorotoluene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
cis-1,2-DCE	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Dibromochloromethane	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Dibromomethane	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,1-Dichloroethane	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,1-Dichloroethene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503570

Date Reported: 4/6/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Trip Blank

Project: 2015 1ST QTR (MKTF)

Collection Date:

Lab ID: 1503570-006

Matrix: AQUEOUS

Received Date: 3/13/2015 10:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
1,2-Dichloropropane	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,3-Dichloropropane	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
2,2-Dichloropropane	ND	2.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,1-Dichloropropene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Hexachlorobutadiene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
2-Hexanone	ND	10		µg/L	1	3/17/2015 4:05:40 AM	R24857
Isopropylbenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
4-Isopropyltoluene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
4-Methyl-2-pentanone	ND	10		µg/L	1	3/17/2015 4:05:40 AM	R24857
Methylene Chloride	ND	3.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
n-Butylbenzene	ND	3.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
n-Propylbenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
sec-Butylbenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Styrene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
tert-Butylbenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
trans-1,2-DCE	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Trichlorofluoromethane	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Vinyl chloride	ND	1.0		µg/L	1	3/17/2015 4:05:40 AM	R24857
Xylenes, Total	ND	1.5		µg/L	1	3/17/2015 4:05:40 AM	R24857
Surr: 1,2-Dichloroethane-d4	91.2	70-130		%REC	1	3/17/2015 4:05:40 AM	R24857
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	3/17/2015 4:05:40 AM	R24857
Surr: Dibromofluoromethane	102	70-130		%REC	1	3/17/2015 4:05:40 AM	R24857
Surr: Toluene-d8	98.5	70-130		%REC	1	3/17/2015 4:05:40 AM	R24857

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503570

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R25072			RunNo: 25072					
Prep Date:		Analysis Date: 3/25/2015			SeqNo: 739895		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								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25072		RunNo: 25072					
Prep Date:			Analysis Date: 3/25/2015		SeqNo: 739896		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.7	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.3	85	115			
Chromium	0.49	0.0060	0.5000	0	97.5	85	115			
Copper	0.49	0.0060	0.5000	0	97.2	85	115			
Iron	0.48	0.020	0.5000	0	95.1	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.48	0.010	0.5000	0	96.8	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R25072			RunNo: 25072					
Prep Date:		Analysis Date: 3/25/2015			SeqNo: 739897		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								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25072		RunNo: 25072					
Prep Date:			Analysis Date: 3/25/2015		SeqNo: 739898		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	97.2	85	115			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503570

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	LCS		SampType: LCS			TestCode: EPA Method 200.7: Dissolved Metals				
Client ID:	LCSW		Batch ID: R25072			RunNo: 25072				
Prep Date:	Analysis Date: 3/25/2015			SeqNo: 739898		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.49	0.0020	0.5000	0	98.9	85	115			
Chromium	0.49	0.0060	0.5000	0	97.9	85	115			
Copper	0.49	0.0060	0.5000	0	97.0	85	115			
Iron	0.48	0.020	0.5000	0	96.7	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.49	0.010	0.5000	0	97.2	85	115			

Sample ID	1503570-002EMS		SampType: MS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	MKTF-34		Batch ID: R25072		RunNo: 25072					
Prep Date:			Analysis Date: 3/25/2015		SeqNo: 740039		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.61	0.0020	0.5000	0.1250	96.9	70	130			
Cadmium	0.50	0.0020	0.5000	0	100	70	130			
Chromium	0.49	0.0060	0.5000	0	97.9	70	130			
Copper	0.55	0.0060	0.5000	0	110	70	130			
Iron	0.72	0.020	0.5000	0.2110	103	70	130			
Zinc	0.50	0.010	0.5000	0.009350	98.7	70	130			

Sample ID	1503570-002EMSD		SampType: MSD		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	MKTF-34		Batch ID: R25072		RunNo: 25072					
Prep Date:			Analysis Date: 3/25/2015		SeqNo: 740040		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.62	0.0020	0.5000	0.1250	98.0	70	130	0.934	20	
Cadmium	0.51	0.0020	0.5000	0	102	70	130	1.41	20	
Chromium	0.50	0.0060	0.5000	0	99.6	70	130	1.70	20	
Copper	0.56	0.0060	0.5000	0	111	70	130	1.20	20	
Iron	0.74	0.020	0.5000	0.2110	105	70	130	1.56	20	
Zinc	0.50	0.010	0.5000	0.009350	98.7	70	130	0.0219	20	

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R25095			RunNo: 25095					
Prep Date:		Analysis Date: 3/26/2015			SeqNo: 740730		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Iron	ND	0.020								
Manganese	ND	0.0020								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503570

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25095		RunNo: 25095					
Prep Date:			Analysis Date: 3/26/2015		SeqNo: 740731		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.2	85	115			
Iron	0.52	0.020	0.5000	0	104	85	115			
Manganese	0.47	0.0020	0.5000	0	94.8	85	115			

Sample ID	1503570-002EMS		SampType: MS			TestCode: EPA Method 200.7: Dissolved Metals				
Client ID:	MKTF-34		Batch ID: R25095			RunNo: 25095				
Prep Date:			Analysis Date: 3/26/2015			SeqNo: 740796		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	0.47	0.0020	0.5000	0.01292	91.9	70	130			

Sample ID	1503570-002EMSD		SampType: MSD		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	MKTF-34		Batch ID: R25095		RunNo: 25095					
Prep Date:			Analysis Date: 3/26/2015		SeqNo: 740797		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	0.47	0.0020	0.5000	0.01292	91.6	70	130	0.276	20	

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R25178			RunNo: 25178					
Prep Date:		Analysis Date: 3/30/2015			SeqNo: 744023		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	ND	0.0050								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25178		RunNo: 25178					
Prep Date:			Analysis Date: 3/30/2015		SeqNo: 744024		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.10	0.0050	0.1000	0	101	85	115			

Sample ID	1503570-002EMS		SampType: MS			TestCode: EPA Method 200.7: Dissolved Metals				
Client ID:	MKTF-34		Batch ID: R25178			RunNo: 25178				
Prep Date:			Analysis Date: 3/30/2015			SeqNo: 744065		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.088	0.0050	0.1000	0	87.8	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503570

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	1503570-002EMSD	SampType:	MSD	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	MKTF-34	Batch ID:	R25178	RunNo:	25178					
Prep Date:		Analysis Date:	3/30/2015	SeqNo:	744066	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.088	0.0050	0.1000	0	88.0	70	130	0.273	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503570

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB-18308	SampType: MBLK			TestCode: EPA Method 200.7: Total Metals					
Client ID:	PBW	Batch ID: 18308			RunNo: 25072					
Prep Date:	3/24/2015	Analysis Date: 3/25/2015			SeqNo: 739893		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-18308		SampType: LCS		TestCode: EPA Method 200.7: Total Metals					
Client ID:	LCSW		Batch ID: 18308		RunNo: 25072					
Prep Date:	3/24/2015		Analysis Date: 3/25/2015		SeqNo: 739894		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	98.4	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.4	85	115			
Chromium	0.50	0.0060	0.5000	0	99.0	85	115			
Copper	0.50	0.0060	0.5000	0	99.4	85	115			
Iron	0.49	0.020	0.5000	0	97.5	85	115			
Manganese	0.48	0.0020	0.5000	0	96.4	85	115			
Silver	0.11	0.0050	0.1000	0	107	85	115			
Zinc	0.49	0.010	0.5000	0	98.1	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503570

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25105		RunNo: 25105					
Prep Date:			Analysis Date: 3/26/2015		SeqNo: 741199		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	96.8	85	115			
Lead	0.024	0.0010	0.02500	0	94.3	85	115			
Selenium	0.024	0.0010	0.02500	0	96.7	85	115			
Uranium	0.024	0.0010	0.02500	0	96.5	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25105		RunNo: 25105					
Prep Date:			Analysis Date: 3/26/2015		SeqNo: 741200		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	95.0	85	115			
Lead	0.024	0.0010	0.02500	0	95.1	85	115			
Selenium	0.023	0.0010	0.02500	0	93.9	85	115			
Uranium	0.024	0.0010	0.02500	0	95.2	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25105		RunNo: 25105					
Prep Date:			Analysis Date: 3/26/2015		SeqNo: 741201		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	96.8	85	115			
Lead	0.023	0.0010	0.02500	0	91.2	85	115			
Selenium	0.024	0.0010	0.02500	0	96.4	85	115			
Uranium	0.023	0.0010	0.02500	0	90.3	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R25105			RunNo: 25105					
Prep Date:		Analysis Date: 3/26/2015			SeqNo: 741202		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R25105			RunNo: 25105					
Prep Date:		Analysis Date: 3/26/2015			SeqNo: 741203		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503570

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB		SampType:	MBLK		TestCode:	EPA 200.8: Dissolved Metals			
Client ID:	PBW		Batch ID:	R25105		RunNo:	25105			
Prep Date:			Analysis Date:	3/26/2015		SeqNo:	741203		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	MB		SampType:	MBLK		TestCode:	EPA 200.8: Dissolved Metals			
Client ID:	PBW		Batch ID:	R25105		RunNo:	25105			
Prep Date:			Analysis Date:	3/26/2015		SeqNo:	741204		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	LCS		SampType:	LCS		TestCode:	EPA 200.8: Dissolved Metals			
Client ID:	LCSW		Batch ID:	R25155		RunNo:	25155			
Prep Date:			Analysis Date:	3/30/2015		SeqNo:	743933		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	99.2	85	115			
Selenium	0.025	0.0010	0.02500	0	100	85	115			

Sample ID	LCS		SampType:	LCS		TestCode:	EPA 200.8: Dissolved Metals			
Client ID:	LCSW		Batch ID:	R25155		RunNo:	25155			
Prep Date:			Analysis Date:	3/30/2015		SeqNo:	743934		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	97.2	85	115			
Selenium	0.025	0.0010	0.02500	0	98.0	85	115			

Sample ID	LCS		SampType:	LCS		TestCode:	EPA 200.8: Dissolved Metals			
Client ID:	LCSW		Batch ID:	R25155		RunNo:	25155			
Prep Date:			Analysis Date:	3/30/2015		SeqNo:	743935		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	99.0	85	115			
Selenium	0.024	0.0010	0.02500	0	97.6	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503570

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB	SampType:	MBLK	TestCode:	EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID:	R25155	RunNo:	25155					
Prep Date:		Analysis Date:	3/30/2015	SeqNo:	743936	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								

Sample ID	MB	SampType:	MBLK	TestCode:	EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID:	R25155	RunNo:	25155					
Prep Date:		Analysis Date:	3/30/2015	SeqNo:	743937	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								

Sample ID	MB	SampType:	MBLK	TestCode:	EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID:	R25155	RunNo:	25155					
Prep Date:		Analysis Date:	3/30/2015	SeqNo:	743938	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503570

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	LLLCS-18308		SampType: LCSLL		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	BatchQC		Batch ID: 18308		RunNo: 25061					
Prep Date:	3/24/2015		Analysis Date: 3/25/2015		SeqNo: 740171		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	99.5	85	115			
Lead	0.026	0.0010	0.02500	0	104	85	115			
Selenium	0.024	0.0010	0.02500	0	96.7	85	115			
Uranium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID	MB-18308		SampType: MBLK		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	PBW		Batch ID: 18308		RunNo: 25061					
Prep Date:	3/24/2015		Analysis Date: 3/25/2015		SeqNo: 740172		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503570

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB-18285	SampType:	MBLK	TestCode:	EPA Method 245.1: Mercury					
Client ID:	PBW	Batch ID:	18285	RunNo:	25035					
Prep Date:	3/23/2015	Analysis Date:	3/24/2015	SeqNo:	738243	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	LCS-18285	SampType:	LCS	TestCode:	EPA Method 245.1: Mercury					
Client ID:	LCSW	Batch ID:	18285	RunNo:	25035					
Prep Date:	3/23/2015	Analysis Date:	3/24/2015	SeqNo:	738244	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0053	0.00020	0.005000	0	105	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503570

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB-18160	SampType:	MBLK		TestCode:	EPA Method 8015D: Diesel Range				
Client ID:	PBW	Batch ID:	18160		RunNo:	24843				
Prep Date:	3/16/2015	Analysis Date:	3/16/2015		SeqNo:	732007		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		114	76.5	150			

Sample ID	LCS-18160		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	LCSW		Batch ID: 18160		RunNo: 24843					
Prep Date:	3/16/2015		Analysis Date: 3/16/2015		SeqNo: 732008		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.1	1.0	5.000	0	82.0	60.1	156			
Surr: DNOP	0.44		0.5000		87.9	76.5	150			

Sample ID	1503570-002CMS		SampType: MS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	MKTF-34		Batch ID: 18160		RunNo: 24843					
Prep Date:	3/16/2015		Analysis Date: 3/16/2015		SeqNo: 732223		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.5	1.0	5.000	0	109	75.9	164			
Surr: DNOP	0.59		0.5000		119	76.5	150			

Sample ID	1503570-002CMSD			SampType:	MSD		TestCode:	EPA Method 8015D: Diesel Range				
Client ID:	MKTF-34			Batch ID:	18160		RunNo:	24843				
Prep Date:	3/16/2015			Analysis Date:	3/16/2015		SeqNo:	732224			Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range Organics (DRO)	5.8	1.0	5.000	0	116	75.9	164	5.37	22.1			
Surr: DNOP	0.64		0.5000		127	76.5	150	0	0			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503570

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID 5ML RB	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBW	Batch ID: R24888		RunNo: 24888							
Prep Date:	Analysis Date: 3/17/2015		SeqNo: 733216		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		87.0	80	120			

Sample ID 2.5UG GRO LCS	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSW	Batch ID: R24888		RunNo: 24888							
Prep Date:	Analysis Date: 3/17/2015		SeqNo: 733218		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.51	0.050	0.5000	0	102	80	120			
Surr: BFB	20		20.00		99.8	80	120			

Sample ID 5ML RB	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBW	Batch ID: R24900		RunNo: 24900							
Prep Date:	Analysis Date: 3/18/2015		SeqNo: 733904		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		85.7	80	120			

Sample ID 2.5UG GRO LCS	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSW	Batch ID: R24900		RunNo: 24900							
Prep Date:	Analysis Date: 3/18/2015		SeqNo: 733905		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	94.4	80	120			
Surr: BFB	20		20.00		100	80	120			

Sample ID 1503570-004BMS	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: MKTF-19	Batch ID: R24900		RunNo: 24900							
Prep Date:	Analysis Date: 3/18/2015		SeqNo: 733908		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	1.0	10.00	14.19	97.0	51	131			
Surr: BFB	410		400.0		104	80	120			

Sample ID 1503570-004BMSD	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: MKTF-19	Batch ID: R24900		RunNo: 24900							
Prep Date:	Analysis Date: 3/18/2015		SeqNo: 733909		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
E Value above quantitation range	H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit	P Sample pH Not In Range
R RPD outside accepted recovery limits	RL Reporting Detection Limit
S Spike Recovery outside accepted recovery limits	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503570

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	1503570-004BMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	MKTF-19	Batch ID:	R24900	RunNo:	24900					
Prep Date:		Analysis Date:	3/18/2015	SeqNo:	733909	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	1.0	10.00	14.19	90.8	51	131	2.60	20	
Surr: BFB	420		400.0		104	80	120	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503570

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	5mL rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R24857			RunNo: 24857					
Prep Date:		Analysis Date: 3/16/2015			SeqNo: 732125	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503570

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	5mL rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R24857	RunNo:	24857					
Prep Date:		Analysis Date:	3/16/2015	SeqNo:	732125	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.8	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	9.5		10.00		94.8	70	130			
Surr: Toluene-d8	9.6		10.00		96.5	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID:	R24857	RunNo:	24857					
Prep Date:		Analysis Date:	3/16/2015	SeqNo:	732127	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	70	130			
Toluene	19	1.0	20.00	0	95.4	70	130			
Chlorobenzene	19	1.0	20.00	0	96.6	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503570

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID 100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSW	Batch ID: R24857			RunNo: 24857						
Prep Date:	Analysis Date: 3/16/2015			SeqNo: 732127		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	22	1.0	20.00	0	110	75.6	144			
Trichloroethene (TCE)	19	1.0	20.00	0	95.8	70	130			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.2	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	9.3		10.00		92.8	70	130			

Sample ID 1503570-002a ms	SampType: MS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: MKTF-34	Batch ID: R24857			RunNo: 24857						
Prep Date:	Analysis Date: 3/17/2015			SeqNo: 732133		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0.08160	102	70	130			
Toluene	21	1.0	20.00	0	103	70	130			
Chlorobenzene	20	1.0	20.00	0	101	70	130			
1,1-Dichloroethene	22	1.0	20.00	0.4972	107	70	130			
Trichloroethene (TCE)	17	1.0	20.00	1.211	80.0	70	130			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.1	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID 1503570-002a msd	SampType: MSD			TestCode: EPA Method 8260B: VOLATILES						
Client ID: MKTF-34	Batch ID: R24857			RunNo: 24857						
Prep Date:	Analysis Date: 3/17/2015			SeqNo: 732134		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0.08160	97.4	70	130	4.81	20	
Toluene	19	1.0	20.00	0	95.8	70	130	7.02	20	
Chlorobenzene	19	1.0	20.00	0	94.8	70	130	5.91	20	
1,1-Dichloroethene	20	1.0	20.00	0.4972	99.4	70	130	6.73	20	
Trichloroethene (TCE)	17	1.0	20.00	1.211	80.0	70	130	0.00930	20	
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.2	70	130	0	0	
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130	0	0	
Surr: Dibromofluoromethane	10		10.00		100	70	130	0	0	
Surr: Toluene-d8	9.7		10.00		97.0	70	130	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503570

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	5mL rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R24886			RunNo: 24886					
Prep Date:		Analysis Date: 3/17/2015			SeqNo: 733138	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								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503570

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	5mL rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R24886			RunNo: 24886					
Prep Date:		Analysis Date: 3/17/2015			SeqNo: 733138		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.2		10.00		92.3	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130			
Surr: Dibromofluoromethane	9.6		10.00		96.5	70	130			
Surr: Toluene-d8	9.6		10.00		95.8	70	130			

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R24886			RunNo: 24886					
Prep Date:		Analysis Date: 3/17/2015			SeqNo: 733141		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	97.6	70	130			
Toluene	19	1.0	20.00	0	92.6	70	130			
Chlorobenzene	19	1.0	20.00	0	95.4	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	106	75.6	144			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503570

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID:	R24886	RunNo:	24886					
Prep Date:		Analysis Date:	3/17/2015	SeqNo:	733141	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	18	1.0	20.00	0	88.6	70	130			
Surr: 1,2-Dichloroethane-d4	8.9		10.00		89.2	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130			
Surr: Dibromofluoromethane	9.4		10.00		94.2	70	130			
Surr: Toluene-d8	9.1		10.00		91.2	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503570

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	mb-18139		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 18139		RunNo: 24913					
Prep Date:	3/16/2015		Analysis Date: 3/18/2015		SeqNo: 734001		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503570

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	mb-18139	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	18139	RunNo:	24913					
Prep Date:	3/16/2015	Analysis Date:	3/18/2015	SeqNo:	734001	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	130		200.0		66.2	17.6	104			
Surr: Phenol-d5	130		200.0		66.3	17.7	89.9			
Surr: 2,4,6-Tribromophenol	170		200.0		83.2	16.3	122			
Surr: Nitrobenzene-d5	64		100.0		64.2	45.3	117			
Surr: 2-Fluorobiphenyl	74		100.0		73.9	43	113			
Surr: 4-Terphenyl-d14	110		100.0		106	47.6	122			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503570

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	lcs-18139		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 18139		RunNo: 24913					
Prep Date:	3/16/2015		Analysis Date: 3/18/2015		SeqNo: 734002		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	73	10	100.0	0	72.7	47.8	99.7			
4-Chloro-3-methylphenol	150	10	200.0	0	74.4	58.1	103			
2-Chlorophenol	130	10	200.0	0	66.8	49.5	96.8			
1,4-Dichlorobenzene	69	10	100.0	0	69.3	40.4	89.4			
2,4-Dinitrotoluene	62	10	100.0	0	61.7	38.6	91.3			
N-Nitrosodi-n-propylamine	73	10	100.0	0	73.0	53.9	95.6			
4-Nitrophenol	130	10	200.0	0	67.2	26.4	108			
Pentachlorophenol	130	20	200.0	0	67.4	36.5	86.6			
Phenol	150	10	200.0	0	73.1	29.3	108			
Pyrene	92	10	100.0	0	92.1	45.7	100			
1,2,4-Trichlorobenzene	77	10	100.0	0	76.6	39.3	94.5			
Surr: 2-Fluorophenol	150		200.0		73.7	17.6	104			
Surr: Phenol-d5	160		200.0		78.0	17.7	89.9			
Surr: 2,4,6-Tribromophenol	190		200.0		95.6	16.3	122			
Surr: Nitrobenzene-d5	69		100.0		68.9	45.3	117			
Surr: 2-Fluorobiphenyl	78		100.0		77.8	43	113			
Surr: 4-Terphenyl-d14	110		100.0		109	47.6	122			

Sample ID	lcsd-18139		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 18139		RunNo: 24913					
Prep Date:	3/16/2015		Analysis Date: 3/18/2015		SeqNo: 734003		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	80	10	100.0	0	79.8	47.8	99.7	9.31	28.2	
4-Chloro-3-methylphenol	160	10	200.0	0	81.1	58.1	103	8.59	24.4	
2-Chlorophenol	150	10	200.0	0	75.9	49.5	96.8	12.8	28.1	
1,4-Dichlorobenzene	77	10	100.0	0	77.3	40.4	89.4	10.9	31.2	
2,4-Dinitrotoluene	73	10	100.0	0	73.4	38.6	91.3	17.4	44.4	
N-Nitrosodi-n-propylamine	83	10	100.0	0	83.2	53.9	95.6	13.0	24.2	
4-Nitrophenol	160	10	200.0	0	77.6	26.4	108	14.3	36.6	
Pentachlorophenol	150	20	200.0	0	76.0	36.5	86.6	12.0	29.5	
Phenol	160	10	200.0	0	80.7	29.3	108	9.97	30	
Pyrene	110	10	100.0	0	109	45.7	100	16.7	31	S
1,2,4-Trichlorobenzene	79	10	100.0	0	79.1	39.3	94.5	3.21	24	
Surr: 2-Fluorophenol	160		200.0		82.2	17.6	104	0	0	
Surr: Phenol-d5	170		200.0		84.3	17.7	89.9	0	0	
Surr: 2,4,6-Tribromophenol	190		200.0		93.2	16.3	122	0	0	
Surr: Nitrobenzene-d5	75		100.0		74.9	45.3	117	0	0	
Surr: 2-Fluorobiphenyl	87		100.0		86.9	43	113	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503570

06-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	lcscd-18139	SampType:	LCSD	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02	Batch ID:	18139	RunNo:	24913					
Prep Date:	3/16/2015	Analysis Date:	3/18/2015	SeqNo:	734003	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	110		100.0		111	47.6	122	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

Sample Log-In Check List

Client Name: **Western Refining Gallup**

Work Order Number: **1503570**

RcptNo: 1

Received by/date:

A.T. *03/13/15*

Logged By: **Ashley Gallegos**

3/13/2015 10:40:00 AM

Aj

Completed By: **Ashley Gallegos**

3/13/2015 10:57:54 AM

Aj

Reviewed By:

IO

03/16/15

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:

Adjusted? *2*

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	1.0	Good	Yes			



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

April 20, 2015

Cheryl Johnson

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

RE: 2015 1ST QTR (MKTF)

OrderNo.: 1503834

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 12 sample(s) on 3/18/2015 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', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 7:00:00 AM

Lab ID: 1503834-001

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Toluene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Ethylbenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Naphthalene	ND	2.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1-Methylnaphthalene	ND	4.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
2-Methylnaphthalene	ND	4.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Acetone	ND	10		µg/L	1	3/24/2015 2:47:38 PM	R25028
Bromobenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Bromodichloromethane	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Bromoform	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Bromomethane	ND	3.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
2-Butanone	ND	10		µg/L	1	3/24/2015 2:47:38 PM	R25028
Carbon disulfide	ND	10		µg/L	1	3/24/2015 2:47:38 PM	R25028
Carbon Tetrachloride	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Chlorobenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Chloroethane	ND	2.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Chloroform	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Chloromethane	ND	3.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
2-Chlorotoluene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
4-Chlorotoluene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
cis-1,2-DCE	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Dibromochloromethane	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Dibromomethane	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,1-Dichloroethane	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,1-Dichloroethene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,2-Dichloropropane	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,3-Dichloropropane	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
2,2-Dichloropropane	ND	2.0		µg/L	1	3/24/2015 2:47:38 PM	R25028

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 7:00:00 AM

Lab ID: 1503834-001

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloropropene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Hexachlorobutadiene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
2-Hexanone	ND	10		µg/L	1	3/24/2015 2:47:38 PM	R25028
Isopropylbenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
4-Isopropyltoluene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
4-Methyl-2-pentanone	ND	10		µg/L	1	3/24/2015 2:47:38 PM	R25028
Methylene Chloride	ND	3.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
n-Butylbenzene	ND	3.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
n-Propylbenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
sec-Butylbenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Styrene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
tert-Butylbenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
trans-1,2-DCE	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Trichlorofluoromethane	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Vinyl chloride	ND	1.0		µg/L	1	3/24/2015 2:47:38 PM	R25028
Xylenes, Total	ND	1.5		µg/L	1	3/24/2015 2:47:38 PM	R25028
Surr: 1,2-Dichloroethane-d4	96.6	70-130		%REC	1	3/24/2015 2:47:38 PM	R25028
Surr: 4-Bromofluorobenzene	98.9	70-130		%REC	1	3/24/2015 2:47:38 PM	R25028
Surr: Dibromofluoromethane	103	70-130		%REC	1	3/24/2015 2:47:38 PM	R25028
Surr: Toluene-d8	93.6	70-130		%REC	1	3/24/2015 2:47:38 PM	R25028

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 2 of 73
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-4

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 10:50:00 AM

Lab ID: 1503834-002

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	1.9	1.0		mg/L	1	3/19/2015 7:57:40 PM	18212
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/19/2015 7:57:40 PM	18212
Surr: DNOP	109	76.5-150		%REC	1	3/19/2015 7:57:40 PM	18212
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	4.8	0.50		mg/L	10	3/24/2015 4:13:50 PM	R25029
Surr: BFB	99.9	80-120		%REC	10	3/24/2015 4:13:50 PM	R25029
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	1.1	0.010		mg/L	5	3/26/2015 3:35:30 PM	R25095
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:50:40 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 9:50:40 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:50:40 PM	R25072
Iron	2.0	0.10	*	mg/L	5	3/26/2015 3:35:30 PM	R25095
Manganese	1.9	0.010	*	mg/L	5	3/26/2015 3:35:30 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 9:50:40 PM	R25072
Zinc	0.021	0.010		mg/L	1	3/25/2015 9:50:40 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	1.8	0.010		mg/L	5	3/31/2015 5:33:01 PM	18338
Cadmium	ND	0.0020		mg/L	1	3/26/2015 6:04:06 PM	18338
Chromium	0.0092	0.0060		mg/L	1	3/26/2015 6:04:06 PM	18338
Copper	0.012	0.0060		mg/L	1	3/31/2015 5:31:13 PM	18338
Iron	11	0.40	*	mg/L	20	3/31/2015 5:34:50 PM	18338
Manganese	2.5	0.010	*	mg/L	5	3/31/2015 5:33:01 PM	18338
Silver	ND	0.0050		mg/L	1	3/26/2015 6:04:06 PM	18338
Zinc	0.030	0.010		mg/L	1	3/31/2015 5:31:13 PM	18338
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	0.0097	0.0050		mg/L	5	3/30/2015 5:45:19 PM	R25155
Lead	ND	0.0050		mg/L	5	3/30/2015 5:45:19 PM	R25155
Selenium	ND	0.050		mg/L	50	3/30/2015 5:42:16 PM	R25155
Uranium	0.013	0.0050		mg/L	5	3/30/2015 5:45:19 PM	R25155
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/27/2015 4:19:33 PM	18338
Lead	0.022	0.0010	*	mg/L	1	3/27/2015 4:09:59 PM	18338
Selenium	0.016	0.010		mg/L	10	3/27/2015 4:19:33 PM	18338
Uranium	0.017	0.0010		mg/L	1	3/27/2015 4:09:59 PM	18338
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	4/2/2015 10:09:43 AM	18458

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-4

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 10:50:00 AM

Lab ID: 1503834-002

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Acenaphthylene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Aniline	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Anthracene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Azobenzene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Benzoic acid	ND	20		µg/L	1	3/24/2015 5:37:13 PM	18250
Benzyl alcohol	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Carbazole	14	10		µg/L	1	3/24/2015 5:37:13 PM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
4-Chloroaniline	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
2-Chlorophenol	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Chrysene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Dibenzofuran	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Diethyl phthalate	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/24/2015 5:37:13 PM	18250
2,4-Dimethylphenol	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/24/2015 5:37:13 PM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/24/2015 5:37:13 PM	18250

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 4 of 73
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-4

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 10:50:00 AM

Lab ID: 1503834-002

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Fluoranthene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Fluorene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Hexachloroethane	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Isophorone	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
1-Methylnaphthalene	51	10		µg/L	1	3/24/2015 5:37:13 PM	18250
2-Methylnaphthalene	25	10		µg/L	1	3/24/2015 5:37:13 PM	18250
2-Methylphenol	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
3+4-Methylphenol	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Naphthalene	59	10		µg/L	1	3/24/2015 5:37:13 PM	18250
2-Nitroaniline	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
3-Nitroaniline	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
4-Nitroaniline	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Nitrobenzene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
2-Nitrophenol	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
4-Nitrophenol	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Pentachlorophenol	ND	20		µg/L	1	3/24/2015 5:37:13 PM	18250
Phenanthrene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Phenol	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Pyrene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Pyridine	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/24/2015 5:37:13 PM	18250
Surr: 2-Fluorophenol	60.7	17.6-104		%REC	1	3/24/2015 5:37:13 PM	18250
Surr: Phenol-d5	64.4	17.7-89.9		%REC	1	3/24/2015 5:37:13 PM	18250
Surr: 2,4,6-Tribromophenol	94.1	16.3-122		%REC	1	3/24/2015 5:37:13 PM	18250
Surr: Nitrobenzene-d5	82.7	45.3-117		%REC	1	3/24/2015 5:37:13 PM	18250
Surr: 2-Fluorobiphenyl	92.0	43-113		%REC	1	3/24/2015 5:37:13 PM	18250
Surr: 4-Terphenyl-d14	93.2	47.6-122		%REC	1	3/24/2015 5:37:13 PM	18250

EPA METHOD 8260B: VOLATILESAnalyst: **DJF**

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-4

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 10:50:00 AM

Lab ID: 1503834-002

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
Benzene	220	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Toluene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Ethylbenzene	260	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Methyl tert-butyl ether (MTBE)	1200	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,2,4-Trimethylbenzene	200	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,3,5-Trimethylbenzene	24	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Naphthalene	170	20		µg/L	10	3/24/2015 3:38:01 PM	R25028
1-Methylnaphthalene	96	40		µg/L	10	3/24/2015 3:38:01 PM	R25028
2-Methylnaphthalene	89	40		µg/L	10	3/24/2015 3:38:01 PM	R25028
Acetone	ND	100		µg/L	10	3/24/2015 3:38:01 PM	R25028
Bromobenzene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Bromodichloromethane	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Bromoform	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Bromomethane	ND	30		µg/L	10	3/24/2015 3:38:01 PM	R25028
2-Butanone	ND	100		µg/L	10	3/24/2015 3:38:01 PM	R25028
Carbon disulfide	ND	100		µg/L	10	3/24/2015 3:38:01 PM	R25028
Carbon Tetrachloride	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Chlorobenzene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Chloroethane	ND	20		µg/L	10	3/24/2015 3:38:01 PM	R25028
Chloroform	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Chloromethane	ND	30		µg/L	10	3/24/2015 3:38:01 PM	R25028
2-Chlorotoluene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
4-Chlorotoluene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
cis-1,2-DCE	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
cis-1,3-Dichloropropene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	3/24/2015 3:38:01 PM	R25028
Dibromochloromethane	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Dibromomethane	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,2-Dichlorobenzene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,3-Dichlorobenzene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,4-Dichlorobenzene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Dichlorodifluoromethane	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,1-Dichloroethane	19	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,1-Dichloroethene	32	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,2-Dichloropropane	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,3-Dichloropropane	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
2,2-Dichloropropane	ND	20		µg/L	10	3/24/2015 3:38:01 PM	R25028

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-4

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 10:50:00 AM

Lab ID: 1503834-002

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloropropene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Hexachlorobutadiene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
2-Hexanone	ND	100		µg/L	10	3/24/2015 3:38:01 PM	R25028
Isopropylbenzene	10	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
4-Isopropyltoluene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
4-Methyl-2-pentanone	ND	100		µg/L	10	3/24/2015 3:38:01 PM	R25028
Methylene Chloride	ND	30		µg/L	10	3/24/2015 3:38:01 PM	R25028
n-Butylbenzene	ND	30		µg/L	10	3/24/2015 3:38:01 PM	R25028
n-Propylbenzene	21	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
sec-Butylbenzene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Styrene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
tert-Butylbenzene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	3/24/2015 3:38:01 PM	R25028
Tetrachloroethene (PCE)	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
trans-1,2-DCE	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
trans-1,3-Dichloropropene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,2,3-Trichlorobenzene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,2,4-Trichlorobenzene	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,1,1-Trichloroethane	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,1,2-Trichloroethane	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Trichloroethene (TCE)	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Trichlorofluoromethane	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
1,2,3-Trichloropropane	ND	20		µg/L	10	3/24/2015 3:38:01 PM	R25028
Vinyl chloride	ND	10		µg/L	10	3/24/2015 3:38:01 PM	R25028
Xylenes, Total	340	15		µg/L	10	3/24/2015 3:38:01 PM	R25028
Surr: 1,2-Dichloroethane-d4	91.2	70-130		%REC	10	3/24/2015 3:38:01 PM	R25028
Surr: 4-Bromofluorobenzene	97.0	70-130		%REC	10	3/24/2015 3:38:01 PM	R25028
Surr: Dibromofluoromethane	93.7	70-130		%REC	10	3/24/2015 3:38:01 PM	R25028
Surr: Toluene-d8	93.8	70-130		%REC	10	3/24/2015 3:38:01 PM	R25028

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-11

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 11:16:00 AM

Lab ID: 1503834-003

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	2.6	1.0		mg/L	1	3/19/2015 8:19:05 PM	18212
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/19/2015 8:19:05 PM	18212
Surr: DNOP	116	76.5-150		%REC	1	3/19/2015 8:19:05 PM	18212
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	55	10		mg/L	200	3/24/2015 4:43:07 PM	R25029
Surr: BFB	88.8	80-120		%REC	200	3/24/2015 4:43:07 PM	R25029
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	2.0	0.020		mg/L	10	3/26/2015 3:37:08 PM	R25095
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:52:22 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 9:52:22 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:52:22 PM	R25072
Iron	4.8	0.20	*	mg/L	10	3/26/2015 3:37:08 PM	R25095
Manganese	2.9	0.020	*	mg/L	10	3/26/2015 3:37:08 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 9:52:22 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 9:52:22 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	1.9	0.010		mg/L	5	3/31/2015 5:38:33 PM	18338
Cadmium	ND	0.0020		mg/L	1	3/26/2015 6:05:55 PM	18338
Chromium	ND	0.0060		mg/L	1	3/26/2015 6:05:55 PM	18338
Copper	ND	0.0060		mg/L	1	3/31/2015 5:36:47 PM	18338
Iron	10	0.40	*	mg/L	20	3/31/2015 5:40:24 PM	18338
Manganese	3.1	0.010	*	mg/L	5	3/31/2015 5:38:33 PM	18338
Silver	ND	0.0050		mg/L	1	3/26/2015 6:05:55 PM	18338
Zinc	0.024	0.010		mg/L	1	3/31/2015 5:36:47 PM	18338
EPA 200.8: DISSOLVED METALS							Analyst: TES
Arsenic	0.0087	0.0010		mg/L	1	4/2/2015 4:05:23 PM	R25250
Lead	ND	0.0010		mg/L	1	4/2/2015 4:05:23 PM	R25250
Selenium	0.0080	0.0050		mg/L	5	4/2/2015 5:19:48 PM	R25250
Uranium	0.0013	0.0010		mg/L	1	4/2/2015 4:05:23 PM	R25250
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.0086	0.0010		mg/L	1	3/27/2015 4:13:10 PM	18338
Lead	0.0068	0.0010		mg/L	1	3/27/2015 4:13:10 PM	18338
Selenium	0.0060	0.0010		mg/L	1	3/27/2015 4:13:10 PM	18338
Uranium	0.0021	0.0010		mg/L	1	3/27/2015 4:13:10 PM	18338
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	4/2/2015 10:11:34 AM	18458

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-11

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 11:16:00 AM

Lab ID: 1503834-003

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Acenaphthylene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Aniline	44	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Anthracene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Azobenzene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Benzoic acid	ND	20		µg/L	1	3/24/2015 6:05:29 PM	18250
Benzyl alcohol	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Carbazole	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
4-Chloroaniline	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
2-Chlorophenol	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Chrysene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Dibenzofuran	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Diethyl phthalate	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/24/2015 6:05:29 PM	18250
2,4-Dimethylphenol	110	10		µg/L	1	3/24/2015 6:05:29 PM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/24/2015 6:05:29 PM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/24/2015 6:05:29 PM	18250

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 9 of 73
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-11

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 11:16:00 AM

Lab ID: 1503834-003

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
2,4-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Fluoranthene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Fluorene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Hexachloroethane	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Isophorone	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
1-Methylnaphthalene	25	10		µg/L	1	3/24/2015 6:05:29 PM	18250
2-Methylnaphthalene	20	10		µg/L	1	3/24/2015 6:05:29 PM	18250
2-Methylphenol	270	20		µg/L	2	3/25/2015 10:42:53 AM	18250
3+4-Methylphenol	240	10		µg/L	1	3/24/2015 6:05:29 PM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Naphthalene	69	10		µg/L	1	3/24/2015 6:05:29 PM	18250
2-Nitroaniline	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
3-Nitroaniline	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
4-Nitroaniline	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Nitrobenzene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
2-Nitrophenol	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
4-Nitrophenol	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Pentachlorophenol	ND	20		µg/L	1	3/24/2015 6:05:29 PM	18250
Phenanthrene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Phenol	52	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Pyrene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Pyridine	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/24/2015 6:05:29 PM	18250
Surr: 2-Fluorophenol	58.0	17.6-104		%REC	1	3/24/2015 6:05:29 PM	18250
Surr: Phenol-d5	59.3	17.7-89.9		%REC	1	3/24/2015 6:05:29 PM	18250
Surr: 2,4,6-Tribromophenol	91.1	16.3-122		%REC	1	3/24/2015 6:05:29 PM	18250
Surr: Nitrobenzene-d5	80.0	45.3-117		%REC	1	3/24/2015 6:05:29 PM	18250
Surr: 2-Fluorobiphenyl	81.2	43-113		%REC	1	3/24/2015 6:05:29 PM	18250
Surr: 4-Terphenyl-d14	80.9	47.6-122		%REC	1	3/24/2015 6:05:29 PM	18250

EPA METHOD 8260B: VOLATILES

Analyst: **DJF**

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-11

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 11:16:00 AM

Lab ID: 1503834-003

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
Benzene	10000	200		µg/L	200	3/24/2015 5:00:22 PM	R25028
Toluene	11000	200		µg/L	200	3/24/2015 5:00:22 PM	R25028
Ethylbenzene	930	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Methyl tert-butyl ether (MTBE)	48	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,2,4-Trimethylbenzene	510	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,3,5-Trimethylbenzene	110	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,2-Dichloroethane (EDC)	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,2-Dibromoethane (EDB)	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Naphthalene	93	40		µg/L	20	3/24/2015 5:36:43 PM	R25028
1-Methylnaphthalene	ND	80		µg/L	20	3/24/2015 5:36:43 PM	R25028
2-Methylnaphthalene	ND	80		µg/L	20	3/24/2015 5:36:43 PM	R25028
Acetone	ND	200		µg/L	20	3/24/2015 5:36:43 PM	R25028
Bromobenzene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Bromodichloromethane	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Bromoform	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Bromomethane	ND	60		µg/L	20	3/24/2015 5:36:43 PM	R25028
2-Butanone	ND	200		µg/L	20	3/24/2015 5:36:43 PM	R25028
Carbon disulfide	ND	200		µg/L	20	3/24/2015 5:36:43 PM	R25028
Carbon Tetrachloride	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Chlorobenzene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Chloroethane	ND	40		µg/L	20	3/24/2015 5:36:43 PM	R25028
Chloroform	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Chloromethane	ND	60		µg/L	20	3/24/2015 5:36:43 PM	R25028
2-Chlorotoluene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
4-Chlorotoluene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
cis-1,2-DCE	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
cis-1,3-Dichloropropene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,2-Dibromo-3-chloropropane	ND	40		µg/L	20	3/24/2015 5:36:43 PM	R25028
Dibromochloromethane	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Dibromomethane	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,2-Dichlorobenzene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,3-Dichlorobenzene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,4-Dichlorobenzene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Dichlorodifluoromethane	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,1-Dichloroethane	48	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,1-Dichloroethene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,2-Dichloropropane	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,3-Dichloropropane	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
2,2-Dichloropropane	ND	40		µg/L	20	3/24/2015 5:36:43 PM	R25028

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-11

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 11:16:00 AM

Lab ID: 1503834-003

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloropropene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Hexachlorobutadiene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
2-Hexanone	ND	200		µg/L	20	3/24/2015 5:36:43 PM	R25028
Isopropylbenzene	33	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
4-Isopropyltoluene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
4-Methyl-2-pentanone	ND	200		µg/L	20	3/24/2015 5:36:43 PM	R25028
Methylene Chloride	ND	60		µg/L	20	3/24/2015 5:36:43 PM	R25028
n-Butylbenzene	ND	60		µg/L	20	3/24/2015 5:36:43 PM	R25028
n-Propylbenzene	94	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
sec-Butylbenzene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Styrene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
tert-Butylbenzene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,1,1,2-Tetrachloroethane	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,1,2,2-Tetrachloroethane	ND	40		µg/L	20	3/24/2015 5:36:43 PM	R25028
Tetrachloroethene (PCE)	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
trans-1,2-DCE	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
trans-1,3-Dichloropropene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,2,3-Trichlorobenzene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,2,4-Trichlorobenzene	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,1,1-Trichloroethane	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,1,2-Trichloroethane	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Trichloroethene (TCE)	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Trichlorofluoromethane	ND	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
1,2,3-Trichloropropane	ND	40		µg/L	20	3/24/2015 5:36:43 PM	R25028
Vinyl chloride	45	20		µg/L	20	3/24/2015 5:36:43 PM	R25028
Xylenes, Total	3700	300		µg/L	200	3/24/2015 5:00:22 PM	R25028
Surr: 1,2-Dichloroethane-d4	92.3	70-130		%REC	20	3/24/2015 5:36:43 PM	R25028
Surr: 4-Bromofluorobenzene	89.6	70-130		%REC	20	3/24/2015 5:36:43 PM	R25028
Surr: Dibromofluoromethane	99.3	70-130		%REC	20	3/24/2015 5:36:43 PM	R25028
Surr: Toluene-d8	92.8	70-130		%REC	20	3/24/2015 5:36:43 PM	R25028

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-10

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 11:40:00 AM

Lab ID: 1503834-004

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	32	1.0		mg/L	1	3/19/2015 8:40:37 PM	18212
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/19/2015 8:40:37 PM	18212
Surr: DNOP	109	76.5-150		%REC	1	3/19/2015 8:40:37 PM	18212
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	80	10		mg/L	200	3/24/2015 5:12:21 PM	R25029
Surr: BFB	90.1	80-120		%REC	200	3/24/2015 5:12:21 PM	R25029
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	12	0.10	*	mg/L	50	3/26/2015 3:38:48 PM	R25095
Cadmium	ND	0.0020		mg/L	1	3/25/2015 9:54:04 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 9:54:04 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 9:54:04 PM	R25072
Iron	49	1.0	*	mg/L	50	3/26/2015 3:38:48 PM	R25095
Manganese	17	0.10	*	mg/L	50	3/26/2015 3:38:48 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 9:54:04 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 9:54:04 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	22	0.20	*	mg/L	100	3/31/2015 5:44:29 PM	18338
Cadmium	ND	0.0020		mg/L	1	3/26/2015 6:07:46 PM	18338
Chromium	0.036	0.0060		mg/L	1	3/26/2015 6:07:46 PM	18338
Copper	0.095	0.0060		mg/L	1	3/31/2015 5:42:37 PM	18338
Iron	100	4.0	*	mg/L	200	4/1/2015 5:38:49 PM	18338
Manganese	27	0.20	*	mg/L	100	3/31/2015 5:44:29 PM	18338
Silver	ND	0.0050		mg/L	1	3/26/2015 6:07:46 PM	18338
Zinc	0.14	0.010		mg/L	1	3/31/2015 5:42:37 PM	18338
EPA 200.8: DISSOLVED METALS							Analyst: TES
Arsenic	ND	0.0050		mg/L	5	4/2/2015 5:22:51 PM	R25250
Lead	ND	0.0010		mg/L	1	4/2/2015 4:10:48 PM	R25250
Selenium	0.0068	0.0050		mg/L	5	4/2/2015 5:22:51 PM	R25250
Uranium	ND	0.0010		mg/L	1	4/2/2015 4:10:48 PM	R25250
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.019	0.010	*	mg/L	10	3/27/2015 5:05:28 PM	18338
Lead	0.20	0.010	*	mg/L	10	3/27/2015 5:05:28 PM	18338
Selenium	ND	0.010		mg/L	10	3/27/2015 5:05:28 PM	18338
Uranium	0.019	0.010		mg/L	10	3/27/2015 5:05:28 PM	18338
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	4/2/2015 10:13:18 AM	18458

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-10

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 11:40:00 AM

Lab ID: 1503834-004

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Acenaphthylene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Aniline	67	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Anthracene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Azobenzene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Benzoic acid	ND	20		µg/L	1	3/24/2015 6:33:44 PM	18250
Benzyl alcohol	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Carbazole	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
4-Chloroaniline	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
2-Chlorophenol	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Chrysene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Dibenzofuran	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Diethyl phthalate	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/24/2015 6:33:44 PM	18250
2,4-Dimethylphenol	110	10		µg/L	1	3/24/2015 6:33:44 PM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/24/2015 6:33:44 PM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/24/2015 6:33:44 PM	18250

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-10

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 11:40:00 AM

Lab ID: 1503834-004

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
2,4-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Fluoranthene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Fluorene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Hexachloroethane	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Isophorone	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
1-Methylnaphthalene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
2-Methylnaphthalene	88	10		µg/L	1	3/24/2015 6:33:44 PM	18250
2-Methylphenol	530	50		µg/L	5	3/25/2015 11:10:32 AM	18250
3+4-Methylphenol	630	50		µg/L	5	3/25/2015 11:10:32 AM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Naphthalene	170	10		µg/L	1	3/24/2015 6:33:44 PM	18250
2-Nitroaniline	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
3-Nitroaniline	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
4-Nitroaniline	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Nitrobenzene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
2-Nitrophenol	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
4-Nitrophenol	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Pentachlorophenol	ND	20		µg/L	1	3/24/2015 6:33:44 PM	18250
Phenanthrene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Phenol	420	50		µg/L	5	3/25/2015 11:10:32 AM	18250
Pyrene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Pyridine	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/24/2015 6:33:44 PM	18250
Surr: 2-Fluorophenol	50.6	17.6-104		%REC	1	3/24/2015 6:33:44 PM	18250
Surr: Phenol-d5	73.6	17.7-89.9		%REC	1	3/24/2015 6:33:44 PM	18250
Surr: 2,4,6-Tribromophenol	109	16.3-122		%REC	1	3/24/2015 6:33:44 PM	18250
Surr: Nitrobenzene-d5	88.9	45.3-117		%REC	1	3/24/2015 6:33:44 PM	18250
Surr: 2-Fluorobiphenyl	159	43-113	S	%REC	1	3/24/2015 6:33:44 PM	18250
Surr: 4-Terphenyl-d14	86.7	47.6-122		%REC	1	3/24/2015 6:33:44 PM	18250

EPA METHOD 8260B: VOLATILES

Analyst: **DJF**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.
	E Value above quantitation range
	J Analyte detected below quantitation limits
	O RSD is greater than RSDlimit
	R RPD outside accepted recovery limits
	S Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-10

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 11:40:00 AM

Lab ID: 1503834-004

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	11000	500		µg/L	500	3/24/2015 6:31:40 PM	R25028
Toluene	21000	500		µg/L	500	3/24/2015 6:31:40 PM	R25028
Ethylbenzene	1600	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,2,4-Trimethylbenzene	960	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,3,5-Trimethylbenzene	240	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Naphthalene	200	100		µg/L	50	3/24/2015 6:59:13 PM	R25028
1-Methylnaphthalene	ND	200		µg/L	50	3/24/2015 6:59:13 PM	R25028
2-Methylnaphthalene	ND	200		µg/L	50	3/24/2015 6:59:13 PM	R25028
Acetone	ND	500		µg/L	50	3/24/2015 6:59:13 PM	R25028
Bromobenzene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Bromodichloromethane	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Bromoform	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Bromomethane	ND	150		µg/L	50	3/24/2015 6:59:13 PM	R25028
2-Butanone	ND	500		µg/L	50	3/24/2015 6:59:13 PM	R25028
Carbon disulfide	ND	500		µg/L	50	3/24/2015 6:59:13 PM	R25028
Carbon Tetrachloride	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Chlorobenzene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Chloroethane	ND	100		µg/L	50	3/24/2015 6:59:13 PM	R25028
Chloroform	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Chloromethane	ND	150		µg/L	50	3/24/2015 6:59:13 PM	R25028
2-Chlorotoluene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
4-Chlorotoluene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
cis-1,2-DCE	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
cis-1,3-Dichloropropene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	3/24/2015 6:59:13 PM	R25028
Dibromochloromethane	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Dibromomethane	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,2-Dichlorobenzene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,3-Dichlorobenzene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,4-Dichlorobenzene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Dichlorodifluoromethane	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,1-Dichloroethane	78	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,1-Dichloroethene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,2-Dichloropropane	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,3-Dichloropropane	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
2,2-Dichloropropane	ND	100		µg/L	50	3/24/2015 6:59:13 PM	R25028

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-10

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 11:40:00 AM

Lab ID: 1503834-004

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloropropene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Hexachlorobutadiene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
2-Hexanone	ND	500		µg/L	50	3/24/2015 6:59:13 PM	R25028
Isopropylbenzene	51	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
4-Isopropyltoluene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
4-Methyl-2-pentanone	ND	500		µg/L	50	3/24/2015 6:59:13 PM	R25028
Methylene Chloride	ND	150		µg/L	50	3/24/2015 6:59:13 PM	R25028
n-Butylbenzene	ND	150		µg/L	50	3/24/2015 6:59:13 PM	R25028
n-Propylbenzene	140	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
sec-Butylbenzene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Styrene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
tert-Butylbenzene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	3/24/2015 6:59:13 PM	R25028
Tetrachloroethene (PCE)	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
trans-1,2-DCE	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
trans-1,3-Dichloropropene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,2,3-Trichlorobenzene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,2,4-Trichlorobenzene	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,1,1-Trichloroethane	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,1,2-Trichloroethane	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Trichloroethene (TCE)	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Trichlorofluoromethane	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
1,2,3-Trichloropropane	ND	100		µg/L	50	3/24/2015 6:59:13 PM	R25028
Vinyl chloride	ND	50		µg/L	50	3/24/2015 6:59:13 PM	R25028
Xylenes, Total	6800	75		µg/L	50	3/24/2015 6:59:13 PM	R25028
Surr: 1,2-Dichloroethane-d4	93.2	70-130		%REC	50	3/24/2015 6:59:13 PM	R25028
Surr: 4-Bromofluorobenzene	95.8	70-130		%REC	50	3/24/2015 6:59:13 PM	R25028
Surr: Dibromofluoromethane	94.6	70-130		%REC	50	3/24/2015 6:59:13 PM	R25028
Surr: Toluene-d8	90.5	70-130		%REC	50	3/24/2015 6:59:13 PM	R25028

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-9

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 1:30:00 PM

Lab ID: 1503834-005

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/19/2015 9:02:06 PM	18212
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/19/2015 9:02:06 PM	18212
Surr: DNOP	103	76.5-150		%REC	1	3/19/2015 9:02:06 PM	18212
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	3.3	0.50		mg/L	10	3/24/2015 5:41:35 PM	R25029
Surr: BFB	95.3	80-120		%REC	10	3/24/2015 5:41:35 PM	R25029
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.19	0.0020		mg/L	1	3/25/2015 10:04:21 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 10:04:21 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 10:04:21 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 10:04:21 PM	R25072
Iron	1.4	0.10	*	mg/L	5	3/26/2015 3:40:30 PM	R25095
Manganese	2.3	0.010	*	mg/L	5	3/26/2015 3:40:30 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 10:04:21 PM	R25072
Zinc	0.039	0.010		mg/L	1	3/25/2015 10:04:21 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.22	0.0020		mg/L	1	3/31/2015 5:46:28 PM	18338
Cadmium	ND	0.0020		mg/L	1	3/26/2015 6:09:49 PM	18338
Chromium	ND	0.0060		mg/L	1	3/26/2015 6:09:49 PM	18338
Copper	ND	0.0060		mg/L	1	3/31/2015 5:46:28 PM	18338
Iron	2.0	0.10	*	mg/L	5	3/31/2015 5:48:24 PM	18338
Manganese	2.4	0.010	*	mg/L	5	3/31/2015 5:48:24 PM	18338
Silver	ND	0.0050		mg/L	1	3/26/2015 6:09:49 PM	18338
Zinc	ND	0.010		mg/L	1	3/31/2015 5:46:28 PM	18338
EPA 200.8: DISSOLVED METALS							Analyst: TES
Arsenic	ND	0.0050		mg/L	5	4/2/2015 5:36:40 PM	R25250
Lead	ND	0.0010		mg/L	1	4/2/2015 4:27:45 PM	R25250
Selenium	ND	0.010		mg/L	10	4/4/2015 7:25:48 PM	R25304
Uranium	0.012	0.0010		mg/L	1	4/2/2015 4:27:45 PM	R25250
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.0029	0.0010		mg/L	1	3/27/2015 4:22:45 PM	18338
Lead	0.0015	0.0010		mg/L	1	3/27/2015 4:22:45 PM	18338
Selenium	0.0053	0.0010		mg/L	1	3/27/2015 4:22:45 PM	18338
Uranium	0.014	0.0010		mg/L	1	3/27/2015 4:22:45 PM	18338
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	4/2/2015 10:15:01 AM	18458

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-9

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 1:30:00 PM

Lab ID: 1503834-005

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: DAM	
Acenaphthene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Acenaphthylene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Aniline	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Anthracene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Azobenzene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Benzoic acid	ND	20		µg/L	1	3/24/2015 7:01:59 PM	18250
Benzyl alcohol	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Carbazole	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
4-Chloroaniline	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
2-Chlorophenol	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Chrysene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Dibenzofuran	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Diethyl phthalate	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/24/2015 7:01:59 PM	18250
2,4-Dimethylphenol	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/24/2015 7:01:59 PM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/24/2015 7:01:59 PM	18250

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-9

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 1:30:00 PM

Lab ID: 1503834-005

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Fluoranthene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Fluorene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Hexachloroethane	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Isophorone	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
1-Methylnaphthalene	27	10		µg/L	1	3/24/2015 7:01:59 PM	18250
2-Methylnaphthalene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
2-Methylphenol	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
3+4-Methylphenol	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Naphthalene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
2-Nitroaniline	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
3-Nitroaniline	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
4-Nitroaniline	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Nitrobenzene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
2-Nitrophenol	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
4-Nitrophenol	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Pentachlorophenol	ND	20		µg/L	1	3/24/2015 7:01:59 PM	18250
Phenanthrene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Phenol	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Pyrene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Pyridine	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/24/2015 7:01:59 PM	18250
Surr: 2-Fluorophenol	68.4	17.6-104		%REC	1	3/24/2015 7:01:59 PM	18250
Surr: Phenol-d5	67.8	17.7-89.9		%REC	1	3/24/2015 7:01:59 PM	18250
Surr: 2,4,6-Tribromophenol	100	16.3-122		%REC	1	3/24/2015 7:01:59 PM	18250
Surr: Nitrobenzene-d5	91.0	45.3-117		%REC	1	3/24/2015 7:01:59 PM	18250
Surr: 2-Fluorobiphenyl	91.1	43-113		%REC	1	3/24/2015 7:01:59 PM	18250
Surr: 4-Terphenyl-d14	84.8	47.6-122		%REC	1	3/24/2015 7:01:59 PM	18250

EPA METHOD 8260B: VOLATILES

Analyst: **DJF**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.
	E Value above quantitation range
	J Analyte detected below quantitation limits
	O RSD is greater than RSDlimit
	R RPD outside accepted recovery limits
	S Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-9

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 1:30:00 PM

Lab ID: 1503834-005

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	490	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Toluene	13	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Ethylbenzene	80	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Methyl tert-butyl ether (MTBE)	500	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,2,4-Trimethylbenzene	18	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Naphthalene	11	10		µg/L	5	3/24/2015 7:53:51 PM	R25028
1-Methylnaphthalene	30	20		µg/L	5	3/24/2015 7:53:51 PM	R25028
2-Methylnaphthalene	ND	20		µg/L	5	3/24/2015 7:53:51 PM	R25028
Acetone	ND	50		µg/L	5	3/24/2015 7:53:51 PM	R25028
Bromobenzene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Bromodichloromethane	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Bromoform	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Bromomethane	ND	15		µg/L	5	3/24/2015 7:53:51 PM	R25028
2-Butanone	ND	50		µg/L	5	3/24/2015 7:53:51 PM	R25028
Carbon disulfide	ND	50		µg/L	5	3/24/2015 7:53:51 PM	R25028
Carbon Tetrachloride	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Chlorobenzene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Chloroethane	ND	10		µg/L	5	3/24/2015 7:53:51 PM	R25028
Chloroform	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Chloromethane	ND	15		µg/L	5	3/24/2015 7:53:51 PM	R25028
2-Chlorotoluene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
4-Chlorotoluene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
cis-1,2-DCE	36	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	3/24/2015 7:53:51 PM	R25028
Dibromochloromethane	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Dibromomethane	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,2-Dichlorobenzene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,3-Dichlorobenzene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,4-Dichlorobenzene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Dichlorodifluoromethane	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,1-Dichloroethane	34	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,1-Dichloroethene	74	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,2-Dichloropropane	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,3-Dichloropropane	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
2,2-Dichloropropane	ND	10		µg/L	5	3/24/2015 7:53:51 PM	R25028

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-9

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 1:30:00 PM

Lab ID: 1503834-005

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloropropene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Hexachlorobutadiene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
2-Hexanone	ND	50		µg/L	5	3/24/2015 7:53:51 PM	R25028
Isopropylbenzene	7.4	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
4-Isopropyltoluene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
4-Methyl-2-pentanone	ND	50		µg/L	5	3/24/2015 7:53:51 PM	R25028
Methylene Chloride	ND	15		µg/L	5	3/24/2015 7:53:51 PM	R25028
n-Butylbenzene	ND	15		µg/L	5	3/24/2015 7:53:51 PM	R25028
n-Propylbenzene	13	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
sec-Butylbenzene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Styrene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
tert-Butylbenzene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	3/24/2015 7:53:51 PM	R25028
Tetrachloroethene (PCE)	7.1	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
trans-1,2-DCE	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,1,1-Trichloroethane	130	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,1,2-Trichloroethane	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Trichloroethene (TCE)	9.0	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Trichlorofluoromethane	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
1,2,3-Trichloropropane	ND	10		µg/L	5	3/24/2015 7:53:51 PM	R25028
Vinyl chloride	ND	5.0		µg/L	5	3/24/2015 7:53:51 PM	R25028
Xylenes, Total	18	7.5		µg/L	5	3/24/2015 7:53:51 PM	R25028
Surr: 1,2-Dichloroethane-d4	93.5	70-130		%REC	5	3/24/2015 7:53:51 PM	R25028
Surr: 4-Bromofluorobenzene	94.9	70-130		%REC	5	3/24/2015 7:53:51 PM	R25028
Surr: Dibromofluoromethane	98.2	70-130		%REC	5	3/24/2015 7:53:51 PM	R25028
Surr: Toluene-d8	91.7	70-130		%REC	5	3/24/2015 7:53:51 PM	R25028

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-16

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 1:55:00 PM

Lab ID: 1503834-006

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	2.9	1.0		mg/L	1	3/19/2015 9:23:33 PM	18212
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/19/2015 9:23:33 PM	18212
Surr: DNOP	95.8	76.5-150		%REC	1	3/19/2015 9:23:33 PM	18212
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	61	10		mg/L	200	3/24/2015 8:07:43 PM	R25029
Surr: BFB	89.1	80-120		%REC	200	3/24/2015 8:07:43 PM	R25029
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.94	0.010		mg/L	5	3/26/2015 3:42:08 PM	R25095
Cadmium	ND	0.0020		mg/L	1	3/25/2015 10:06:02 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 10:06:02 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 10:06:02 PM	R25072
Iron	5.6	0.20	*	mg/L	10	3/26/2015 3:53:50 PM	R25095
Manganese	1.2	0.010	*	mg/L	5	3/26/2015 3:42:08 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 10:06:02 PM	R25072
Zinc	0.024	0.010		mg/L	1	3/25/2015 10:06:02 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	1.0	0.020		mg/L	10	3/31/2015 5:58:00 PM	18338
Cadmium	ND	0.0020		mg/L	1	3/26/2015 6:21:57 PM	18338
Chromium	ND	0.0060		mg/L	1	3/26/2015 6:21:57 PM	18338
Copper	0.023	0.0060		mg/L	1	3/31/2015 5:56:10 PM	18338
Iron	7.2	0.20	*	mg/L	10	3/31/2015 5:58:00 PM	18338
Manganese	1.3	0.020	*	mg/L	10	3/31/2015 5:58:00 PM	18338
Silver	ND	0.0050		mg/L	1	3/26/2015 6:21:57 PM	18338
Zinc	0.035	0.010		mg/L	1	3/31/2015 5:56:10 PM	18338
EPA 200.8: DISSOLVED METALS							Analyst: TES
Arsenic	ND	0.010		mg/L	10	4/2/2015 5:39:43 PM	R25250
Lead	ND	0.0010		mg/L	1	4/2/2015 4:30:52 PM	R25250
Selenium	ND	0.020		mg/L	20	4/2/2015 5:42:46 PM	R25250
Uranium	ND	0.0010		mg/L	1	4/2/2015 4:30:52 PM	R25250
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/27/2015 5:08:39 PM	18338
Lead	ND	0.010		mg/L	10	3/27/2015 5:08:39 PM	18338
Selenium	ND	0.020		mg/L	20	3/31/2015 5:23:43 PM	18338
Uranium	ND	0.010		mg/L	10	3/27/2015 5:08:39 PM	18338
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	4/2/2015 10:16:45 AM	18458

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-16

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 1:55:00 PM

Lab ID: 1503834-006

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Acenaphthylene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Aniline	20	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Anthracene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Azobenzene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Benzoic acid	ND	20		µg/L	1	3/24/2015 7:30:13 PM	18250
Benzyl alcohol	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Carbazole	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
4-Chloroaniline	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
2-Chlorophenol	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Chrysene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Dibenzofuran	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Diethyl phthalate	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/24/2015 7:30:13 PM	18250
2,4-Dimethylphenol	190	10		µg/L	1	3/24/2015 7:30:13 PM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/24/2015 7:30:13 PM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/24/2015 7:30:13 PM	18250

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-16

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 1:55:00 PM

Lab ID: 1503834-006

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Fluoranthene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Fluorene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Hexachloroethane	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Isophorone	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
1-Methylnaphthalene	45	10		µg/L	1	3/24/2015 7:30:13 PM	18250
2-Methylnaphthalene	53	10		µg/L	1	3/24/2015 7:30:13 PM	18250
2-Methylphenol	150	10		µg/L	1	3/24/2015 7:30:13 PM	18250
3+4-Methylphenol	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Naphthalene	150	10		µg/L	1	3/24/2015 7:30:13 PM	18250
2-Nitroaniline	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
3-Nitroaniline	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
4-Nitroaniline	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Nitrobenzene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
2-Nitrophenol	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
4-Nitrophenol	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Pentachlorophenol	ND	20		µg/L	1	3/24/2015 7:30:13 PM	18250
Phenanthrene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Phenol	31	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Pyrene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Pyridine	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/24/2015 7:30:13 PM	18250
Surr: 2-Fluorophenol	65.3	17.6-104		%REC	1	3/24/2015 7:30:13 PM	18250
Surr: Phenol-d5	49.4	17.7-89.9		%REC	1	3/24/2015 7:30:13 PM	18250
Surr: 2,4,6-Tribromophenol	104	16.3-122		%REC	1	3/24/2015 7:30:13 PM	18250
Surr: Nitrobenzene-d5	88.3	45.3-117		%REC	1	3/24/2015 7:30:13 PM	18250
Surr: 2-Fluorobiphenyl	89.6	43-113		%REC	1	3/24/2015 7:30:13 PM	18250
Surr: 4-Terphenyl-d14	79.3	47.6-122		%REC	1	3/24/2015 7:30:13 PM	18250

EPA METHOD 8260B: VOLATILES

Analyst: **DJF**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-16

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 1:55:00 PM

Lab ID: 1503834-006

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst: DJF		
Benzene	19000	500		µg/L	500	3/24/2015 8:21:12 PM	R25028
Toluene	450	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Ethylbenzene	1400	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Methyl tert-butyl ether (MTBE)	1600	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,2,4-Trimethylbenzene	940	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,3,5-Trimethylbenzene	310	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Naphthalene	200	100		µg/L	50	3/24/2015 8:48:39 PM	R25028
1-Methylnaphthalene	ND	200		µg/L	50	3/24/2015 8:48:39 PM	R25028
2-Methylnaphthalene	ND	200		µg/L	50	3/24/2015 8:48:39 PM	R25028
Acetone	ND	500		µg/L	50	3/24/2015 8:48:39 PM	R25028
Bromobenzene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Bromodichloromethane	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Bromoform	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Bromomethane	ND	150		µg/L	50	3/24/2015 8:48:39 PM	R25028
2-Butanone	ND	500		µg/L	50	3/24/2015 8:48:39 PM	R25028
Carbon disulfide	ND	500		µg/L	50	3/24/2015 8:48:39 PM	R25028
Carbon Tetrachloride	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Chlorobenzene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Chloroethane	ND	100		µg/L	50	3/24/2015 8:48:39 PM	R25028
Chloroform	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Chloromethane	ND	150		µg/L	50	3/24/2015 8:48:39 PM	R25028
2-Chlorotoluene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
4-Chlorotoluene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
cis-1,2-DCE	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
cis-1,3-Dichloropropene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	3/24/2015 8:48:39 PM	R25028
Dibromochloromethane	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Dibromomethane	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,2-Dichlorobenzene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,3-Dichlorobenzene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,4-Dichlorobenzene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Dichlorodifluoromethane	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,1-Dichloroethane	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,1-Dichloroethene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,2-Dichloropropane	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,3-Dichloropropane	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
2,2-Dichloropropane	ND	100		µg/L	50	3/24/2015 8:48:39 PM	R25028

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-16

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 1:55:00 PM

Lab ID: 1503834-006

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloropropene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Hexachlorobutadiene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
2-Hexanone	ND	500		µg/L	50	3/24/2015 8:48:39 PM	R25028
Isopropylbenzene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
4-Isopropyltoluene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
4-Methyl-2-pentanone	ND	500		µg/L	50	3/24/2015 8:48:39 PM	R25028
Methylene Chloride	ND	150		µg/L	50	3/24/2015 8:48:39 PM	R25028
n-Butylbenzene	ND	150		µg/L	50	3/24/2015 8:48:39 PM	R25028
n-Propylbenzene	110	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
sec-Butylbenzene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Styrene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
tert-Butylbenzene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	3/24/2015 8:48:39 PM	R25028
Tetrachloroethene (PCE)	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
trans-1,2-DCE	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
trans-1,3-Dichloropropene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,2,3-Trichlorobenzene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,2,4-Trichlorobenzene	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,1,1-Trichloroethane	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,1,2-Trichloroethane	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Trichloroethene (TCE)	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Trichlorofluoromethane	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
1,2,3-Trichloropropane	ND	100		µg/L	50	3/24/2015 8:48:39 PM	R25028
Vinyl chloride	ND	50		µg/L	50	3/24/2015 8:48:39 PM	R25028
Xylenes, Total	5400	75		µg/L	50	3/24/2015 8:48:39 PM	R25028
Surr: 1,2-Dichloroethane-d4	90.4	70-130		%REC	50	3/24/2015 8:48:39 PM	R25028
Surr: 4-Bromofluorobenzene	94.9	70-130		%REC	50	3/24/2015 8:48:39 PM	R25028
Surr: Dibromofluoromethane	91.0	70-130		%REC	50	3/24/2015 8:48:39 PM	R25028
Surr: Toluene-d8	92.8	70-130		%REC	50	3/24/2015 8:48:39 PM	R25028

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-20

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 2:20:00 PM

Lab ID: 1503834-007

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	4.5	1.0		mg/L	1	3/19/2015 9:44:54 PM	18212
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/19/2015 9:44:54 PM	18212
Surr: DNOP	94.8	76.5-150		%REC	1	3/19/2015 9:44:54 PM	18212
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	37	2.5		mg/L	50	3/24/2015 8:37:00 PM	R25029
Surr: BFB	90.2	80-120		%REC	50	3/24/2015 8:37:00 PM	R25029
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	2.0	0.020		mg/L	10	3/26/2015 3:55:31 PM	R25095
Cadmium	ND	0.0020		mg/L	1	3/25/2015 10:11:34 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 10:11:34 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 10:11:34 PM	R25072
Iron	8.6	0.20	*	mg/L	10	3/26/2015 3:55:31 PM	R25095
Manganese	3.1	0.020	*	mg/L	10	3/26/2015 3:55:31 PM	R25095
Silver	ND	0.0050		mg/L	1	3/25/2015 10:11:34 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 10:11:34 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	2.0	0.010	*	mg/L	5	3/31/2015 6:01:38 PM	18338
Cadmium	ND	0.0020		mg/L	1	3/26/2015 6:23:54 PM	18338
Chromium	ND	0.0060		mg/L	1	3/26/2015 6:23:54 PM	18338
Copper	0.016	0.0060		mg/L	1	3/31/2015 5:59:57 PM	18338
Iron	11	0.40	*	mg/L	20	3/31/2015 6:03:37 PM	18338
Manganese	3.2	0.010	*	mg/L	5	3/31/2015 6:01:38 PM	18338
Silver	ND	0.0050		mg/L	1	3/26/2015 6:23:54 PM	18338
Zinc	0.030	0.010		mg/L	1	3/31/2015 5:59:57 PM	18338
EPA 200.8: DISSOLVED METALS							Analyst: TES
Arsenic	0.022	0.010	*	mg/L	10	4/2/2015 5:45:50 PM	R25250
Lead	0.0013	0.0010		mg/L	1	4/2/2015 4:33:55 PM	R25250
Selenium	ND	0.010		mg/L	10	4/2/2015 5:45:50 PM	R25250
Uranium	0.0088	0.0010		mg/L	1	4/2/2015 4:33:55 PM	R25250
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.025	0.0010	*	mg/L	1	3/27/2015 4:35:33 PM	18338
Lead	0.0066	0.0010		mg/L	1	3/27/2015 4:35:33 PM	18338
Selenium	0.0046	0.0010		mg/L	1	3/27/2015 4:35:33 PM	18338
Uranium	0.011	0.0010		mg/L	1	3/27/2015 4:35:33 PM	18338
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	4/2/2015 10:18:31 AM	18458

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-20

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 2:20:00 PM

Lab ID: 1503834-007

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Acenaphthylene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Aniline	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Anthracene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Azobenzene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Benzoic acid	ND	20		µg/L	1	3/24/2015 7:58:27 PM	18250
Benzyl alcohol	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Carbazole	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
4-Chloroaniline	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
2-Chlorophenol	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Chrysene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Dibenzofuran	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Diethyl phthalate	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/24/2015 7:58:27 PM	18250
2,4-Dimethylphenol	320	20		µg/L	2	3/25/2015 11:38:22 AM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/24/2015 7:58:27 PM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/24/2015 7:58:27 PM	18250

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-20

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 2:20:00 PM

Lab ID: 1503834-007

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Fluoranthene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Fluorene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Hexachloroethane	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Isophorone	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
1-Methylnaphthalene	45	10		µg/L	1	3/24/2015 7:58:27 PM	18250
2-Methylnaphthalene	37	10		µg/L	1	3/24/2015 7:58:27 PM	18250
2-Methylphenol	210	10		µg/L	1	3/24/2015 7:58:27 PM	18250
3+4-Methylphenol	360	20		µg/L	2	3/25/2015 11:38:22 AM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Naphthalene	130	10		µg/L	1	3/24/2015 7:58:27 PM	18250
2-Nitroaniline	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
3-Nitroaniline	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
4-Nitroaniline	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Nitrobenzene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
2-Nitrophenol	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
4-Nitrophenol	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Pentachlorophenol	ND	20		µg/L	1	3/24/2015 7:58:27 PM	18250
Phenanthrene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Phenol	210	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Pyrene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Pyridine	16	10		µg/L	1	3/24/2015 7:58:27 PM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/24/2015 7:58:27 PM	18250
Surr: 2-Fluorophenol	50.8	17.6-104		%REC	1	3/24/2015 7:58:27 PM	18250
Surr: Phenol-d5	44.7	17.7-89.9		%REC	1	3/24/2015 7:58:27 PM	18250
Surr: 2,4,6-Tribromophenol	95.7	16.3-122		%REC	1	3/24/2015 7:58:27 PM	18250
Surr: Nitrobenzene-d5	77.3	45.3-117		%REC	1	3/24/2015 7:58:27 PM	18250
Surr: 2-Fluorobiphenyl	84.7	43-113		%REC	1	3/24/2015 7:58:27 PM	18250
Surr: 4-Terphenyl-d14	70.0	47.6-122		%REC	1	3/24/2015 7:58:27 PM	18250

EPA METHOD 8260B: VOLATILES

Analyst: **DJF**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-20

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 2:20:00 PM

Lab ID: 1503834-007

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
Benzene	7000	200		µg/L	200	3/25/2015 12:32:59 PM	R25068
Toluene	2300	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Ethylbenzene	89	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,2,4-Trimethylbenzene	1300	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,3,5-Trimethylbenzene	390	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Naphthalene	210	100		µg/L	50	3/24/2015 9:43:30 PM	R25028
1-Methylnaphthalene	ND	200		µg/L	50	3/24/2015 9:43:30 PM	R25028
2-Methylnaphthalene	ND	200		µg/L	50	3/24/2015 9:43:30 PM	R25028
Acetone	ND	500		µg/L	50	3/24/2015 9:43:30 PM	R25028
Bromobenzene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Bromodichloromethane	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Bromoform	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Bromomethane	ND	150		µg/L	50	3/24/2015 9:43:30 PM	R25028
2-Butanone	ND	500		µg/L	50	3/24/2015 9:43:30 PM	R25028
Carbon disulfide	ND	500		µg/L	50	3/24/2015 9:43:30 PM	R25028
Carbon Tetrachloride	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Chlorobenzene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Chloroethane	ND	100		µg/L	50	3/24/2015 9:43:30 PM	R25028
Chloroform	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Chloromethane	ND	150		µg/L	50	3/24/2015 9:43:30 PM	R25028
2-Chlorotoluene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
4-Chlorotoluene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
cis-1,2-DCE	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
cis-1,3-Dichloropropene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	3/24/2015 9:43:30 PM	R25028
Dibromochloromethane	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Dibromomethane	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,2-Dichlorobenzene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,3-Dichlorobenzene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,4-Dichlorobenzene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Dichlorodifluoromethane	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,1-Dichloroethane	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,1-Dichloroethene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,2-Dichloropropane	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,3-Dichloropropane	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
2,2-Dichloropropane	ND	100		µg/L	50	3/24/2015 9:43:30 PM	R25028

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-20

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 2:20:00 PM

Lab ID: 1503834-007

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloropropene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Hexachlorobutadiene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
2-Hexanone	ND	500		µg/L	50	3/24/2015 9:43:30 PM	R25028
Isopropylbenzene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
4-Isopropyltoluene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
4-Methyl-2-pentanone	ND	500		µg/L	50	3/24/2015 9:43:30 PM	R25028
Methylene Chloride	ND	150		µg/L	50	3/24/2015 9:43:30 PM	R25028
n-Butylbenzene	ND	150		µg/L	50	3/24/2015 9:43:30 PM	R25028
n-Propylbenzene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
sec-Butylbenzene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Styrene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
tert-Butylbenzene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	3/24/2015 9:43:30 PM	R25028
Tetrachloroethene (PCE)	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
trans-1,2-DCE	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
trans-1,3-Dichloropropene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,2,3-Trichlorobenzene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,2,4-Trichlorobenzene	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,1,1-Trichloroethane	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,1,2-Trichloroethane	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Trichloroethene (TCE)	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Trichlorofluoromethane	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
1,2,3-Trichloropropane	ND	100		µg/L	50	3/24/2015 9:43:30 PM	R25028
Vinyl chloride	ND	50		µg/L	50	3/24/2015 9:43:30 PM	R25028
Xylenes, Total	9600	300		µg/L	200	3/25/2015 12:32:59 PM	R25068
Surr: 1,2-Dichloroethane-d4	94.8	70-130		%REC	50	3/24/2015 9:43:30 PM	R25028
Surr: 4-Bromofluorobenzene	92.2	70-130		%REC	50	3/24/2015 9:43:30 PM	R25028
Surr: Dibromofluoromethane	94.8	70-130		%REC	50	3/24/2015 9:43:30 PM	R25028
Surr: Toluene-d8	93.1	70-130		%REC	50	3/24/2015 9:43:30 PM	R25028

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-21

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 2:26:00 PM

Lab ID: 1503834-008

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	3.8	1.0		mg/L	1	3/19/2015 10:06:27 PM	18212
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/19/2015 10:06:27 PM	18212
Surr: DNOP	84.3	76.5-150		%REC	1	3/19/2015 10:06:27 PM	18212
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	16	1.0		mg/L	20	3/24/2015 9:06:15 PM	R25029
Surr: BFB	92.3	80-120		%REC	20	3/24/2015 9:06:15 PM	R25029
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	1.9	0.010		mg/L	5	3/30/2015 8:11:31 PM	R25178
Cadmium	ND	0.0020		mg/L	1	3/25/2015 10:13:14 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 10:13:14 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 10:13:14 PM	R25072
Iron	18	0.40	*	mg/L	20	3/30/2015 8:13:21 PM	R25178
Manganese	3.1	0.010	*	mg/L	5	3/30/2015 8:11:31 PM	R25178
Silver	ND	0.0050		mg/L	1	3/25/2015 10:13:14 PM	R25072
Zinc	0.074	0.010		mg/L	1	3/25/2015 10:13:14 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	4.9	0.020	*	mg/L	10	3/31/2015 6:07:38 PM	18338
Cadmium	ND	0.0020		mg/L	1	3/26/2015 6:25:51 PM	18338
Chromium	0.029	0.0060		mg/L	1	3/26/2015 6:25:51 PM	18338
Copper	0.10	0.0060		mg/L	1	3/31/2015 6:05:38 PM	18338
Iron	55	2.0	*	mg/L	100	3/31/2015 6:09:17 PM	18338
Manganese	6.4	0.020	*	mg/L	10	3/31/2015 6:07:38 PM	18338
Silver	ND	0.0050		mg/L	1	3/26/2015 6:25:51 PM	18338
Zinc	0.44	0.010		mg/L	1	3/31/2015 6:05:38 PM	18338
EPA 200.8: DISSOLVED METALS							Analyst: TES
Arsenic	0.011	0.010	*	mg/L	10	4/2/2015 5:48:53 PM	R25250
Lead	0.012	0.0010		mg/L	1	4/2/2015 4:36:59 PM	R25250
Selenium	ND	0.010		mg/L	10	4/2/2015 5:48:53 PM	R25250
Uranium	0.0012	0.0010		mg/L	1	4/2/2015 4:36:59 PM	R25250
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.020	0.010	*	mg/L	10	3/27/2015 5:11:50 PM	18338
Lead	0.079	0.010	*	mg/L	10	3/27/2015 5:11:50 PM	18338
Selenium	ND	0.010		mg/L	10	3/27/2015 5:11:50 PM	18338
Uranium	0.0066	0.0010		mg/L	1	3/27/2015 4:38:45 PM	18338
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	4/2/2015 10:23:58 AM	18458

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-21

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 2:26:00 PM

Lab ID: 1503834-008

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Acenaphthylene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Aniline	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Anthracene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Azobenzene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Benzoic acid	ND	20		µg/L	1	3/24/2015 8:26:41 PM	18250
Benzyl alcohol	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Carbazole	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
4-Chloroaniline	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
2-Chlorophenol	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Chrysene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Dibenzofuran	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Diethyl phthalate	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/24/2015 8:26:41 PM	18250
2,4-Dimethylphenol	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/24/2015 8:26:41 PM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/24/2015 8:26:41 PM	18250

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-21

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 2:26:00 PM

Lab ID: 1503834-008

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Fluoranthene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Fluorene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Hexachloroethane	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Isophorone	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
1-Methylnaphthalene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
2-Methylnaphthalene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
2-Methylphenol	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
3+4-Methylphenol	69	10		µg/L	1	3/24/2015 8:26:41 PM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Naphthalene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
2-Nitroaniline	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
3-Nitroaniline	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
4-Nitroaniline	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Nitrobenzene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
2-Nitrophenol	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
4-Nitrophenol	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Pentachlorophenol	ND	20		µg/L	1	3/24/2015 8:26:41 PM	18250
Phenanthrene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Phenol	38	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Pyrene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Pyridine	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/24/2015 8:26:41 PM	18250
Surr: 2-Fluorophenol	32.4	17.6-104		%REC	1	3/24/2015 8:26:41 PM	18250
Surr: Phenol-d5	25.4	17.7-89.9		%REC	1	3/24/2015 8:26:41 PM	18250
Surr: 2,4,6-Tribromophenol	47.4	16.3-122		%REC	1	3/24/2015 8:26:41 PM	18250
Surr: Nitrobenzene-d5	53.7	45.3-117		%REC	1	3/24/2015 8:26:41 PM	18250
Surr: 2-Fluorobiphenyl	44.2	43-113		%REC	1	3/24/2015 8:26:41 PM	18250
Surr: 4-Terphenyl-d14	38.8	47.6-122	S	%REC	1	3/24/2015 8:26:41 PM	18250

EPA METHOD 8260B: VOLATILES

Analyst: **DJF**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-21

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 2:26:00 PM

Lab ID: 1503834-008

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
Benzene	3700	50		µg/L	50	3/24/2015 10:10:47 PM	R25028
Toluene	260	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Ethylbenzene	13	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Methyl tert-butyl ether (MTBE)	630	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,2,4-Trimethylbenzene	110	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,3,5-Trimethylbenzene	51	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Naphthalene	ND	20		µg/L	10	3/25/2015 1:00:27 PM	R25068
1-Methylnaphthalene	ND	40		µg/L	10	3/25/2015 1:00:27 PM	R25068
2-Methylnaphthalene	ND	40		µg/L	10	3/25/2015 1:00:27 PM	R25068
Acetone	ND	100		µg/L	10	3/25/2015 1:00:27 PM	R25068
Bromobenzene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Bromodichloromethane	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Bromoform	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Bromomethane	ND	30		µg/L	10	3/25/2015 1:00:27 PM	R25068
2-Butanone	ND	100		µg/L	10	3/25/2015 1:00:27 PM	R25068
Carbon disulfide	ND	100		µg/L	10	3/25/2015 1:00:27 PM	R25068
Carbon Tetrachloride	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Chlorobenzene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Chloroethane	ND	20		µg/L	10	3/25/2015 1:00:27 PM	R25068
Chloroform	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Chloromethane	ND	30		µg/L	10	3/25/2015 1:00:27 PM	R25068
2-Chlorotoluene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
4-Chlorotoluene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
cis-1,2-DCE	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
cis-1,3-Dichloropropene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	3/25/2015 1:00:27 PM	R25068
Dibromochloromethane	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Dibromomethane	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,2-Dichlorobenzene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,3-Dichlorobenzene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,4-Dichlorobenzene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Dichlorodifluoromethane	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,1-Dichloroethane	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,1-Dichloroethene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,2-Dichloropropane	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,3-Dichloropropane	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
2,2-Dichloropropane	ND	20		µg/L	10	3/25/2015 1:00:27 PM	R25068

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-21

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 2:26:00 PM

Lab ID: 1503834-008

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloropropene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Hexachlorobutadiene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
2-Hexanone	ND	100		µg/L	10	3/25/2015 1:00:27 PM	R25068
Isopropylbenzene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
4-Isopropyltoluene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
4-Methyl-2-pentanone	ND	100		µg/L	10	3/25/2015 1:00:27 PM	R25068
Methylene Chloride	ND	30		µg/L	10	3/25/2015 1:00:27 PM	R25068
n-Butylbenzene	ND	30		µg/L	10	3/25/2015 1:00:27 PM	R25068
n-Propylbenzene	16	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
sec-Butylbenzene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Styrene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
tert-Butylbenzene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	3/25/2015 1:00:27 PM	R25068
Tetrachloroethene (PCE)	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
trans-1,2-DCE	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
trans-1,3-Dichloropropene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,2,3-Trichlorobenzene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,2,4-Trichlorobenzene	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,1,1-Trichloroethane	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,1,2-Trichloroethane	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Trichloroethene (TCE)	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Trichlorofluoromethane	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
1,2,3-Trichloropropane	ND	20		µg/L	10	3/25/2015 1:00:27 PM	R25068
Vinyl chloride	ND	10		µg/L	10	3/25/2015 1:00:27 PM	R25068
Xylenes, Total	270	15		µg/L	10	3/25/2015 1:00:27 PM	R25068
Surr: 1,2-Dichloroethane-d4	90.6	70-130		%REC	10	3/25/2015 1:00:27 PM	R25068
Surr: 4-Bromofluorobenzene	90.7	70-130		%REC	10	3/25/2015 1:00:27 PM	R25068
Surr: Dibromofluoromethane	95.6	70-130		%REC	10	3/25/2015 1:00:27 PM	R25068
Surr: Toluene-d8	91.3	70-130		%REC	10	3/25/2015 1:00:27 PM	R25068

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-39

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 2:55:00 PM

Lab ID: 1503834-009

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	6.2	1.0		mg/L	1	3/19/2015 10:27:57 PM	18212
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/19/2015 10:27:57 PM	18212
Surr: DNOP	103	76.5-150		%REC	1	3/19/2015 10:27:57 PM	18212
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.21	0.050		mg/L	1	3/25/2015 12:32:38 PM	R25071
Surr: BFB	194	80-120	S	%REC	1	3/25/2015 12:32:38 PM	R25071
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	21	0.10	*	mg/L	50	3/30/2015 8:16:58 PM	R25178
Cadmium	ND	0.0020		mg/L	1	3/25/2015 10:15:02 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 10:15:02 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 10:15:02 PM	R25072
Iron	31	1.0	*	mg/L	50	3/30/2015 8:16:58 PM	R25178
Manganese	7.0	0.020	*	mg/L	10	3/30/2015 8:15:18 PM	R25178
Silver	ND	0.0050		mg/L	1	3/25/2015 10:15:02 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 10:15:02 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	35	0.20	*	mg/L	100	3/31/2015 6:20:29 PM	18338
Cadmium	ND	0.010		mg/L	5	3/31/2015 6:11:10 PM	18338
Chromium	ND	0.030		mg/L	5	3/31/2015 6:11:10 PM	18338
Copper	ND	0.030		mg/L	5	3/31/2015 6:11:10 PM	18338
Iron	50	2.0	*	mg/L	100	3/31/2015 6:20:29 PM	18338
Manganese	8.6	0.020	*	mg/L	10	3/31/2015 6:12:54 PM	18338
Silver	ND	0.025		mg/L	5	3/31/2015 6:11:10 PM	18338
Zinc	0.059	0.050		mg/L	5	3/31/2015 6:11:10 PM	18338
EPA 200.8: DISSOLVED METALS							Analyst: TES
Arsenic	ND	0.010		mg/L	10	4/2/2015 5:51:56 PM	R25250
Lead	ND	0.0050		mg/L	5	4/2/2015 4:46:08 PM	R25250
Selenium	0.011	0.010		mg/L	10	4/2/2015 5:51:56 PM	R25250
Uranium	0.0099	0.0050		mg/L	5	4/2/2015 4:46:08 PM	R25250
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	3/27/2015 5:15:02 PM	18338
Lead	0.034	0.010	*	mg/L	10	3/27/2015 5:15:02 PM	18338
Selenium	ND	0.010		mg/L	10	3/27/2015 5:15:02 PM	18338
Uranium	0.012	0.010		mg/L	10	3/27/2015 5:15:02 PM	18338
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	0.00021	0.00020		mg/L	1	4/2/2015 10:25:44 AM	18458

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-39

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 2:55:00 PM

Lab ID: 1503834-009

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Acenaphthylene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Aniline	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Anthracene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Azobenzene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Benzoic acid	ND	20		µg/L	1	3/24/2015 10:13:35 PM	18250
Benzyl alcohol	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Carbazole	11	10		µg/L	1	3/24/2015 10:13:35 PM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
4-Chloroaniline	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
2-Chlorophenol	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Chrysene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Dibenzofuran	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Diethyl phthalate	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/24/2015 10:13:35 PM	18250
2,4-Dimethylphenol	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/24/2015 10:13:35 PM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/24/2015 10:13:35 PM	18250

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-39

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 2:55:00 PM

Lab ID: 1503834-009

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Fluoranthene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Fluorene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Hexachloroethane	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Isophorone	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
1-Methylnaphthalene	56	10		µg/L	1	3/24/2015 10:13:35 PM	18250
2-Methylnaphthalene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
2-Methylphenol	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
3+4-Methylphenol	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Naphthalene	20	10		µg/L	1	3/24/2015 10:13:35 PM	18250
2-Nitroaniline	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
3-Nitroaniline	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
4-Nitroaniline	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Nitrobenzene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
2-Nitrophenol	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
4-Nitrophenol	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Pentachlorophenol	ND	20		µg/L	1	3/24/2015 10:13:35 PM	18250
Phenanthrene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Phenol	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Pyrene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Pyridine	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/24/2015 10:13:35 PM	18250
Surr: 2-Fluorophenol	86.4	17.6-104		%REC	1	3/24/2015 10:13:35 PM	18250
Surr: Phenol-d5	71.3	17.7-89.9		%REC	1	3/24/2015 10:13:35 PM	18250
Surr: 2,4,6-Tribromophenol	105	16.3-122		%REC	1	3/24/2015 10:13:35 PM	18250
Surr: Nitrobenzene-d5	86.5	45.3-117		%REC	1	3/24/2015 10:13:35 PM	18250
Surr: 2-Fluorobiphenyl	95.8	43-113		%REC	1	3/24/2015 10:13:35 PM	18250
Surr: 4-Terphenyl-d14	79.3	47.6-122		%REC	1	3/24/2015 10:13:35 PM	18250

EPA METHOD 8260B: VOLATILES

Analyst: **DJF**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.
	E Value above quantitation range
	J Analyte detected below quantitation limits
	O RSD is greater than RSDlimit
	R RPD outside accepted recovery limits
	S Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-39

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 2:55:00 PM

Lab ID: 1503834-009

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	16	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Toluene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Ethylbenzene	39	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Methyl tert-butyl ether (MTBE)	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,2,4-Trimethylbenzene	64	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,3,5-Trimethylbenzene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,2-Dichloroethane (EDC)	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Naphthalene	44	4.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1-Methylnaphthalene	91	8.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
2-Methylnaphthalene	13	8.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Acetone	ND	20		µg/L	2	3/25/2015 1:28:00 PM	R25068
Bromobenzene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Bromodichloromethane	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Bromoform	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Bromomethane	ND	6.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
2-Butanone	ND	20		µg/L	2	3/25/2015 1:28:00 PM	R25068
Carbon disulfide	ND	20		µg/L	2	3/25/2015 1:28:00 PM	R25068
Carbon Tetrachloride	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Chlorobenzene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Chloroethane	ND	4.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Chloroform	2.2	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Chloromethane	ND	6.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
2-Chlorotoluene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
4-Chlorotoluene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
cis-1,2-DCE	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Dibromochloromethane	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Dibromomethane	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,2-Dichlorobenzene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,3-Dichlorobenzene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,4-Dichlorobenzene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Dichlorodifluoromethane	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,1-Dichloroethane	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,1-Dichloroethene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,2-Dichloropropane	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,3-Dichloropropane	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
2,2-Dichloropropane	ND	4.0		µg/L	2	3/25/2015 1:28:00 PM	R25068

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-39

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 2:55:00 PM

Lab ID: 1503834-009

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloropropene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Hexachlorobutadiene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
2-Hexanone	ND	20		µg/L	2	3/25/2015 1:28:00 PM	R25068
Isopropylbenzene	11	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
4-Isopropyltoluene	5.2	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
4-Methyl-2-pentanone	ND	20		µg/L	2	3/25/2015 1:28:00 PM	R25068
Methylene Chloride	6.3	6.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
n-Butylbenzene	ND	6.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
n-Propylbenzene	14	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
sec-Butylbenzene	5.7	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Styrene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
tert-Butylbenzene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
trans-1,2-DCE	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,1,1-Trichloroethane	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,1,2-Trichloroethane	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Trichloroethene (TCE)	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Trichlorofluoromethane	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
1,2,3-Trichloropropane	ND	4.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Vinyl chloride	ND	2.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Xylenes, Total	ND	3.0		µg/L	2	3/25/2015 1:28:00 PM	R25068
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	2	3/25/2015 1:28:00 PM	R25068
Surr: 4-Bromofluorobenzene	100	70-130		%REC	2	3/25/2015 1:28:00 PM	R25068
Surr: Dibromofluoromethane	98.5	70-130		%REC	2	3/25/2015 1:28:00 PM	R25068
Surr: Toluene-d8	91.0	70-130		%REC	2	3/25/2015 1:28:00 PM	R25068

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-38

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 3:15:00 PM

Lab ID: 1503834-010

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/19/2015 10:49:26 PM	18212
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/19/2015 10:49:26 PM	18212
Surr: DNOP	95.4	76.5-150		%REC	1	3/19/2015 10:49:26 PM	18212
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.33	0.050		mg/L	1	3/24/2015 10:04:43 PM	R25029
Surr: BFB	92.2	80-120		%REC	1	3/24/2015 10:04:43 PM	R25029
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.14	0.0020		mg/L	1	3/25/2015 10:16:51 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 10:16:51 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 10:16:51 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 10:16:51 PM	R25072
Iron	0.24	0.020		mg/L	1	3/25/2015 10:16:51 PM	R25072
Manganese	3.1	0.010	*	mg/L	5	3/30/2015 8:19:05 PM	R25178
Silver	ND	0.0050		mg/L	1	3/25/2015 10:16:51 PM	R25072
Zinc	0.096	0.010		mg/L	1	3/25/2015 10:16:51 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.34	0.0020		mg/L	1	3/31/2015 6:22:26 PM	18338
Cadmium	ND	0.0020		mg/L	1	3/26/2015 6:29:51 PM	18338
Chromium	ND	0.0060		mg/L	1	3/26/2015 6:29:51 PM	18338
Copper	ND	0.0060		mg/L	1	3/31/2015 6:22:26 PM	18338
Iron	3.5	0.20	*	mg/L	10	3/31/2015 6:34:14 PM	18338
Manganese	3.1	0.010	*	mg/L	5	3/31/2015 6:27:54 PM	18338
Silver	ND	0.0050		mg/L	1	3/26/2015 6:29:51 PM	18338
Zinc	0.014	0.010		mg/L	1	3/31/2015 6:22:26 PM	18338
EPA 200.8: DISSOLVED METALS							Analyst: TES
Arsenic	ND	0.010		mg/L	10	4/2/2015 5:54:59 PM	R25250
Lead	ND	0.0010		mg/L	1	4/2/2015 4:52:15 PM	R25250
Selenium	ND	0.010		mg/L	10	4/2/2015 5:54:59 PM	R25250
Uranium	0.025	0.0010		mg/L	1	4/2/2015 4:52:15 PM	R25250
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.0031	0.0010		mg/L	1	3/27/2015 4:45:07 PM	18338
Lead	0.0060	0.0010		mg/L	1	3/27/2015 4:45:07 PM	18338
Selenium	0.0058	0.0010		mg/L	1	3/27/2015 4:45:07 PM	18338
Uranium	0.029	0.0010		mg/L	1	3/27/2015 4:45:07 PM	18338
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	4/2/2015 10:29:03 AM	18458

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-38

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 3:15:00 PM

Lab ID: 1503834-010

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Acenaphthylene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Aniline	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Anthracene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Azobenzene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Benzoic acid	ND	20		µg/L	1	3/24/2015 10:41:32 PM	18250
Benzyl alcohol	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Carbazole	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
4-Chloroaniline	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
2-Chlorophenol	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Chrysene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Dibenzofuran	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Diethyl phthalate	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/24/2015 10:41:32 PM	18250
2,4-Dimethylphenol	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/24/2015 10:41:32 PM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/24/2015 10:41:32 PM	18250

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-38

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 3:15:00 PM

Lab ID: 1503834-010

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
2,4-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Fluoranthene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Fluorene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Hexachloroethane	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Isophorone	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
1-Methylnaphthalene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
2-Methylnaphthalene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
2-Methylphenol	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
3+4-Methylphenol	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Naphthalene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
2-Nitroaniline	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
3-Nitroaniline	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
4-Nitroaniline	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Nitrobenzene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
2-Nitrophenol	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
4-Nitrophenol	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Pentachlorophenol	ND	20		µg/L	1	3/24/2015 10:41:32 PM	18250
Phenanthrene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Phenol	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Pyrene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Pyridine	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/24/2015 10:41:32 PM	18250
Surr: 2-Fluorophenol	85.9	17.6-104		%REC	1	3/24/2015 10:41:32 PM	18250
Surr: Phenol-d5	74.9	17.7-89.9		%REC	1	3/24/2015 10:41:32 PM	18250
Surr: 2,4,6-Tribromophenol	106	16.3-122		%REC	1	3/24/2015 10:41:32 PM	18250
Surr: Nitrobenzene-d5	98.1	45.3-117		%REC	1	3/24/2015 10:41:32 PM	18250
Surr: 2-Fluorobiphenyl	109	43-113		%REC	1	3/24/2015 10:41:32 PM	18250
Surr: 4-Terphenyl-d14	84.1	47.6-122		%REC	1	3/24/2015 10:41:32 PM	18250

EPA METHOD 8260B: VOLATILES

Analyst: **DJF**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.
	E Value above quantitation range
	J Analyte detected below quantitation limits
	O RSD is greater than RSDlimit
	R RPD outside accepted recovery limits
	S Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-38

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 3:15:00 PM

Lab ID: 1503834-010

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	9.2	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Toluene	18	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Ethylbenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Methyl tert-butyl ether (MTBE)	6.0	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Naphthalene	ND	2.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1-Methylnaphthalene	ND	4.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
2-Methylnaphthalene	ND	4.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Acetone	ND	10		µg/L	1	3/26/2015 2:01:20 AM	R25068
Bromobenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Bromodichloromethane	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Bromoform	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Bromomethane	ND	3.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
2-Butanone	ND	10		µg/L	1	3/26/2015 2:01:20 AM	R25068
Carbon disulfide	ND	10		µg/L	1	3/26/2015 2:01:20 AM	R25068
Carbon Tetrachloride	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Chlorobenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Chloroethane	ND	2.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Chloroform	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Chloromethane	ND	3.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
2-Chlorotoluene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
4-Chlorotoluene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
cis-1,2-DCE	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Dibromochloromethane	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Dibromomethane	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,1-Dichloroethane	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,1-Dichloroethene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,2-Dichloropropane	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,3-Dichloropropane	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
2,2-Dichloropropane	ND	2.0		µg/L	1	3/26/2015 2:01:20 AM	R25068

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-38

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015 3:15:00 PM

Lab ID: 1503834-010

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloropropene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Hexachlorobutadiene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
2-Hexanone	ND	10		µg/L	1	3/26/2015 2:01:20 AM	R25068
Isopropylbenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
4-Isopropyltoluene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
4-Methyl-2-pentanone	ND	10		µg/L	1	3/26/2015 2:01:20 AM	R25068
Methylene Chloride	ND	3.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
n-Butylbenzene	ND	3.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
n-Propylbenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
sec-Butylbenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Styrene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
tert-Butylbenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
trans-1,2-DCE	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Trichlorofluoromethane	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Vinyl chloride	ND	1.0		µg/L	1	3/26/2015 2:01:20 AM	R25068
Xylenes, Total	ND	1.5		µg/L	1	3/26/2015 2:01:20 AM	R25068
Surr: 1,2-Dichloroethane-d4	88.6	70-130		%REC	1	3/26/2015 2:01:20 AM	R25068
Surr: 4-Bromofluorobenzene	88.1	70-130		%REC	1	3/26/2015 2:01:20 AM	R25068
Surr: Dibromofluoromethane	97.4	70-130		%REC	1	3/26/2015 2:01:20 AM	R25068
Surr: Toluene-d8	92.0	70-130		%REC	1	3/26/2015 2:01:20 AM	R25068

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Blind Duplicate

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015

Lab ID: 1503834-011

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Acenaphthylene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Aniline	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Anthracene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Azobenzene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Benzoic acid	ND	20		µg/L	1	3/24/2015 11:09:29 PM	18250
Benzyl alcohol	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Carbazole	15	10		µg/L	1	3/24/2015 11:09:29 PM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
4-Chloroaniline	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
2-Chlorophenol	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Chrysene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Dibenzofuran	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Diethyl phthalate	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/24/2015 11:09:29 PM	18250
2,4-Dimethylphenol	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/24/2015 11:09:29 PM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/24/2015 11:09:29 PM	18250

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Blind Duplicate

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/16/2015

Lab ID: 1503834-011

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Fluoranthene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Fluorene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Hexachloroethane	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Isophorone	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
1-Methylnaphthalene	70	10		µg/L	1	3/24/2015 11:09:29 PM	18250
2-Methylnaphthalene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
2-Methylphenol	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
3+4-Methylphenol	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Naphthalene	27	10		µg/L	1	3/24/2015 11:09:29 PM	18250
2-Nitroaniline	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
3-Nitroaniline	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
4-Nitroaniline	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Nitrobenzene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
2-Nitrophenol	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
4-Nitrophenol	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Pentachlorophenol	ND	20		µg/L	1	3/24/2015 11:09:29 PM	18250
Phenanthrene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Phenol	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Pyrene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Pyridine	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/24/2015 11:09:29 PM	18250
Surr: 2-Fluorophenol	12.0	17.6-104	S	%REC	1	3/24/2015 11:09:29 PM	18250
Surr: Phenol-d5	36.7	17.7-89.9		%REC	1	3/24/2015 11:09:29 PM	18250
Surr: 2,4,6-Tribromophenol	19.4	16.3-122		%REC	1	3/24/2015 11:09:29 PM	18250
Surr: Nitrobenzene-d5	87.8	45.3-117		%REC	1	3/24/2015 11:09:29 PM	18250
Surr: 2-Fluorobiphenyl	85.1	43-113		%REC	1	3/24/2015 11:09:29 PM	18250
Surr: 4-Terphenyl-d14	74.8	47.6-122		%REC	1	3/24/2015 11:09:29 PM	18250

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: 2015 1ST QTR (MKTF)

Collection Date:

Lab ID: 1503834-012

Matrix: TRIP BLANK

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/24/2015 10:33:56 PM	R25029
Surr: BFB	84.6	80-120		%REC	1	3/24/2015 10:33:56 PM	R25029
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Toluene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Ethylbenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Naphthalene	ND	2.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1-Methylnaphthalene	ND	4.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
2-Methylnaphthalene	ND	4.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Acetone	ND	10		µg/L	1	3/26/2015 2:28:48 AM	R25068
Bromobenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Bromodichloromethane	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Bromoform	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Bromomethane	ND	3.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
2-Butanone	ND	10		µg/L	1	3/26/2015 2:28:48 AM	R25068
Carbon disulfide	ND	10		µg/L	1	3/26/2015 2:28:48 AM	R25068
Carbon Tetrachloride	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Chlorobenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Chloroethane	ND	2.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Chloroform	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Chloromethane	ND	3.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
2-Chlorotoluene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
4-Chlorotoluene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
cis-1,2-DCE	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Dibromochloromethane	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Dibromomethane	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,1-Dichloroethane	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,1-Dichloroethene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503834

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: 2015 1ST QTR (MKTF)

Collection Date:

Lab ID: 1503834-012

Matrix: TRIP BLANK

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: DJF
1,2-Dichloropropane	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,3-Dichloropropane	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
2,2-Dichloropropane	ND	2.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,1-Dichloropropene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Hexachlorobutadiene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
2-Hexanone	ND	10		µg/L	1	3/26/2015 2:28:48 AM	R25068
Isopropylbenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
4-Isopropyltoluene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
4-Methyl-2-pentanone	ND	10		µg/L	1	3/26/2015 2:28:48 AM	R25068
Methylene Chloride	ND	3.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
n-Butylbenzene	ND	3.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
n-Propylbenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
sec-Butylbenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Styrene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
tert-Butylbenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
trans-1,2-DCE	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Trichlorofluoromethane	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Vinyl chloride	ND	1.0		µg/L	1	3/26/2015 2:28:48 AM	R25068
Xylenes, Total	ND	1.5		µg/L	1	3/26/2015 2:28:48 AM	R25068
Surr: 1,2-Dichloroethane-d4	91.0	70-130		%REC	1	3/26/2015 2:28:48 AM	R25068
Surr: 4-Bromofluorobenzene	91.4	70-130		%REC	1	3/26/2015 2:28:48 AM	R25068
Surr: Dibromofluoromethane	94.7	70-130		%REC	1	3/26/2015 2:28:48 AM	R25068
Surr: Toluene-d8	87.1	70-130		%REC	1	3/26/2015 2:28:48 AM	R25068

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503834

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R25072			RunNo: 25072					
Prep Date:		Analysis Date: 3/25/2015			SeqNo: 739895		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								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25072		RunNo: 25072					
Prep Date:			Analysis Date: 3/25/2015		SeqNo: 739896		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.7	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.3	85	115			
Chromium	0.49	0.0060	0.5000	0	97.5	85	115			
Copper	0.49	0.0060	0.5000	0	97.2	85	115			
Iron	0.48	0.020	0.5000	0	95.1	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.48	0.010	0.5000	0	96.8	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R25072			RunNo: 25072					
Prep Date:		Analysis Date: 3/25/2015			SeqNo: 739897		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								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25072		RunNo: 25072					
Prep Date:			Analysis Date: 3/25/2015		SeqNo: 739898		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	97.2	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503834

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	LCS		SampType: LCS			TestCode: EPA Method 200.7: Dissolved Metals				
Client ID:	LCSW		Batch ID: R25072			RunNo: 25072				
Prep Date:	Analysis Date: 3/25/2015			SeqNo: 739898		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.49	0.0020	0.5000	0	98.9	85	115			
Chromium	0.49	0.0060	0.5000	0	97.9	85	115			
Copper	0.49	0.0060	0.5000	0	97.0	85	115			
Iron	0.48	0.020	0.5000	0	96.7	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.49	0.010	0.5000	0	97.2	85	115			

Sample ID	1503834-006EMS			SampType: MS		TestCode: EPA Method 200.7: Dissolved Metals				
Client ID:	MKTF-16			Batch ID: R25072		RunNo: 25072				
Prep Date:				Analysis Date: 3/25/2015		SeqNo: 740062		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.51	0.0020	0.5000	0	102	70	130			
Chromium	0.49	0.0060	0.5000	0	98.8	70	130			
Copper	0.58	0.0060	0.5000	0	116	70	130			
Silver	0.083	0.0050	0.1000	0	82.7	70	130			
Zinc	0.51	0.010	0.5000	0.02399	96.9	70	130			

Sample ID	1503834-006EMSD		SampType: MSD		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	MKTF-16		Batch ID: R25072		RunNo: 25072					
Prep Date:			Analysis Date: 3/25/2015		SeqNo: 740063		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.50	0.0020	0.5000	0	101	70	130	0.806	20	
Chromium	0.49	0.0060	0.5000	0	98.3	70	130	0.536	20	
Copper	0.57	0.0060	0.5000	0	114	70	130	1.62	20	
Silver	0.086	0.0050	0.1000	0	86.0	70	130	3.85	20	
Zinc	0.50	0.010	0.5000	0.02399	95.8	70	130	1.10	20	

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R25095			RunNo: 25095					
Prep Date:		Analysis Date: 3/26/2015			SeqNo: 740730		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Iron	ND	0.020								
Manganese	ND	0.0020								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503834

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25095		RunNo: 25095					
Prep Date:			Analysis Date: 3/26/2015		SeqNo: 740731		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.2	85	115			
Iron	0.52	0.020	0.5000	0	104	85	115			
Manganese	0.47	0.0020	0.5000	0	94.8	85	115			

Sample ID	1503834-006EMS		SampType: MS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	MKTF-16		Batch ID: R25095		RunNo: 25095					
Prep Date:			Analysis Date: 3/26/2015		SeqNo: 740808		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	3.4	0.010	2.500	0.9406	98.9	70	130			
Manganese	3.6	0.010	2.500	1.191	98.0	70	130			

Sample ID	1503834-006EMSD		SampType: MSD		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	MKTF-16		Batch ID: R25095		RunNo: 25095					
Prep Date:			Analysis Date: 3/26/2015		SeqNo: 740809		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	3.5	0.010	2.500	0.9406	102	70	130	2.09	20	
Manganese	3.7	0.010	2.500	1.191	98.9	70	130	0.621	20	

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R25178			RunNo: 25178					
Prep Date:		Analysis Date: 3/30/2015			SeqNo: 744023		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25178		RunNo: 25178					
Prep Date:			Analysis Date: 3/30/2015		SeqNo: 744024		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	95.5	85	115			
Iron	0.48	0.020	0.5000	0	95.4	85	115			
Manganese	0.47	0.0020	0.5000	0	93.5	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503834

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB-18338		SampType:	MBLK		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	PBW		Batch ID:	18338		RunNo:	25098			
Prep Date:	3/25/2015		Analysis Date:	3/26/2015		SeqNo:	740873		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-18338		SampType:	LCS		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	LCSW		Batch ID:	18338		RunNo:	25098			
Prep Date:	3/25/2015		Analysis Date:	3/26/2015		SeqNo:	740874		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.2	85	115			
Cadmium	0.49	0.0020	0.5000	0	97.9	85	115			
Chromium	0.49	0.0060	0.5000	0	97.6	85	115			
Copper	0.49	0.0060	0.5000	0	98.0	85	115			
Iron	0.48	0.020	0.5000	0	96.8	85	115			
Manganese	0.47	0.0020	0.5000	0	94.6	85	115			
Silver	0.10	0.0050	0.1000	0	105	85	115			
Zinc	0.48	0.010	0.5000	0	95.1	85	115			

Sample ID	1503834-010FMS		SampType:	MS		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	MKTF-38		Batch ID:	18338		RunNo:	25098			
Prep Date:	3/25/2015		Analysis Date:	3/26/2015		SeqNo:	741712		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.48	0.0020	0.5000	0	96.6	70	130			
Chromium	0.46	0.0060	0.5000	0.004630	91.7	70	130			
Silver	0.11	0.0050	0.1000	0	108	70	130			

Sample ID	1503834-010FMSD		SampType:	MSD		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	MKTF-38		Batch ID:	18338		RunNo:	25098			
Prep Date:	3/25/2015		Analysis Date:	3/26/2015		SeqNo:	741713		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.48	0.0020	0.5000	0	96.3	70	130	0.334	20	
Chromium	0.47	0.0060	0.5000	0.004630	92.6	70	130	0.982	20	
Silver	0.11	0.0050	0.1000	0	108	70	130	0.527	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503834

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	1503834-010FMS		SampType: MS			TestCode: EPA Method 200.7: Total Metals				
Client ID:	MKTF-38		Batch ID: 18338			RunNo: 25211				
Prep Date:	3/25/2015		Analysis Date: 3/31/2015			SeqNo: 745308		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.84	0.0020	0.5000	0.3383	100	70	130			
Copper	0.56	0.0060	0.5000	0	112	70	130			
Zinc	0.50	0.010	0.5000	0.01402	96.6	70	130			

Sample ID	1503834-010FMSD		SampType: MSD			TestCode: EPA Method 200.7: Total Metals				
Client ID:	MKTF-38		Batch ID: 18338			RunNo: 25211				
Prep Date:	3/25/2015		Analysis Date: 3/31/2015			SeqNo: 745309		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.84	0.0020	0.5000	0.3383	100	70	130	0.103	20	
Copper	0.56	0.0060	0.5000	0	113	70	130	0.342	20	
Zinc	0.50	0.010	0.5000	0.01402	97.5	70	130	0.931	20	

Sample ID	1503834-010FMS		SampType: MS			TestCode: EPA Method 200.7: Total Metals				
Client ID:	MKTF-38		Batch ID: 18338			RunNo: 25211				
Prep Date:	3/25/2015		Analysis Date: 3/31/2015			SeqNo: 745311		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	3.6	0.010	0.5000	3.120	99.8	70	130			

Sample ID	1503834-010FMSD		SampType: MSD			TestCode: EPA Method 200.7: Total Metals				
Client ID:	MKTF-38		Batch ID: 18338			RunNo: 25211				
Prep Date:	3/25/2015		Analysis Date: 3/31/2015			SeqNo: 745312		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	3.7	0.010	0.5000	3.120	109	70	130	1.29	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503834

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID LCS	SampType: LCS				TestCode: EPA 200.8: Dissolved Metals					
Client ID: LCSW	Batch ID: R25155				RunNo: 25155					
Prep Date:	Analysis Date: 3/30/2015				SeqNo: 743933		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	99.2	85	115			
Lead	0.025	0.0010	0.02500	0	99.7	85	115			
Selenium	0.025	0.0010	0.02500	0	100	85	115			
Uranium	0.025	0.0010	0.02500	0	102	85	115			

Sample ID LCS	SampType: LCS				TestCode: EPA 200.8: Dissolved Metals					
Client ID: LCSW	Batch ID: R25155				RunNo: 25155					
Prep Date:	Analysis Date: 3/30/2015				SeqNo: 743934		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	97.2	85	115			
Lead	0.025	0.0010	0.02500	0	99.8	85	115			
Selenium	0.025	0.0010	0.02500	0	98.0	85	115			
Uranium	0.026	0.0010	0.02500	0	102	85	115			

Sample ID LCS	SampType: LCS				TestCode: EPA 200.8: Dissolved Metals					
Client ID: LCSW	Batch ID: R25155				RunNo: 25155					
Prep Date:	Analysis Date: 3/30/2015				SeqNo: 743935		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	99.0	85	115			
Lead	0.025	0.0010	0.02500	0	99.2	85	115			
Selenium	0.024	0.0010	0.02500	0	97.6	85	115			
Uranium	0.025	0.0010	0.02500	0	101	85	115			

Sample ID MB	SampType: MBLK				TestCode: EPA 200.8: Dissolved Metals					
Client ID: PBW	Batch ID: R25155				RunNo: 25155					
Prep Date:	Analysis Date: 3/30/2015				SeqNo: 743936		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID MB	SampType: MBLK				TestCode: EPA 200.8: Dissolved Metals					
Client ID: PBW	Batch ID: R25155				RunNo: 25155					
Prep Date:	Analysis Date: 3/30/2015				SeqNo: 743937		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
E Value above quantitation range	H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit	P Sample pH Not In Range
R RPD outside accepted recovery limits	RL Reporting Detection Limit
S Spike Recovery outside accepted recovery limits	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503834

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB		SampType:	MBLK		TestCode:	EPA 200.8: Dissolved Metals			
Client ID:	PBW		Batch ID:	R25155		RunNo:	25155			
Prep Date:			Analysis Date:	3/30/2015		SeqNo:	743937	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	MB		SampType:	MBLK		TestCode:	EPA 200.8: Dissolved Metals			
Client ID:	PBW		Batch ID:	R25155		RunNo:	25155			
Prep Date:			Analysis Date:	3/30/2015		SeqNo:	743938	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	1503834-009EMS		SampType:	MS		TestCode:	EPA 200.8: Dissolved Metals			
Client ID:	MKTF-39		Batch ID:	R25250		RunNo:	25250			
Prep Date:			Analysis Date:	4/2/2015		SeqNo:	747250	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.13	0.0050	0.1250	0.001311	101	70	130			
Uranium	0.15	0.0050	0.1250	0.009857	113	70	130			

Sample ID	LCS		SampType:	LCS		TestCode:	EPA 200.8: Dissolved Metals			
Client ID:	LCSW		Batch ID:	R25250		RunNo:	25250			
Prep Date:			Analysis Date:	4/2/2015		SeqNo:	747261	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	94.8	85	115			
Lead	0.025	0.0010	0.02500	0	98.3	85	115			
Selenium	0.023	0.0010	0.02500	0	92.6	85	115			
Uranium	0.025	0.0010	0.02500	0	100	85	115			

Sample ID	MB		SampType:	MBLK		TestCode:	EPA 200.8: Dissolved Metals			
Client ID:	PBW		Batch ID:	R25250		RunNo:	25250			
Prep Date:			Analysis Date:	4/2/2015		SeqNo:	747262	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503834

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals						
Client ID:	PBW	Batch ID: R25250			RunNo: 25250						
Prep Date:		Analysis Date: 4/2/2015			SeqNo: 747262		Units: mg/L				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium		ND	0.0010								
Uranium		ND	0.0010								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA 200.8: Dissolved Metals						
Client ID:	LCSW	Batch ID:	R25304	RunNo:	25304						
Prep Date:		Analysis Date:	4/4/2015	SeqNo:	748545	Units:	mg/L				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium		0.025	0.0010	0.02500	0	99.5	85	115			

Sample ID	MB	SampType:	MBLK			TestCode:	EPA 200.8: Dissolved Metals				
Client ID:	PBW	Batch ID:	R25304			RunNo:	25304				
Prep Date:		Analysis Date:	4/4/2015			SeqNo:	748546	Units:	mg/L		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium		ND	0.0010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503834

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	LLLCS-18338		SampType: LCSLL		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	BatchQC		Batch ID: 18338		RunNo: 25145					
Prep Date:	3/25/2015		Analysis Date: 3/27/2015		SeqNo: 742934		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	101	85	115			
Lead	0.026	0.0010	0.02500	0	104	85	115			
Selenium	0.024	0.0010	0.02500	0	94.2	85	115			
Uranium	0.027	0.0010	0.02500	0	107	85	115			

Sample ID	MB-18338		SampType: MBLK		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	PBW		Batch ID: 18338		RunNo: 25145					
Prep Date:	3/25/2015		Analysis Date: 3/27/2015		SeqNo: 742936		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503834

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB-18458	SampType:	MBLK	TestCode:	EPA Method 245.1: Mercury					
Client ID:	PBW	Batch ID:	18458	RunNo:	25243					
Prep Date:	4/1/2015	Analysis Date:	4/2/2015	SeqNo:	746453	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	LCS-18458	SampType:	LCS	TestCode:	EPA Method 245.1: Mercury					
Client ID:	LCSW	Batch ID:	18458	RunNo:	25243					
Prep Date:	4/1/2015	Analysis Date:	4/2/2015	SeqNo:	746454	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0051	0.00020	0.005000	0	102	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503834

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB-18212		SampType: MBLK		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	PBW		Batch ID: 18212		RunNo: 24910					
Prep Date:	3/18/2015		Analysis Date: 3/19/2015		SeqNo: 734683		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.0		1.000		101	76.5	150			

Sample ID	LCS-18212		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	LCSW		Batch ID: 18212		RunNo: 24910					
Prep Date:	3/18/2015		Analysis Date: 3/19/2015		SeqNo: 734684		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.7	1.0	5.000	0	94.5	60.1	156			
Surr: DNOP	0.54		0.5000		107	76.5	150			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503834

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	5ML RBC		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBW		Batch ID: R25029		RunNo: 25029					
Prep Date:			Analysis Date: 3/24/2015		SeqNo: 738548		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		83.0	80	120			

Sample ID	2.5UG GRO LCSB		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSW		Batch ID: R25029		RunNo: 25029					
Prep Date:			Analysis Date: 3/24/2015		SeqNo: 738549		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.50	0.050	0.5000	0	100	80	120			
Surr: BFB	19		20.00		93.3	80	120			

Sample ID	5ML RB	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID: R25071			RunNo: 25071					
Prep Date:		Analysis Date: 3/25/2015			SeqNo: 739716		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		89.6	80	120			

Sample ID	2.5UG GRO LCS		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSW		Batch ID: R25071		RunNo: 25071					
Prep Date:			Analysis Date: 3/25/2015		SeqNo: 739717		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.49	0.050	0.5000	0	97.4	80	120			
Surr: BFB	20		20.00		102	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503834

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R25028			RunNo: 25028					
Prep Date:		Analysis Date: 3/24/2015			SeqNo: 738128		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503834

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	5ml rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R25028	RunNo:	25028					
Prep Date:		Analysis Date:	3/24/2015	SeqNo:	738128	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.5	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		95.6	70	130			
Surr: Dibromofluoromethane	9.6		10.00		96.3	70	130			
Surr: Toluene-d8	8.9		10.00		89.4	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID:	R25028	RunNo:	25028					
Prep Date:		Analysis Date:	3/24/2015	SeqNo:	738130	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	70	130			
Toluene	22	1.0	20.00	0	112	70	130			
Chlorobenzene	22	1.0	20.00	0	110	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503834

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	100ng lcs		SampType: LCS			TestCode: EPA Method 8260B: VOLATILES				
Client ID:	LCSW		Batch ID: R25028			RunNo: 25028				
Prep Date:			Analysis Date: 3/24/2015			SeqNo: 738130		Units: µg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	23	1.0	20.00	0	114	75.6	144			
Trichloroethene (TCE)	19	1.0	20.00	0	97.3	70	130			
Surr: 1,2-Dichloroethane-d4	9.1		10.00		91.4	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		95.6	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.1	70	130			
Surr: Toluene-d8	9.4		10.00		93.8	70	130			

Sample ID	1503834-002a ms		SampType: MS			TestCode: EPA Method 8260B: VOLATILES				
Client ID:	MKTF-4		Batch ID: R25028			RunNo: 25028				
Prep Date:			Analysis Date: 3/24/2015			SeqNo: 738581		Units: µg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	420	10	200.0	218.8	98.5	70	130			
Toluene	230	10	200.0	6.550	113	70	130			
Chlorobenzene	210	10	200.0	0	107	70	130			
1,1-Dichloroethene	270	10	200.0	31.69	117	70	130			
Trichloroethene (TCE)	200	10	200.0	0	99.0	70	130			
Surr: 1,2-Dichloroethane-d4	95		100.0		95.3	70	130			
Surr: 4-Bromofluorobenzene	95		100.0		95.3	70	130			
Surr: Dibromofluoromethane	90		100.0		90.0	70	130			
Surr: Toluene-d8	96		100.0		96.4	70	130			

Sample ID	1503834-002a msd		SampType: MSD			TestCode: EPA Method 8260B: VOLATILES				
Client ID:	MKTF-4		Batch ID: R25028			RunNo: 25028				
Prep Date:			Analysis Date: 3/24/2015			SeqNo: 738582		Units: µg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	420	10	200.0	218.8	103	70	130	2.16	20	
Toluene	230	10	200.0	6.550	113	70	130	0.164	20	
Chlorobenzene	220	10	200.0	0	108	70	130	0.972	20	
1,1-Dichloroethene	270	10	200.0	31.69	118	70	130	0.549	20	
Trichloroethene (TCE)	200	10	200.0	0	101	70	130	1.78	20	
Surr: 1,2-Dichloroethane-d4	100		100.0		101	70	130	0	0	
Surr: 4-Bromofluorobenzene	94		100.0		93.8	70	130	0	0	
Surr: Dibromofluoromethane	96		100.0		95.7	70	130	0	0	
Surr: Toluene-d8	98		100.0		97.7	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503834

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R25068			RunNo: 25068					
Prep Date:		Analysis Date: 3/25/2015			SeqNo: 739872	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503834

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	5ml rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R25068	RunNo:	25068					
Prep Date:		Analysis Date:	3/25/2015	SeqNo:	739872	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.0		10.00		90.4	70	130			
Surr: 4-Bromofluorobenzene	9.0		10.00		90.2	70	130			
Surr: Dibromofluoromethane	9.5		10.00		94.9	70	130			
Surr: Toluene-d8	8.9		10.00		89.1	70	130			

Sample ID	100nglcs200anxlcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID:	R25068	RunNo:	25068					
Prep Date:		Analysis Date:	3/25/2015	SeqNo:	739876	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	97.7	70	130			
Toluene	20	1.0	20.00	0	102	70	130			
Chlorobenzene	19	1.0	20.00	0	93.3	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503834

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	100nglcs200anxlcs	SampType:	LCS	TestCode: EPA Method 8260B: VOLATILES						
Client ID:	LCSW	Batch ID:	R25068	RunNo: 25068						
Prep Date:		Analysis Date:	3/25/2015	SeqNo: 739876		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	21	1.0	20.00	0	107	75.6	144			
Trichloroethene (TCE)	18	1.0	20.00	0	88.1	70	130			
Surr: 1,2-Dichloroethane-d4	8.6		10.00		85.6	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	9.2		10.00		92.1	70	130			
Surr: Toluene-d8	9.3		10.00		92.7	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503834

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	mb-18250		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 18250		RunNo: 25041					
Prep Date:	3/20/2015		Analysis Date: 3/24/2015		SeqNo: 738605		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503834

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	mb-18250	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	18250	RunNo:	25041					
Prep Date:	3/20/2015	Analysis Date:	3/24/2015	SeqNo:	738605	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	160		200.0		79.2	17.6	104			
Surr: Phenol-d5	160		200.0		79.4	17.7	89.9			
Surr: 2,4,6-Tribromophenol	180		200.0		87.6	16.3	122			
Surr: Nitrobenzene-d5	78		100.0		78.5	45.3	117			
Surr: 2-Fluorobiphenyl	78		100.0		77.9	43	113			
Surr: 4-Terphenyl-d14	85		100.0		85.0	47.6	122			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503834

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	lcs-18250		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 18250		RunNo: 25041					
Prep Date:	3/20/2015		Analysis Date: 3/24/2015		SeqNo: 738606		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	77	10	100.0	0	77.3	47.8	99.7			
4-Chloro-3-methylphenol	170	10	200.0	0	85.2	58.1	103			
2-Chlorophenol	150	10	200.0	0	77.2	49.5	96.8			
1,4-Dichlorobenzene	75	10	100.0	0	75.0	40.4	89.4			
2,4-Dinitrotoluene	64	10	100.0	0	63.9	38.6	91.3			
N-Nitrosodi-n-propylamine	83	10	100.0	0	82.6	53.9	95.6			
4-Nitrophenol	150	10	200.0	0	73.9	26.4	108			
Pentachlorophenol	140	20	200.0	0	69.6	36.5	86.6			
Phenol	170	10	200.0	0	84.0	29.3	108			
Pyrene	80	10	100.0	0	79.7	45.7	100			
1,2,4-Trichlorobenzene	82	10	100.0	0	82.1	39.3	94.5			
Surr: 2-Fluorophenol	150		200.0		76.8	17.6	104			
Surr: Phenol-d5	160		200.0		82.2	17.7	89.9			
Surr: 2,4,6-Tribromophenol	170		200.0		85.3	16.3	122			
Surr: Nitrobenzene-d5	77		100.0		77.3	45.3	117			
Surr: 2-Fluorobiphenyl	77		100.0		77.1	43	113			
Surr: 4-Terphenyl-d14	86		100.0		85.7	47.6	122			

Sample ID	mb-18336		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 18336		RunNo: 25103					
Prep Date:	3/25/2015		Analysis Date: 3/26/2015		SeqNo: 741043		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	160		200.0		78.7	17.6	104			
Surr: Phenol-d5	170		200.0		83.2	17.7	89.9			
Surr: 2,4,6-Tribromophenol	210		200.0		106	16.3	122			
Surr: Nitrobenzene-d5	78		100.0		78.4	45.3	117			
Surr: 2-Fluorobiphenyl	76		100.0		76.0	43	113			
Surr: 4-Terphenyl-d14	91		100.0		91.4	47.6	122			

Sample ID	lcs-18336		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 18336		RunNo: 25103					
Prep Date:	3/25/2015		Analysis Date: 3/26/2015		SeqNo: 741044		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	160		200.0		82.3	17.6	104			
Surr: Phenol-d5	170		200.0		84.3	17.7	89.9			
Surr: 2,4,6-Tribromophenol	200		200.0		100	16.3	122			
Surr: Nitrobenzene-d5	75		100.0		75.4	45.3	117			
Surr: 2-Fluorobiphenyl	80		100.0		79.7	43	113			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503834

20-Apr-15

Client: Western Refining Southwest, Gallup**Project:** 2015 1ST QTR (MKTF)

Sample ID	lcs-18336		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 18336		RunNo: 25103					
Prep Date:	3/25/2015		Analysis Date: 3/26/2015		SeqNo: 741044		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	89		100.0		88.8	47.6	122			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

Sample Log-In Check List

Client Name: **Western Refining Gallup**

Work Order Number: **1503834**

RcptNo: **1**

Received by/date:

CS

03/18/15

Logged By:

Ashley Gallegos

3/18/2015 11:00:00 AM

Completed By:

Ashley Gallegos

3/18/2015 5:48:31 PM

Reviewed By:

[Signature]

03/19/15

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: **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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.2	Good	Yes			



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

April 20, 2015

Cheryl Johnson

Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: 2015 1ST QTR (MKTF)

OrderNo.: 1503835

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 7 sample(s) on 3/18/2015 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", is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503835

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/17/2015 7:00:00 AM

Lab ID: 1503835-001

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: KJH	
Benzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Toluene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Ethylbenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Naphthalene	ND	2.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1-Methylnaphthalene	ND	4.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
2-Methylnaphthalene	ND	4.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Acetone	ND	10		µg/L	1	3/19/2015 11:58:04 PM	R24939
Bromobenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Bromodichloromethane	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Bromoform	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Bromomethane	ND	3.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
2-Butanone	ND	10		µg/L	1	3/19/2015 11:58:04 PM	R24939
Carbon disulfide	ND	10		µg/L	1	3/19/2015 11:58:04 PM	R24939
Carbon Tetrachloride	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Chlorobenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Chloroethane	ND	2.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Chloroform	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Chloromethane	ND	3.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
2-Chlorotoluene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
4-Chlorotoluene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
cis-1,2-DCE	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Dibromochloromethane	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Dibromomethane	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,1-Dichloroethane	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,1-Dichloroethene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,2-Dichloropropane	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,3-Dichloropropane	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
2,2-Dichloropropane	ND	2.0		µg/L	1	3/19/2015 11:58:04 PM	R24939

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 1 of 45
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503835

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/17/2015 7:00:00 AM

Lab ID: 1503835-001

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: KJH
1,1-Dichloropropene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Hexachlorobutadiene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
2-Hexanone	ND	10		µg/L	1	3/19/2015 11:58:04 PM	R24939
Isopropylbenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
4-Isopropyltoluene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
4-Methyl-2-pentanone	ND	10		µg/L	1	3/19/2015 11:58:04 PM	R24939
Methylene Chloride	ND	3.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
n-Butylbenzene	ND	3.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
n-Propylbenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
sec-Butylbenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Styrene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
tert-Butylbenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
trans-1,2-DCE	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Trichlorofluoromethane	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Vinyl chloride	ND	1.0		µg/L	1	3/19/2015 11:58:04 PM	R24939
Xylenes, Total	ND	1.5		µg/L	1	3/19/2015 11:58:04 PM	R24939
Surr: 1,2-Dichloroethane-d4	81.1	70-130		%REC	1	3/19/2015 11:58:04 PM	R24939
Surr: 4-Bromofluorobenzene	89.3	70-130		%REC	1	3/19/2015 11:58:04 PM	R24939
Surr: Dibromofluoromethane	82.5	70-130		%REC	1	3/19/2015 11:58:04 PM	R24939
Surr: Toluene-d8	92.4	70-130		%REC	1	3/19/2015 11:58:04 PM	R24939

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 2 of 45
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503835

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-37

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/17/2015 9:50:00 AM

Lab ID: 1503835-002

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	4.5	1.0		mg/L	1	3/19/2015 11:10:52 PM	18212
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/19/2015 11:10:52 PM	18212
Surr: DNOP	99.9	76.5-150		%REC	1	3/19/2015 11:10:52 PM	18212
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	11	0.25		mg/L	5	3/24/2015 11:03:06 PM	R25029
Surr: BFB	186	80-120	S	%REC	5	3/24/2015 11:03:06 PM	R25029
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.16	0.0020		mg/L	1	3/25/2015 10:18:46 PM	R25072
Cadmium	ND	0.0020		mg/L	1	3/25/2015 10:18:46 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 10:18:46 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 10:18:46 PM	R25072
Iron	1.1	0.10	*	mg/L	5	3/31/2015 3:43:58 PM	R25194
Manganese	2.7	0.010	*	mg/L	5	3/31/2015 3:43:58 PM	R25194
Silver	ND	0.0050		mg/L	1	3/25/2015 10:18:46 PM	R25072
Zinc	0.029	0.010		mg/L	1	3/25/2015 10:18:46 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.23	0.0020		mg/L	1	3/31/2015 6:36:11 PM	18338
Cadmium	ND	0.0020		mg/L	1	3/26/2015 6:35:27 PM	18338
Chromium	ND	0.0060		mg/L	1	3/26/2015 6:35:27 PM	18338
Copper	0.012	0.0060		mg/L	1	3/31/2015 6:36:11 PM	18338
Iron	5.1	0.20	*	mg/L	10	3/31/2015 6:38:06 PM	18338
Manganese	2.9	0.020	*	mg/L	10	3/31/2015 6:38:06 PM	18338
Silver	ND	0.0050		mg/L	1	3/26/2015 6:35:27 PM	18338
Zinc	0.14	0.010		mg/L	1	3/31/2015 6:36:11 PM	18338
EPA 200.8: DISSOLVED METALS							Analyst: TES
Arsenic	ND	0.0050		mg/L	5	4/2/2015 5:10:38 PM	R25250
Lead	0.0071	0.0010		mg/L	1	4/2/2015 5:01:29 PM	R25250
Selenium	ND	0.010		mg/L	10	4/2/2015 5:58:02 PM	R25250
Uranium	0.021	0.0010		mg/L	1	4/2/2015 5:01:29 PM	R25250
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.0032	0.0010		mg/L	1	3/27/2015 4:48:19 PM	18338
Lead	0.030	0.0010	*	mg/L	1	3/27/2015 4:48:19 PM	18338
Selenium	0.0036	0.0010		mg/L	1	3/27/2015 4:48:19 PM	18338
Uranium	0.026	0.0010		mg/L	1	3/27/2015 4:48:19 PM	18338
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/30/2015 6:23:53 PM	18400

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503835

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-37

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/17/2015 9:50:00 AM

Lab ID: 1503835-002

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Acenaphthylene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Aniline	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Anthracene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Azobenzene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Benzoic acid	ND	20		µg/L	1	3/24/2015 11:37:21 PM	18250
Benzyl alcohol	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Carbazole	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
4-Chloroaniline	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
2-Chlorophenol	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Chrysene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Dibenzofuran	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Diethyl phthalate	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/24/2015 11:37:21 PM	18250
2,4-Dimethylphenol	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/24/2015 11:37:21 PM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/24/2015 11:37:21 PM	18250

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 4 of 45
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503835

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-37

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/17/2015 9:50:00 AM

Lab ID: 1503835-002

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Fluoranthene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Fluorene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Hexachloroethane	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Isophorone	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
1-Methylnaphthalene	72	10		µg/L	1	3/24/2015 11:37:21 PM	18250
2-Methylnaphthalene	96	10		µg/L	1	3/24/2015 11:37:21 PM	18250
2-Methylphenol	33	10		µg/L	1	3/24/2015 11:37:21 PM	18250
3+4-Methylphenol	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Naphthalene	160	10		µg/L	1	3/24/2015 11:37:21 PM	18250
2-Nitroaniline	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
3-Nitroaniline	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
4-Nitroaniline	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Nitrobenzene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
2-Nitrophenol	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
4-Nitrophenol	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Pentachlorophenol	ND	20		µg/L	1	3/24/2015 11:37:21 PM	18250
Phenanthrene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Phenol	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Pyrene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Pyridine	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/24/2015 11:37:21 PM	18250
Surr: 2-Fluorophenol	78.3	17.6-104		%REC	1	3/24/2015 11:37:21 PM	18250
Surr: Phenol-d5	58.0	17.7-89.9		%REC	1	3/24/2015 11:37:21 PM	18250
Surr: 2,4,6-Tribromophenol	109	16.3-122		%REC	1	3/24/2015 11:37:21 PM	18250
Surr: Nitrobenzene-d5	69.4	45.3-117		%REC	1	3/24/2015 11:37:21 PM	18250
Surr: 2-Fluorobiphenyl	88.4	43-113		%REC	1	3/24/2015 11:37:21 PM	18250
Surr: 4-Terphenyl-d14	79.0	47.6-122		%REC	1	3/24/2015 11:37:21 PM	18250

EPA METHOD 8260B: VOLATILES

Analyst: **KJH**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503835

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-37

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/17/2015 9:50:00 AM

Lab ID: 1503835-002

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: KJH			
Benzene	820	100		µg/L	100	3/20/2015 2:36:01 PM	R24984
Toluene	270	10		µg/L	10	3/20/2015 3:04:46 PM	R24984
Ethylbenzene	29	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Methyl tert-butyl ether (MTBE)	57	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,2,4-Trimethylbenzene	240	10		µg/L	10	3/20/2015 3:04:46 PM	R24984
1,3,5-Trimethylbenzene	110	10		µg/L	10	3/20/2015 3:04:46 PM	R24984
1,2-Dichloroethane (EDC)	9.1	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Naphthalene	88	20		µg/L	10	3/20/2015 3:04:46 PM	R24984
1-Methylnaphthalene	30	4.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
2-Methylnaphthalene	38	20		µg/L	10	3/20/2015 3:04:46 PM	R24984
Acetone	ND	10		µg/L	1	3/20/2015 12:26:47 AM	R24939
Bromobenzene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Bromodichloromethane	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Bromoform	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Bromomethane	ND	3.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
2-Butanone	ND	10		µg/L	1	3/20/2015 12:26:47 AM	R24939
Carbon disulfide	ND	10		µg/L	1	3/20/2015 12:26:47 AM	R24939
Carbon Tetrachloride	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Chlorobenzene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Chloroethane	ND	2.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Chloroform	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Chloromethane	ND	3.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
2-Chlorotoluene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
4-Chlorotoluene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
cis-1,2-DCE	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Dibromochloromethane	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Dibromomethane	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,1-Dichloroethane	18	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,1-Dichloroethene	81	10		µg/L	10	3/20/2015 3:04:46 PM	R24984
1,2-Dichloropropane	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,3-Dichloropropane	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
2,2-Dichloropropane	ND	2.0		µg/L	1	3/20/2015 12:26:47 AM	R24939

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 6 of 45
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503835

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-37

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/17/2015 9:50:00 AM

Lab ID: 1503835-002

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: KJH
1,1-Dichloropropene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Hexachlorobutadiene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
2-Hexanone	ND	10		µg/L	1	3/20/2015 12:26:47 AM	R24939
Isopropylbenzene	47	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
4-Isopropyltoluene	4.5	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
4-Methyl-2-pentanone	ND	10		µg/L	1	3/20/2015 12:26:47 AM	R24939
Methylene Chloride	ND	3.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
n-Butylbenzene	20	3.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
n-Propylbenzene	56	10		µg/L	10	3/20/2015 3:04:46 PM	R24984
sec-Butylbenzene	7.3	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Styrene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
tert-Butylbenzene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
trans-1,2-DCE	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,1,1-Trichloroethane	8.7	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,1,2-Trichloroethane	2.2	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Trichloroethene (TCE)	120	10		µg/L	10	3/20/2015 3:04:46 PM	R24984
Trichlorofluoromethane	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Vinyl chloride	ND	1.0		µg/L	1	3/20/2015 12:26:47 AM	R24939
Xylenes, Total	490	15		µg/L	10	3/20/2015 3:04:46 PM	R24984
Surr: 1,2-Dichloroethane-d4	92.0	70-130		%REC	1	3/20/2015 12:26:47 AM	R24939
Surr: 4-Bromofluorobenzene	82.6	70-130		%REC	1	3/20/2015 12:26:47 AM	R24939
Surr: Dibromofluoromethane	123	70-130		%REC	1	3/20/2015 12:26:47 AM	R24939
Surr: Toluene-d8	106	70-130		%REC	1	3/20/2015 12:26:47 AM	R24939

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 7 of 45
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503835

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-18

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/17/2015 10:29:00 AM

Lab ID: 1503835-003

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	5.4	1.0		mg/L	1	3/19/2015 11:32:28 PM	18212
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/19/2015 11:32:28 PM	18212
Surr: DNOP	111	76.5-150		%REC	1	3/19/2015 11:32:28 PM	18212
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	1.8	0.25		mg/L	5	3/24/2015 11:32:16 PM	R25029
Surr: BFB	101	80-120		%REC	5	3/24/2015 11:32:16 PM	R25029
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	2.5	0.010	*	mg/L	5	3/31/2015 3:46:03 PM	R25194
Cadmium	ND	0.0020		mg/L	1	3/25/2015 10:20:49 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 10:20:49 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 10:20:49 PM	R25072
Iron	3.8	0.10	*	mg/L	5	3/31/2015 3:46:03 PM	R25194
Manganese	1.8	0.010	*	mg/L	5	3/31/2015 3:46:03 PM	R25194
Silver	ND	0.0050		mg/L	1	3/25/2015 10:20:49 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 10:20:49 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	3.5	0.020	*	mg/L	10	3/31/2015 6:48:07 PM	18338
Cadmium	ND	0.0020		mg/L	1	3/26/2015 6:37:21 PM	18338
Chromium	0.012	0.0060		mg/L	1	3/26/2015 6:37:21 PM	18338
Copper	0.011	0.0060		mg/L	1	3/31/2015 6:46:09 PM	18338
Iron	14	1.0	*	mg/L	50	3/31/2015 6:49:55 PM	18338
Manganese	2.7	0.020	*	mg/L	10	3/31/2015 6:48:07 PM	18338
Silver	ND	0.0050		mg/L	1	3/26/2015 6:37:21 PM	18338
Zinc	0.051	0.010		mg/L	1	3/31/2015 6:46:09 PM	18338
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	4/6/2015 7:52:24 PM	R25331
Lead	ND	0.0010		mg/L	1	4/4/2015 7:28:51 PM	R25304
Selenium	ND	0.010		mg/L	10	4/6/2015 7:52:24 PM	R25331
Uranium	ND	0.0010		mg/L	1	4/4/2015 7:28:51 PM	R25304
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.0031	0.0010		mg/L	1	3/27/2015 4:51:30 PM	18338
Lead	0.021	0.0010	*	mg/L	1	3/27/2015 4:51:30 PM	18338
Selenium	ND	0.010		mg/L	10	3/31/2015 5:26:55 PM	18338
Uranium	0.0026	0.0010		mg/L	1	3/27/2015 4:51:30 PM	18338
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/30/2015 6:25:41 PM	18400

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503835

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-18

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/17/2015 10:29:00 AM

Lab ID: 1503835-003

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Acenaphthylene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Aniline	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Anthracene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Azobenzene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Benzoic acid	ND	20		µg/L	1	3/25/2015 12:05:16 AM	18250
Benzyl alcohol	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Carbazole	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
4-Chloroaniline	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
2-Chlorophenol	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Chrysene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Dibenzofuran	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Diethyl phthalate	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/25/2015 12:05:16 AM	18250
2,4-Dimethylphenol	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/25/2015 12:05:16 AM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/25/2015 12:05:16 AM	18250

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 9 of 45
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503835

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-18

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/17/2015 10:29:00 AM

Lab ID: 1503835-003

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Fluoranthene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Fluorene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Hexachloroethane	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Isophorone	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
1-Methylnaphthalene	100	10		µg/L	1	3/25/2015 12:05:16 AM	18250
2-Methylnaphthalene	28	10		µg/L	1	3/25/2015 12:05:16 AM	18250
2-Methylphenol	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
3+4-Methylphenol	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Naphthalene	32	10		µg/L	1	3/25/2015 12:05:16 AM	18250
2-Nitroaniline	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
3-Nitroaniline	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
4-Nitroaniline	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Nitrobenzene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
2-Nitrophenol	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
4-Nitrophenol	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Pentachlorophenol	ND	20		µg/L	1	3/25/2015 12:05:16 AM	18250
Phenanthrene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Phenol	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Pyrene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Pyridine	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/25/2015 12:05:16 AM	18250
Surr: 2-Fluorophenol	68.9	17.6-104		%REC	1	3/25/2015 12:05:16 AM	18250
Surr: Phenol-d5	58.1	17.7-89.9		%REC	1	3/25/2015 12:05:16 AM	18250
Surr: 2,4,6-Tribromophenol	97.1	16.3-122		%REC	1	3/25/2015 12:05:16 AM	18250
Surr: Nitrobenzene-d5	74.7	45.3-117		%REC	1	3/25/2015 12:05:16 AM	18250
Surr: 2-Fluorobiphenyl	85.2	43-113		%REC	1	3/25/2015 12:05:16 AM	18250
Surr: 4-Terphenyl-d14	78.2	47.6-122		%REC	1	3/25/2015 12:05:16 AM	18250

EPA METHOD 8260B: VOLATILES

Analyst: **KJH**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.
	E Value above quantitation range
	J Analyte detected below quantitation limits
	O RSD is greater than RSDlimit
	R RPD outside accepted recovery limits
	S Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503835

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-18

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/17/2015 10:29:00 AM

Lab ID: 1503835-003

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: KJH
Benzene	58	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Toluene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Ethylbenzene	17	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Methyl tert-butyl ether (MTBE)	91	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,2,4-Trimethylbenzene	65	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,3,5-Trimethylbenzene	19	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Naphthalene	36	10		µg/L	5	3/20/2015 3:33:25 PM	R24984
1-Methylnaphthalene	88	20		µg/L	5	3/20/2015 3:33:25 PM	R24984
2-Methylnaphthalene	25	20		µg/L	5	3/20/2015 3:33:25 PM	R24984
Acetone	ND	50		µg/L	5	3/20/2015 3:33:25 PM	R24984
Bromobenzene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Bromodichloromethane	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Bromoform	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Bromomethane	ND	15		µg/L	5	3/20/2015 3:33:25 PM	R24984
2-Butanone	ND	50		µg/L	5	3/20/2015 3:33:25 PM	R24984
Carbon disulfide	ND	50		µg/L	5	3/20/2015 3:33:25 PM	R24984
Carbon Tetrachloride	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Chlorobenzene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Chloroethane	ND	10		µg/L	5	3/20/2015 3:33:25 PM	R24984
Chloroform	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Chloromethane	ND	15		µg/L	5	3/20/2015 3:33:25 PM	R24984
2-Chlorotoluene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
4-Chlorotoluene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
cis-1,2-DCE	5.6	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	3/20/2015 3:33:25 PM	R24984
Dibromochloromethane	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Dibromomethane	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,2-Dichlorobenzene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,3-Dichlorobenzene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,4-Dichlorobenzene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Dichlorodifluoromethane	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,1-Dichloroethane	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,1-Dichloroethene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,2-Dichloropropane	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,3-Dichloropropane	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
2,2-Dichloropropane	ND	10		µg/L	5	3/20/2015 3:33:25 PM	R24984

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503835

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-18

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/17/2015 10:29:00 AM

Lab ID: 1503835-003

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: KJH			
1,1-Dichloropropene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Hexachlorobutadiene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
2-Hexanone	ND	50		µg/L	5	3/20/2015 3:33:25 PM	R24984
Isopropylbenzene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
4-Isopropyltoluene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
4-Methyl-2-pentanone	ND	50		µg/L	5	3/20/2015 3:33:25 PM	R24984
Methylene Chloride	ND	15		µg/L	5	3/20/2015 3:33:25 PM	R24984
n-Butylbenzene	ND	15		µg/L	5	3/20/2015 3:33:25 PM	R24984
n-Propylbenzene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
sec-Butylbenzene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Styrene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
tert-Butylbenzene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	3/20/2015 3:33:25 PM	R24984
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
trans-1,2-DCE	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,1,1-Trichloroethane	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,1,2-Trichloroethane	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Trichloroethene (TCE)	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Trichlorofluoromethane	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
1,2,3-Trichloropropane	ND	10		µg/L	5	3/20/2015 3:33:25 PM	R24984
Vinyl chloride	ND	5.0		µg/L	5	3/20/2015 3:33:25 PM	R24984
Xylenes, Total	29	7.5		µg/L	5	3/20/2015 3:33:25 PM	R24984
Surr: 1,2-Dichloroethane-d4	89.4	70-130		%REC	5	3/20/2015 3:33:25 PM	R24984
Surr: 4-Bromofluorobenzene	107	70-130		%REC	5	3/20/2015 3:33:25 PM	R24984
Surr: Dibromofluoromethane	87.4	70-130		%REC	5	3/20/2015 3:33:25 PM	R24984
Surr: Toluene-d8	90.3	70-130		%REC	5	3/20/2015 3:33:25 PM	R24984

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503835

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-36

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/17/2015 10:53:00 AM

Lab ID: 1503835-004

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	10	1.0		mg/L	1	3/19/2015 11:53:49 PM	18212
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/19/2015 11:53:49 PM	18212
Surr: DNOP	110	76.5-150		%REC	1	3/19/2015 11:53:49 PM	18212
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	38	5.0		mg/L	100	3/25/2015 12:01:32 AM	R25029
Surr: BFB	91.0	80-120		%REC	100	3/25/2015 12:01:32 AM	R25029
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	6.4	0.020	*	mg/L	10	3/31/2015 3:48:08 PM	R25194
Cadmium	ND	0.0020		mg/L	1	3/25/2015 10:31:03 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 10:31:03 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 10:31:03 PM	R25072
Iron	19	1.0	*	mg/L	50	3/31/2015 4:02:53 PM	R25194
Manganese	2.6	0.020	*	mg/L	10	3/31/2015 3:48:08 PM	R25194
Silver	ND	0.0050		mg/L	1	3/25/2015 10:31:03 PM	R25072
Zinc	0.047	0.010		mg/L	1	3/25/2015 10:31:03 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	7.0	0.020	*	mg/L	10	3/31/2015 6:53:32 PM	18338
Cadmium	ND	0.0020		mg/L	1	3/26/2015 6:39:14 PM	18338
Chromium	ND	0.0060		mg/L	1	3/26/2015 6:39:14 PM	18338
Copper	ND	0.0060		mg/L	1	3/31/2015 6:51:53 PM	18338
Iron	22	1.0	*	mg/L	50	3/31/2015 6:55:20 PM	18338
Manganese	2.8	0.020	*	mg/L	10	3/31/2015 6:53:32 PM	18338
Silver	ND	0.0050		mg/L	1	3/26/2015 6:39:14 PM	18338
Zinc	0.028	0.010		mg/L	1	3/31/2015 6:51:53 PM	18338
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	0.015	0.010	*	mg/L	10	4/6/2015 7:55:28 PM	R25331
Lead	0.0034	0.0010		mg/L	1	4/4/2015 7:31:54 PM	R25304
Selenium	ND	0.010		mg/L	10	4/6/2015 7:55:28 PM	R25331
Uranium	ND	0.0010		mg/L	1	4/4/2015 7:31:54 PM	R25304
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.016	0.0010	*	mg/L	1	3/27/2015 4:54:41 PM	18338
Lead	0.015	0.0010	*	mg/L	1	3/27/2015 4:54:41 PM	18338
Selenium	0.0057	0.0010		mg/L	1	3/27/2015 4:54:41 PM	18338
Uranium	0.0016	0.0010		mg/L	1	3/27/2015 4:54:41 PM	18338
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/30/2015 6:27:32 PM	18400

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503835

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-36

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/17/2015 10:53:00 AM

Lab ID: 1503835-004

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Acenaphthylene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Aniline	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Anthracene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Azobenzene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Benzoic acid	ND	20		µg/L	1	3/25/2015 12:32:54 AM	18250
Benzyl alcohol	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Carbazole	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
4-Chloroaniline	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
2-Chlorophenol	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Chrysene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Dibenzofuran	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Diethyl phthalate	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/25/2015 12:32:54 AM	18250
2,4-Dimethylphenol	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/25/2015 12:32:54 AM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/25/2015 12:32:54 AM	18250

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503835

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-36

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/17/2015 10:53:00 AM

Lab ID: 1503835-004

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Fluoranthene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Fluorene	10	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Hexachloroethane	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Isophorone	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
1-Methylnaphthalene	240	10		µg/L	1	3/25/2015 12:32:54 AM	18250
2-Methylnaphthalene	390	50		µg/L	5	3/25/2015 12:06:09 PM	18250
2-Methylphenol	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
3+4-Methylphenol	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Naphthalene	470	50		µg/L	5	3/25/2015 12:06:09 PM	18250
2-Nitroaniline	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
3-Nitroaniline	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
4-Nitroaniline	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Nitrobenzene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
2-Nitrophenol	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
4-Nitrophenol	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Pentachlorophenol	ND	20		µg/L	1	3/25/2015 12:32:54 AM	18250
Phenanthrene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Phenol	44	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Pyrene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Pyridine	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/25/2015 12:32:54 AM	18250
Surr: 2-Fluorophenol	79.0	17.6-104		%REC	1	3/25/2015 12:32:54 AM	18250
Surr: Phenol-d5	63.9	17.7-89.9		%REC	1	3/25/2015 12:32:54 AM	18250
Surr: 2,4,6-Tribromophenol	108	16.3-122		%REC	1	3/25/2015 12:32:54 AM	18250
Surr: Nitrobenzene-d5	81.7	45.3-117		%REC	1	3/25/2015 12:32:54 AM	18250
Surr: 2-Fluorobiphenyl	95.3	43-113		%REC	1	3/25/2015 12:32:54 AM	18250
Surr: 4-Terphenyl-d14	85.7	47.6-122		%REC	1	3/25/2015 12:32:54 AM	18250

EPA METHOD 8260B: VOLATILES

Analyst: **KJH**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503835

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-36

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/17/2015 10:53:00 AM

Lab ID: 1503835-004

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: KJH
Benzene	8300	1000		µg/L	1E	3/20/2015 4:02:03 PM	R24984
Toluene	23	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Ethylbenzene	1400	100		µg/L	100	3/20/2015 1:24:05 AM	R24939
Methyl tert-butyl ether (MTBE)	8300	1000		µg/L	1E	3/20/2015 4:02:03 PM	R24984
1,2,4-Trimethylbenzene	31	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,3,5-Trimethylbenzene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Naphthalene	430	200		µg/L	100	3/20/2015 1:24:05 AM	R24939
1-Methylnaphthalene	260	40		µg/L	10	3/20/2015 1:52:44 AM	R24939
2-Methylnaphthalene	510	400		µg/L	100	3/20/2015 1:24:05 AM	R24939
Acetone	ND	100		µg/L	10	3/20/2015 1:52:44 AM	R24939
Bromobenzene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Bromodichloromethane	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Bromoform	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Bromomethane	ND	30		µg/L	10	3/20/2015 1:52:44 AM	R24939
2-Butanone	ND	100		µg/L	10	3/20/2015 1:52:44 AM	R24939
Carbon disulfide	ND	100		µg/L	10	3/20/2015 1:52:44 AM	R24939
Carbon Tetrachloride	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Chlorobenzene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Chloroethane	ND	20		µg/L	10	3/20/2015 1:52:44 AM	R24939
Chloroform	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Chloromethane	ND	30		µg/L	10	3/20/2015 1:52:44 AM	R24939
2-Chlorotoluene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
4-Chlorotoluene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
cis-1,2-DCE	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
cis-1,3-Dichloropropene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	3/20/2015 1:52:44 AM	R24939
Dibromochloromethane	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Dibromomethane	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,2-Dichlorobenzene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,3-Dichlorobenzene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,4-Dichlorobenzene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Dichlorodifluoromethane	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,1-Dichloroethane	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,1-Dichloroethene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,2-Dichloropropane	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,3-Dichloropropane	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
2,2-Dichloropropane	ND	20		µg/L	10	3/20/2015 1:52:44 AM	R24939

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503835

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-36

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/17/2015 10:53:00 AM

Lab ID: 1503835-004

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: KJH			
1,1-Dichloropropene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Hexachlorobutadiene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
2-Hexanone	ND	100		µg/L	10	3/20/2015 1:52:44 AM	R24939
Isopropylbenzene	30	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
4-Isopropyltoluene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
4-Methyl-2-pentanone	ND	100		µg/L	10	3/20/2015 1:52:44 AM	R24939
Methylene Chloride	ND	30		µg/L	10	3/20/2015 1:52:44 AM	R24939
n-Butylbenzene	ND	30		µg/L	10	3/20/2015 1:52:44 AM	R24939
n-Propylbenzene	81	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
sec-Butylbenzene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Styrene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
tert-Butylbenzene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	3/20/2015 1:52:44 AM	R24939
Tetrachloroethene (PCE)	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
trans-1,2-DCE	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
trans-1,3-Dichloropropene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,2,3-Trichlorobenzene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,2,4-Trichlorobenzene	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,1,1-Trichloroethane	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,1,2-Trichloroethane	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Trichloroethene (TCE)	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Trichlorofluoromethane	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
1,2,3-Trichloropropane	ND	20		µg/L	10	3/20/2015 1:52:44 AM	R24939
Vinyl chloride	ND	10		µg/L	10	3/20/2015 1:52:44 AM	R24939
Xylenes, Total	78	15		µg/L	10	3/20/2015 1:52:44 AM	R24939
Surr: 1,2-Dichloroethane-d4	84.6	70-130		%REC	10	3/20/2015 1:52:44 AM	R24939
Surr: 4-Bromofluorobenzene	93.9	70-130		%REC	10	3/20/2015 1:52:44 AM	R24939
Surr: Dibromofluoromethane	91.7	70-130		%REC	10	3/20/2015 1:52:44 AM	R24939
Surr: Toluene-d8	92.1	70-130		%REC	10	3/20/2015 1:52:44 AM	R24939

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503835

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-35

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/17/2015 11:25:00 AM

Lab ID: 1503835-005

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	6.0	1.0		mg/L	1	3/20/2015 12:15:11 AM	18212
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/20/2015 12:15:11 AM	18212
Surr: DNOP	120	76.5-150		%REC	1	3/20/2015 12:15:11 AM	18212
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	3.7	0.25		mg/L	5	3/25/2015 12:30:48 AM	R25029
Surr: BFB	104	80-120		%REC	5	3/25/2015 12:30:48 AM	R25029
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.31	0.0020		mg/L	1	3/31/2015 3:50:16 PM	R25194
Cadmium	ND	0.0020		mg/L	1	3/25/2015 10:32:43 PM	R25072
Chromium	ND	0.0060		mg/L	1	3/25/2015 10:32:43 PM	R25072
Copper	ND	0.0060		mg/L	1	3/25/2015 10:32:43 PM	R25072
Iron	3.6	0.10	*	mg/L	5	3/31/2015 3:59:27 PM	R25194
Manganese	3.5	0.010	*	mg/L	5	3/31/2015 3:59:27 PM	R25194
Silver	ND	0.0050		mg/L	1	3/25/2015 10:32:43 PM	R25072
Zinc	ND	0.010		mg/L	1	3/25/2015 10:32:43 PM	R25072
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	8.2	0.020	*	mg/L	10	3/31/2015 6:57:35 PM	18395
Cadmium	ND	0.0020		mg/L	1	3/30/2015 8:21:05 PM	18395
Chromium	0.013	0.0060		mg/L	1	3/30/2015 8:21:05 PM	18395
Copper	0.025	0.0060		mg/L	1	3/30/2015 8:21:05 PM	18395
Iron	15	1.0	*	mg/L	50	3/31/2015 6:59:27 PM	18395
Manganese	6.3	0.020	*	mg/L	10	3/31/2015 6:57:35 PM	18395
Silver	ND	0.0050		mg/L	1	3/30/2015 8:21:05 PM	18395
Zinc	0.062	0.010		mg/L	1	3/30/2015 8:21:05 PM	18395
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	4/6/2015 7:58:31 PM	R25331
Lead	0.0011	0.0010		mg/L	1	4/4/2015 7:34:58 PM	R25304
Selenium	ND	0.010		mg/L	10	4/6/2015 7:58:31 PM	R25331
Uranium	0.0026	0.0010		mg/L	1	4/4/2015 7:34:58 PM	R25304
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.0040	0.0010		mg/L	1	3/31/2015 6:14:47 PM	18395
Lead	0.034	0.0010	*	mg/L	1	3/31/2015 6:14:47 PM	18395
Selenium	ND	0.0050		mg/L	5	4/3/2015 12:37:28 PM	18395
Uranium	0.0053	0.0010		mg/L	1	3/31/2015 6:14:47 PM	18395
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	3/30/2015 6:29:14 PM	18400

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503835

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-35

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/17/2015 11:25:00 AM

Lab ID: 1503835-005

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Acenaphthylene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Aniline	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Anthracene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Azobenzene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Benzoic acid	ND	20		µg/L	1	3/25/2015 1:00:39 AM	18250
Benzyl alcohol	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Carbazole	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
4-Chloroaniline	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
2-Chlorophenol	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Chrysene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Dibenzofuran	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Diethyl phthalate	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/25/2015 1:00:39 AM	18250
2,4-Dimethylphenol	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/25/2015 1:00:39 AM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/25/2015 1:00:39 AM	18250

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503835

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-35

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/17/2015 11:25:00 AM

Lab ID: 1503835-005

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Fluoranthene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Fluorene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Hexachloroethane	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Isophorone	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
1-Methylnaphthalene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
2-Methylnaphthalene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
2-Methylphenol	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
3+4-Methylphenol	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Naphthalene	28	10		µg/L	1	3/25/2015 1:00:39 AM	18250
2-Nitroaniline	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
3-Nitroaniline	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
4-Nitroaniline	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Nitrobenzene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
2-Nitrophenol	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
4-Nitrophenol	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Pentachlorophenol	ND	20		µg/L	1	3/25/2015 1:00:39 AM	18250
Phenanthrene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Phenol	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Pyrene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Pyridine	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/25/2015 1:00:39 AM	18250
Surr: 2-Fluorophenol	77.7	17.6-104		%REC	1	3/25/2015 1:00:39 AM	18250
Surr: Phenol-d5	66.2	17.7-89.9		%REC	1	3/25/2015 1:00:39 AM	18250
Surr: 2,4,6-Tribromophenol	112	16.3-122		%REC	1	3/25/2015 1:00:39 AM	18250
Surr: Nitrobenzene-d5	87.6	45.3-117		%REC	1	3/25/2015 1:00:39 AM	18250
Surr: 2-Fluorobiphenyl	89.5	43-113		%REC	1	3/25/2015 1:00:39 AM	18250
Surr: 4-Terphenyl-d14	84.2	47.6-122		%REC	1	3/25/2015 1:00:39 AM	18250

EPA METHOD 8260B: VOLATILESAnalyst: **KJH**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503835

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-35

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/17/2015 11:25:00 AM

Lab ID: 1503835-005

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: KJH
Benzene	470	20		µg/L	20	3/20/2015 4:30:46 PM	R24984
Toluene	5.2	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Ethylbenzene	320	20		µg/L	20	3/20/2015 4:30:46 PM	R24984
Methyl tert-butyl ether (MTBE)	33	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,2,4-Trimethylbenzene	34	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,3,5-Trimethylbenzene	46	20		µg/L	20	3/20/2015 4:30:46 PM	R24984
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Naphthalene	36	2.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1-Methylnaphthalene	7.7	4.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
2-Methylnaphthalene	6.3	4.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Acetone	ND	10		µg/L	1	3/20/2015 2:21:24 AM	R24939
Bromobenzene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Bromodichloromethane	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Bromoform	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Bromomethane	ND	3.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
2-Butanone	ND	10		µg/L	1	3/20/2015 2:21:24 AM	R24939
Carbon disulfide	ND	10		µg/L	1	3/20/2015 2:21:24 AM	R24939
Carbon Tetrachloride	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Chlorobenzene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Chloroethane	ND	2.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Chloroform	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Chloromethane	ND	3.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
2-Chlorotoluene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
4-Chlorotoluene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
cis-1,2-DCE	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Dibromochloromethane	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Dibromomethane	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,1-Dichloroethane	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,1-Dichloroethene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,2-Dichloropropane	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,3-Dichloropropane	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
2,2-Dichloropropane	ND	2.0		µg/L	1	3/20/2015 2:21:24 AM	R24939

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503835

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-35

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/17/2015 11:25:00 AM

Lab ID: 1503835-005

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: KJH
1,1-Dichloropropene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Hexachlorobutadiene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
2-Hexanone	ND	10		µg/L	1	3/20/2015 2:21:24 AM	R24939
Isopropylbenzene	8.2	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
4-Isopropyltoluene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
4-Methyl-2-pentanone	ND	10		µg/L	1	3/20/2015 2:21:24 AM	R24939
Methylene Chloride	ND	3.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
n-Butylbenzene	ND	3.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
n-Propylbenzene	35	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
sec-Butylbenzene	1.8	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Styrene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
tert-Butylbenzene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
trans-1,2-DCE	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Trichlorofluoromethane	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Vinyl chloride	ND	1.0		µg/L	1	3/20/2015 2:21:24 AM	R24939
Xylenes, Total	170	1.5		µg/L	1	3/20/2015 2:21:24 AM	R24939
Surr: 1,2-Dichloroethane-d4	84.8	70-130		%REC	1	3/20/2015 2:21:24 AM	R24939
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	3/20/2015 2:21:24 AM	R24939
Surr: Dibromofluoromethane	97.5	70-130		%REC	1	3/20/2015 2:21:24 AM	R24939
Surr: Toluene-d8	105	70-130		%REC	1	3/20/2015 2:21:24 AM	R24939

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503835

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Blind Duplicate

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/17/2015

Lab ID: 1503835-006

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
Acenaphthene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Acenaphthylene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Aniline	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Anthracene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Azobenzene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Benz(a)anthracene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Benzo(a)pyrene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Benzo(b)fluoranthene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Benzo(k)fluoranthene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Benzoic acid	ND	20		µg/L	1	3/26/2015 3:05:16 PM	18250
Benzyl alcohol	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Bis(2-ethylhexyl)phthalate	17	10		µg/L	1	3/26/2015 3:05:16 PM	18250
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Butyl benzyl phthalate	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Carbazole	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
4-Chloroaniline	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
2-Chloronaphthalene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
2-Chlorophenol	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Chrysene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Di-n-butyl phthalate	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Di-n-octyl phthalate	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Dibenzofuran	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
1,2-Dichlorobenzene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
1,3-Dichlorobenzene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
1,4-Dichlorobenzene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Diethyl phthalate	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Dimethyl phthalate	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
2,4-Dichlorophenol	ND	20		µg/L	1	3/26/2015 3:05:16 PM	18250
2,4-Dimethylphenol	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/26/2015 3:05:16 PM	18250
2,4-Dinitrophenol	ND	20		µg/L	1	3/26/2015 3:05:16 PM	18250

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503835

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Blind Duplicate

Project: 2015 1ST QTR (MKTF)

Collection Date: 3/17/2015

Lab ID: 1503835-006

Matrix: AQUEOUS

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
2,6-Dinitrotoluene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Fluoranthene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Fluorene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Hexachlorobenzene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Hexachlorobutadiene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Hexachloroethane	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Isophorone	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
1-Methylnaphthalene	100	10		µg/L	1	3/26/2015 3:05:16 PM	18250
2-Methylnaphthalene	140	10		µg/L	1	3/26/2015 3:05:16 PM	18250
2-Methylphenol	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
3+4-Methylphenol	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
N-Nitrosodimethylamine	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Naphthalene	120	10		µg/L	1	3/26/2015 3:05:16 PM	18250
2-Nitroaniline	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
3-Nitroaniline	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
4-Nitroaniline	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Nitrobenzene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
2-Nitrophenol	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
4-Nitrophenol	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Pentachlorophenol	ND	20		µg/L	1	3/26/2015 3:05:16 PM	18250
Phenanthrene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Phenol	97	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Pyrene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Pyridine	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
2,4,5-Trichlorophenol	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
2,4,6-Trichlorophenol	ND	10		µg/L	1	3/26/2015 3:05:16 PM	18250
Surr: 2-Fluorophenol	38.4	17.6-104		%REC	1	3/26/2015 3:05:16 PM	18250
Surr: Phenol-d5	32.4	17.7-89.9		%REC	1	3/26/2015 3:05:16 PM	18250
Surr: 2,4,6-Tribromophenol	29.0	16.3-122		%REC	1	3/26/2015 3:05:16 PM	18250
Surr: Nitrobenzene-d5	30.2	45.3-117	S	%REC	1	3/26/2015 3:05:16 PM	18250
Surr: 2-Fluorobiphenyl	22.2	43-113	S	%REC	1	3/26/2015 3:05:16 PM	18250
Surr: 4-Terphenyl-d14	21.6	47.6-122	S	%REC	1	3/26/2015 3:05:16 PM	18250

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503835

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: 2015 1ST QTR (MKTF)

Collection Date:

Lab ID: 1503835-007

Matrix: TRIP BLANK

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/25/2015 1:00:01 AM	R25029
Surr: BFB	88.3	80-120		%REC	1	3/25/2015 1:00:01 AM	R25029
EPA METHOD 8260B: VOLATILES							Analyst: KJH
Benzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Toluene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Ethylbenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Naphthalene	ND	2.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1-Methylnaphthalene	ND	4.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
2-Methylnaphthalene	ND	4.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Acetone	ND	10		µg/L	1	3/20/2015 2:50:06 AM	R24939
Bromobenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Bromodichloromethane	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Bromoform	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Bromomethane	ND	3.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
2-Butanone	ND	10		µg/L	1	3/20/2015 2:50:06 AM	R24939
Carbon disulfide	ND	10		µg/L	1	3/20/2015 2:50:06 AM	R24939
Carbon Tetrachloride	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Chlorobenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Chloroethane	ND	2.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Chloroform	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Chloromethane	ND	3.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
2-Chlorotoluene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
4-Chlorotoluene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
cis-1,2-DCE	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Dibromochloromethane	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Dibromomethane	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,1-Dichloroethane	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,1-Dichloroethene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503835

Date Reported: 4/20/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: 2015 1ST QTR (MKTF)

Collection Date:

Lab ID: 1503835-007

Matrix: TRIP BLANK

Received Date: 3/18/2015 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: KJH
1,2-Dichloropropane	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,3-Dichloropropane	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
2,2-Dichloropropane	ND	2.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,1-Dichloropropene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Hexachlorobutadiene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
2-Hexanone	ND	10		µg/L	1	3/20/2015 2:50:06 AM	R24939
Isopropylbenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
4-Isopropyltoluene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
4-Methyl-2-pentanone	ND	10		µg/L	1	3/20/2015 2:50:06 AM	R24939
Methylene Chloride	ND	3.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
n-Butylbenzene	ND	3.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
n-Propylbenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
sec-Butylbenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Styrene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
tert-Butylbenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
trans-1,2-DCE	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Trichlorofluoromethane	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Vinyl chloride	ND	1.0		µg/L	1	3/20/2015 2:50:06 AM	R24939
Xylenes, Total	ND	1.5		µg/L	1	3/20/2015 2:50:06 AM	R24939
Surr: 1,2-Dichloroethane-d4	81.6	70-130		%REC	1	3/20/2015 2:50:06 AM	R24939
Surr: 4-Bromofluorobenzene	88.7	70-130		%REC	1	3/20/2015 2:50:06 AM	R24939
Surr: Dibromofluoromethane	88.2	70-130		%REC	1	3/20/2015 2:50:06 AM	R24939
Surr: Toluene-d8	92.7	70-130		%REC	1	3/20/2015 2:50:06 AM	R24939

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503835

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R25072			RunNo: 25072					
Prep Date:		Analysis Date: 3/25/2015			SeqNo: 739895		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								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25072		RunNo: 25072					
Prep Date:			Analysis Date: 3/25/2015		SeqNo: 739896		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.7	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.3	85	115			
Chromium	0.49	0.0060	0.5000	0	97.5	85	115			
Copper	0.49	0.0060	0.5000	0	97.2	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.48	0.010	0.5000	0	96.8	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R25072			RunNo: 25072					
Prep Date:		Analysis Date: 3/25/2015			SeqNo: 739897		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								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25072		RunNo: 25072					
Prep Date:			Analysis Date: 3/25/2015		SeqNo: 739898		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	97.2	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.9	85	115			
Chromium	0.49	0.0060	0.5000	0	97.9	85	115			
Copper	0.49	0.0060	0.5000	0	97.0	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503835

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25072		RunNo: 25072					
Prep Date:			Analysis Date: 3/25/2015		SeqNo: 739898		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.49	0.010	0.5000	0	97.2	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R25194			RunNo: 25194					
Prep Date:		Analysis Date: 3/31/2015			SeqNo: 744541		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25194		RunNo: 25194					
Prep Date:			Analysis Date: 3/31/2015		SeqNo: 744542		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	98.8	85	115			
Iron	0.48	0.020	0.5000	0	96.7	85	115			
Manganese	0.47	0.0020	0.5000	0	94.5	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503835

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB-18338		SampType: MBLK		TestCode: EPA Method 200.7: Total Metals					
Client ID:	PBW		Batch ID: 18338		RunNo: 25098					
Prep Date:	3/25/2015		Analysis Date: 3/26/2015		SeqNo: 740873		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-18338		SampType: LCS		TestCode: EPA Method 200.7: Total Metals					
Client ID:	LCSW		Batch ID: 18338		RunNo: 25098					
Prep Date:	3/25/2015		Analysis Date: 3/26/2015		SeqNo: 740874		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.2	85	115			
Cadmium	0.49	0.0020	0.5000	0	97.9	85	115			
Chromium	0.49	0.0060	0.5000	0	97.6	85	115			
Copper	0.49	0.0060	0.5000	0	98.0	85	115			
Iron	0.48	0.020	0.5000	0	96.8	85	115			
Manganese	0.47	0.0020	0.5000	0	94.6	85	115			
Silver	0.10	0.0050	0.1000	0	105	85	115			
Zinc	0.48	0.010	0.5000	0	95.1	85	115			

Sample ID	MB-18395		SampType: MBLK		TestCode: EPA Method 200.7: Total Metals					
Client ID:	PBW		Batch ID: 18395		RunNo: 25178					
Prep Date:	3/28/2015		Analysis Date: 3/30/2015		SeqNo: 744123		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503835

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	LCS-18395		SampType: LCS		TestCode: EPA Method 200.7: Total Metals					
Client ID:	LCSW		Batch ID: 18395		RunNo: 25178					
Prep Date:	3/28/2015		Analysis Date: 3/30/2015		SeqNo: 744124		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	99.6	85	115			
Cadmium	0.51	0.0020	0.5000	0	103	85	115			
Chromium	0.51	0.0060	0.5000	0	101	85	115			
Copper	0.50	0.0060	0.5000	0	101	85	115			
Iron	0.50	0.020	0.5000	0	99.2	85	115			
Manganese	0.49	0.0020	0.5000	0	97.6	85	115			
Silver	0.11	0.0050	0.1000	0	110	85	115			
Zinc	0.50	0.010	0.5000	0	101	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503835

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID 1503835-002EMS	SampType: MS			TestCode: EPA 200.8: Dissolved Metals						
Client ID: MKTF-37	Batch ID: R25250			RunNo: 25250						
Prep Date:	Analysis Date: 4/2/2015			SeqNo: 747257			Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.12	0.0050	0.1250	0.002789	94.8	70	130			

Sample ID 1503835-002EMS	SampType: MS			TestCode: EPA 200.8: Dissolved Metals						
Client ID: MKTF-37	Batch ID: R25250			RunNo: 25250						
Prep Date:	Analysis Date: 4/2/2015			SeqNo: 747258			Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.032	0.0010	0.02500	0.007137	98.9	70	130			
Uranium	0.046	0.0010	0.02500	0.02101	98.8	70	130			

Sample ID 1503835-002EMSD	SampType: MSD			TestCode: EPA 200.8: Dissolved Metals						
Client ID: MKTF-37	Batch ID: R25250			RunNo: 25250						
Prep Date:	Analysis Date: 4/2/2015			SeqNo: 747259			Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.12	0.0050	0.1250	0.002789	93.9	70	130	0.922	20	

Sample ID 1503835-002EMSD	SampType: MSD			TestCode: EPA 200.8: Dissolved Metals						
Client ID: MKTF-37	Batch ID: R25250			RunNo: 25250						
Prep Date:	Analysis Date: 4/2/2015			SeqNo: 747260			Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.032	0.0010	0.02500	0.007137	99.8	70	130	0.677	20	
Uranium	0.046	0.0010	0.02500	0.02101	100	70	130	0.674	20	

Sample ID LCS	SampType: LCS			TestCode: EPA 200.8: Dissolved Metals						
Client ID: LCSW	Batch ID: R25250			RunNo: 25250						
Prep Date:	Analysis Date: 4/2/2015			SeqNo: 747261			Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	94.8	85	115			
Lead	0.025	0.0010	0.02500	0	98.3	85	115			
Selenium	0.023	0.0010	0.02500	0	92.6	85	115			
Uranium	0.025	0.0010	0.02500	0	100	85	115			

Sample ID MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals						
Client ID: PBW	Batch ID: R25250			RunNo: 25250						
Prep Date:	Analysis Date: 4/2/2015			SeqNo: 747262			Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503835

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R25250			RunNo: 25250					
Prep Date:		Analysis Date: 4/2/2015			SeqNo: 747262		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25304		RunNo: 25304					
Prep Date:			Analysis Date: 4/4/2015		SeqNo: 748545		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.023	0.0010	0.02500	0	94.0	85	115			
Uranium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R25304			RunNo: 25304					
Prep Date:		Analysis Date: 4/4/2015			SeqNo: 748546		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R25331		RunNo: 25331					
Prep Date:			Analysis Date: 4/6/2015		SeqNo: 749539		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	97.6	85	115			
Selenium	0.024	0.0010	0.02500	0	96.8	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R25331			RunNo: 25331					
Prep Date:		Analysis Date: 4/6/2015			SeqNo: 749540		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503835

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	LLLCS-18338		SampType: LCSLL		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	BatchQC		Batch ID: 18338		RunNo: 25145					
Prep Date:	3/25/2015		Analysis Date: 3/27/2015		SeqNo: 742934		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	101	85	115			
Lead	0.026	0.0010	0.02500	0	104	85	115			
Selenium	0.024	0.0010	0.02500	0	94.2	85	115			
Uranium	0.027	0.0010	0.02500	0	107	85	115			

Sample ID	MB-18338		SampType: MBLK		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	PBW		Batch ID: 18338		RunNo: 25145					
Prep Date:	3/25/2015		Analysis Date: 3/27/2015		SeqNo: 742936		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	LLLCS-18395		SampType: LCSLL		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	BatchQC		Batch ID: 18395		RunNo: 25201					
Prep Date:	3/28/2015		Analysis Date: 3/31/2015		SeqNo: 744827		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.026	0.0010	0.02500	0	105	85	115			
Lead	0.027	0.0010	0.02500	0	108	85	115			
Selenium	0.026	0.0010	0.02500	0	103	85	115			
Uranium	0.026	0.0010	0.02500	0	106	85	115			

Sample ID	MB-18395		SampType: MBLK		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	PBW		Batch ID: 18395		RunNo: 25201					
Prep Date:	3/28/2015		Analysis Date: 3/31/2015		SeqNo: 744835		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503835

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB-18400	SampType:	MBLK	TestCode:	EPA Method 245.1: Mercury					
Client ID:	PBW	Batch ID:	18400	RunNo:	25169					
Prep Date:	3/30/2015	Analysis Date:	3/30/2015	SeqNo:	743606	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	LCS-18400	SampType:	LCS	TestCode:	EPA Method 245.1: Mercury					
Client ID:	LCSW	Batch ID:	18400	RunNo:	25169					
Prep Date:	3/30/2015	Analysis Date:	3/30/2015	SeqNo:	743607	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0052	0.00020	0.005000	0	104	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503835

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	MB-18212		SampType: MBLK		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	PBW		Batch ID: 18212		RunNo: 24910					
Prep Date:	3/18/2015		Analysis Date: 3/19/2015		SeqNo: 734683		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.0		1.000		101	76.5	150			

Sample ID	LCS-18212		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	LCSW		Batch ID: 18212		RunNo: 24910					
Prep Date:	3/18/2015		Analysis Date: 3/19/2015		SeqNo: 734684		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.7	1.0	5.000	0	94.5	60.1	156			
Surr: DNOP	0.54		0.5000		107	76.5	150			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503835

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	5ML RBC	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID:	R25029	RunNo:	25029					
Prep Date:		Analysis Date:	3/24/2015	SeqNo:	738548	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		83.0	80	120			

Sample ID	2.5UG GRO LCSB	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	R25029	RunNo:	25029					
Prep Date:		Analysis Date:	3/24/2015	SeqNo:	738549	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.50	0.050	0.5000	0	100	80	120			
Surr: BFB	19		20.00		93.3	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503835

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	5mL-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R24939			RunNo: 24939					
Prep Date:		Analysis Date: 3/19/2015			SeqNo: 734919		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503835

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	5mL-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R24939	RunNo:	24939					
Prep Date:		Analysis Date:	3/19/2015	SeqNo:	734919	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	7.5		10.00		75.1	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.2	70	130			
Surr: Dibromofluoromethane	7.9		10.00		79.2	70	130			
Surr: Toluene-d8	9.2		10.00		91.6	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID:	R24939	RunNo:	24939					
Prep Date:		Analysis Date:	3/19/2015	SeqNo:	734921	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	110	70	130			
Toluene	21	1.0	20.00	0	107	70	130			
Chlorobenzene	19	1.0	20.00	0	96.6	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503835

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	100ng lcs	SampType: LCS		TestCode: EPA Method 8260B: VOLATILES						
Client ID:	LCSW	Batch ID: R24939		RunNo: 24939						
Prep Date:	Analysis Date: 3/19/2015		SeqNo: 734921		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	22	1.0	20.00	0	112	75.6	144			
Trichloroethene (TCE)	19	1.0	20.00	0	96.5	70	130			
Surr: 1,2-Dichloroethane-d4	8.2		10.00		82.4	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		96.2	70	130			
Surr: Dibromofluoromethane	9.0		10.00		90.0	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID	5mL-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R24984			RunNo: 24984					
Prep Date:		Analysis Date: 3/20/2015			SeqNo: 736450		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503835

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	5mL-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R24984			RunNo: 24984					
Prep Date:		Analysis Date: 3/20/2015			SeqNo: 736450	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	7.7		10.00		76.8	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503835

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	5mL-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R24984			RunNo: 24984					
Prep Date:		Analysis Date: 3/20/2015			SeqNo: 736450		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	9.7		10.00		97.0	70	130			
Surr: Dibromofluoromethane	8.5		10.00		85.0	70	130			
Surr: Toluene-d8	9.6		10.00		95.6	70	130			

Sample ID	100ng lcs2	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R24984			RunNo: 24984					
Prep Date:		Analysis Date: 3/20/2015			SeqNo: 736452		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	21	1.0	20.00	0	103	70	130			
Chlorobenzene	19	1.0	20.00	0	95.9	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	109	75.6	144			
Trichloroethene (TCE)	19	1.0	20.00	0	95.4	70	130			
Surr: 1,2-Dichloroethane-d4	8.9		10.00		89.2	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.1	70	130			
Surr: Toluene-d8	11		10.00		107	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503835

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	mb-18250		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 18250		RunNo: 25041					
Prep Date:	3/20/2015		Analysis Date: 3/24/2015		SeqNo: 738605		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503835

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	mb-18250	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	18250	RunNo:	25041					
Prep Date:	3/20/2015	Analysis Date:	3/24/2015	SeqNo:	738605	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	160		200.0		79.2	17.6	104			
Surr: Phenol-d5	160		200.0		79.4	17.7	89.9			
Surr: 2,4,6-Tribromophenol	180		200.0		87.6	16.3	122			
Surr: Nitrobenzene-d5	78		100.0		78.5	45.3	117			
Surr: 2-Fluorobiphenyl	78		100.0		77.9	43	113			
Surr: 4-Terphenyl-d14	85		100.0		85.0	47.6	122			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503835

20-Apr-15

Client: Western Refining Southwest, Gallup

Project: 2015 1ST QTR (MKTF)

Sample ID	lcs-18250		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 18250		RunNo: 25041					
Prep Date:	3/20/2015		Analysis Date: 3/24/2015		SeqNo: 738606		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	77	10	100.0	0	77.3	47.8	99.7			
4-Chloro-3-methylphenol	170	10	200.0	0	85.2	58.1	103			
2-Chlorophenol	150	10	200.0	0	77.2	49.5	96.8			
1,4-Dichlorobenzene	75	10	100.0	0	75.0	40.4	89.4			
2,4-Dinitrotoluene	64	10	100.0	0	63.9	38.6	91.3			
N-Nitrosodi-n-propylamine	83	10	100.0	0	82.6	53.9	95.6			
4-Nitrophenol	150	10	200.0	0	73.9	26.4	108			
Pentachlorophenol	140	20	200.0	0	69.6	36.5	86.6			
Phenol	170	10	200.0	0	84.0	29.3	108			
Pyrene	80	10	100.0	0	79.7	45.7	100			
1,2,4-Trichlorobenzene	82	10	100.0	0	82.1	39.3	94.5			
Surr: 2-Fluorophenol	150		200.0		76.8	17.6	104			
Surr: Phenol-d5	160		200.0		82.2	17.7	89.9			
Surr: 2,4,6-Tribromophenol	170		200.0		85.3	16.3	122			
Surr: Nitrobenzene-d5	77		100.0		77.3	45.3	117			
Surr: 2-Fluorobiphenyl	77		100.0		77.1	43	113			
Surr: 4-Terphenyl-d14	86		100.0		85.7	47.6	122			

Sample ID	mb-18336		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 18336		RunNo: 25103					
Prep Date:	3/25/2015		Analysis Date: 3/26/2015		SeqNo: 741043		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	160		200.0		78.7	17.6	104			
Surr: Phenol-d5	170		200.0		83.2	17.7	89.9			
Surr: 2,4,6-Tribromophenol	210		200.0		106	16.3	122			
Surr: Nitrobenzene-d5	78		100.0		78.4	45.3	117			
Surr: 2-Fluorobiphenyl	76		100.0		76.0	43	113			
Surr: 4-Terphenyl-d14	91		100.0		91.4	47.6	122			

Sample ID	lcs-18336		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 18336		RunNo: 25103					
Prep Date:	3/25/2015		Analysis Date: 3/26/2015		SeqNo: 741044		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	160		200.0		82.3	17.6	104			
Surr: Phenol-d5	170		200.0		84.3	17.7	89.9			
Surr: 2,4,6-Tribromophenol	200		200.0		100	16.3	122			
Surr: Nitrobenzene-d5	75		100.0		75.4	45.3	117			
Surr: 2-Fluorobiphenyl	80		100.0		79.7	43	113			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503835

20-Apr-15

Client: Western Refining Southwest, Gallup**Project:** 2015 1ST QTR (MKTF)

Sample ID	lcs-18336		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 18336		RunNo: 25103					
Prep Date:	3/25/2015		Analysis Date: 3/26/2015		SeqNo: 741044		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	89		100.0		88.8	47.6	122			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit



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: 1503835

RcptNo: 1

Received by/date:

CS

03/18/15

Logged By: Ashley Gallegos

3/18/2015 11:00:00 AM

Completed By: Ashley Gallegos

3/18/2015 5:58:51 PM

Reviewed By:

AG / A

03/19/15

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: 10
(≤ 2 or > 12 unless noted)
Adjusted? ☒
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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.2	Good	Yes			



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 24, 2015

Cheryl Johnson

Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: 2015 2nd Quarter-OW Wells

OrderNo.: 1506179

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 4 sample(s) on 6/3/2015 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', is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506179

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015 2nd Quarter-OW Wells

Collection Date: 6/1/2015 10:00:00 AM

Lab ID: 1506179-001

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: DJF	
Benzene	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
Toluene	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
Ethylbenzene	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
Naphthalene	ND	2.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
1-Methylnaphthalene	ND	4.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
2-Methylnaphthalene	ND	4.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
Acetone	ND	10		µg/L	1	6/9/2015 9:04:10 PM	R26716
Bromobenzene	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
Bromodichloromethane	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
Bromoform	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
Bromomethane	ND	3.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
2-Butanone	ND	10		µg/L	1	6/9/2015 9:04:10 PM	R26716
Carbon disulfide	ND	10		µg/L	1	6/9/2015 9:04:10 PM	R26716
Carbon Tetrachloride	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
Chlorobenzene	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
Chloroethane	ND	2.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
Chloroform	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
Chloromethane	ND	3.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
2-Chlorotoluene	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
4-Chlorotoluene	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
cis-1,2-DCE	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
Dibromochloromethane	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
Dibromomethane	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
1,1-Dichloroethane	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
1,1-Dichloroethene	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
1,2-Dichloropropane	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
1,3-Dichloropropane	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
2,2-Dichloropropane	ND	2.0		µg/L	1	6/9/2015 9:04:10 PM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 1 of 26
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506179

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015 2nd Quarter-OW Wells

Collection Date: 6/1/2015 10:00:00 AM

Lab ID: 1506179-001

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloropropene	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
Hexachlorobutadiene	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
2-Hexanone	ND	10		µg/L	1	6/9/2015 9:04:10 PM	R26716
Isopropylbenzene	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
4-Isopropyltoluene	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
4-Methyl-2-pentanone	ND	10		µg/L	1	6/9/2015 9:04:10 PM	R26716
Methylene Chloride	ND	3.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
n-Butylbenzene	ND	3.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
n-Propylbenzene	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
sec-Butylbenzene	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
Styrene	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
tert-Butylbenzene	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
trans-1,2-DCE	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
Trichlorofluoromethane	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
Vinyl chloride	ND	1.0		µg/L	1	6/9/2015 9:04:10 PM	R26716
Xylenes, Total	ND	1.5		µg/L	1	6/9/2015 9:04:10 PM	R26716
Surr: 1,2-Dichloroethane-d4	99.2	70-130		%REC	1	6/9/2015 9:04:10 PM	R26716
Surr: 4-Bromofluorobenzene	98.0	70-130		%REC	1	6/9/2015 9:04:10 PM	R26716
Surr: Dibromofluoromethane	99.0	70-130		%REC	1	6/9/2015 9:04:10 PM	R26716
Surr: Toluene-d8	100	70-130		%REC	1	6/9/2015 9:04:10 PM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506179

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-14

Project: 2015 2nd Quarter-OW Wells

Collection Date: 6/1/2015 10:20:00 AM

Lab ID: 1506179-002

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/15/2015 4:18:50 PM	R26843
Lead	ND	0.010		mg/L	10	6/15/2015 4:18:50 PM	R26843
Selenium	ND	0.010		mg/L	10	6/15/2015 4:18:50 PM	R26843
Uranium	ND	0.010		mg/L	10	6/15/2015 4:18:50 PM	R26843
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	1.9	0.010		mg/L	5	6/11/2015 12:29:24 PM	R26773
Cadmium	ND	0.0020		mg/L	1	6/5/2015 5:37:37 PM	R26653
Chromium	ND	0.0060		mg/L	1	6/5/2015 5:37:37 PM	R26653
Copper	ND	0.0060		mg/L	1	6/5/2015 5:37:37 PM	R26653
Iron	5.0	0.10	*	mg/L	5	6/11/2015 12:29:24 PM	R26773
Manganese	2.3	0.010	*	mg/L	5	6/11/2015 12:29:24 PM	R26773
Silver	ND	0.0050		mg/L	1	6/5/2015 5:37:37 PM	R26653
Zinc	0.12	0.010		mg/L	1	6/5/2015 5:37:37 PM	R26653
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	1.9	0.010		mg/L	5	6/10/2015 3:12:16 PM	19599
Cadmium	ND	0.0020		mg/L	1	6/9/2015 1:52:08 PM	19599
Chromium	ND	0.0060		mg/L	1	6/9/2015 1:52:08 PM	19599
Copper	ND	0.0060		mg/L	1	6/9/2015 1:52:08 PM	19599
Iron	4.8	0.10	*	mg/L	5	6/10/2015 3:12:16 PM	19599
Manganese	2.2	0.010	*	mg/L	5	6/10/2015 3:12:16 PM	19599
Silver	ND	0.0050		mg/L	1	6/9/2015 1:52:08 PM	19599
Zinc	ND	0.010		mg/L	1	6/9/2015 1:52:08 PM	19599
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/16/2015 12:40:22 PM	19599
Lead	ND	0.0050		mg/L	10	6/16/2015 12:40:22 PM	19599
Selenium	ND	0.010		mg/L	10	6/16/2015 12:40:22 PM	19599
Uranium	0.0067	0.0050		mg/L	10	6/16/2015 12:40:22 PM	19599
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/5/2015 2:36:05 PM	19589
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	4600	200		µg/L	200	6/9/2015 9:31:53 PM	R26716
Toluene	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
Ethylbenzene	160	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
Methyl tert-butyl ether (MTBE)	740	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
1,2,4-Trimethylbenzene	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
1,3,5-Trimethylbenzene	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
1,2-Dichloroethane (EDC)	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506179

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-14

Project: 2015 2nd Quarter-OW Wells

Collection Date: 6/1/2015 10:20:00 AM

Lab ID: 1506179-002

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst: DJF		
1,2-Dibromoethane (EDB)	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
Naphthalene	ND	40		µg/L	20	6/10/2015 1:14:24 PM	R26729
1-Methylnaphthalene	ND	80		µg/L	20	6/10/2015 1:14:24 PM	R26729
2-Methylnaphthalene	ND	80		µg/L	20	6/10/2015 1:14:24 PM	R26729
Acetone	ND	200		µg/L	20	6/10/2015 1:14:24 PM	R26729
Bromobenzene	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
Bromodichloromethane	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
Bromoform	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
Bromomethane	ND	60		µg/L	20	6/10/2015 1:14:24 PM	R26729
2-Butanone	ND	200		µg/L	20	6/10/2015 1:14:24 PM	R26729
Carbon disulfide	ND	200		µg/L	20	6/10/2015 1:14:24 PM	R26729
Carbon Tetrachloride	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
Chlorobenzene	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
Chloroethane	ND	40		µg/L	20	6/10/2015 1:14:24 PM	R26729
Chloroform	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
Chloromethane	ND	60		µg/L	20	6/10/2015 1:14:24 PM	R26729
2-Chlorotoluene	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
4-Chlorotoluene	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
cis-1,2-DCE	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
cis-1,3-Dichloropropene	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
1,2-Dibromo-3-chloropropane	ND	40		µg/L	20	6/10/2015 1:14:24 PM	R26729
Dibromochloromethane	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
Dibromomethane	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
1,2-Dichlorobenzene	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
1,3-Dichlorobenzene	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
1,4-Dichlorobenzene	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
Dichlorodifluoromethane	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
1,1-Dichloroethane	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
1,1-Dichloroethene	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
1,2-Dichloropropane	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
1,3-Dichloropropane	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
2,2-Dichloropropane	ND	40		µg/L	20	6/10/2015 1:14:24 PM	R26729
1,1-Dichloropropene	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
Hexachlorobutadiene	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
2-Hexanone	ND	200		µg/L	20	6/10/2015 1:14:24 PM	R26729
Isopropylbenzene	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
4-Isopropyltoluene	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
4-Methyl-2-pentanone	ND	200		µg/L	20	6/10/2015 1:14:24 PM	R26729
Methylene Chloride	ND	60		µg/L	20	6/10/2015 1:14:24 PM	R26729

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506179

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-14

Project: 2015 2nd Quarter-OW Wells

Collection Date: 6/1/2015 10:20:00 AM

Lab ID: 1506179-002

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: DJF	
n-Butylbenzene	ND	60		µg/L	20	6/10/2015 1:14:24 PM	R26729
n-Propylbenzene	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
sec-Butylbenzene	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
Styrene	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
tert-Butylbenzene	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
1,1,1,2-Tetrachloroethane	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
1,1,2,2-Tetrachloroethane	ND	40		µg/L	20	6/10/2015 1:14:24 PM	R26729
Tetrachloroethene (PCE)	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
trans-1,2-DCE	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
trans-1,3-Dichloropropene	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
1,2,3-Trichlorobenzene	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
1,2,4-Trichlorobenzene	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
1,1,1-Trichloroethane	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
1,1,2-Trichloroethane	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
Trichloroethene (TCE)	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
Trichlorofluoromethane	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
1,2,3-Trichloropropane	ND	40		µg/L	20	6/10/2015 1:14:24 PM	R26729
Vinyl chloride	ND	20		µg/L	20	6/10/2015 1:14:24 PM	R26729
Xylenes, Total	ND	30		µg/L	20	6/10/2015 1:14:24 PM	R26729
Surr: 1,2-Dichloroethane-d4	107	70-130		%REC	20	6/10/2015 1:14:24 PM	R26729
Surr: 4-Bromofluorobenzene	102	70-130		%REC	20	6/10/2015 1:14:24 PM	R26729
Surr: Dibromofluoromethane	106	70-130		%REC	20	6/10/2015 1:14:24 PM	R26729
Surr: Toluene-d8	95.9	70-130		%REC	20	6/10/2015 1:14:24 PM	R26729

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 5 of 26
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506179

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-29

Project: 2015 2nd Quarter-OW Wells

Collection Date: 6/1/2015 11:18:00 AM

Lab ID: 1506179-003

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/15/2015 4:21:53 PM	R26843
Lead	ND	0.010		mg/L	10	6/15/2015 4:21:53 PM	R26843
Selenium	ND	0.010		mg/L	10	6/15/2015 4:21:53 PM	R26843
Uranium	0.053	0.010	*	mg/L	10	6/15/2015 4:21:53 PM	R26843
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.064	0.0020		mg/L	1	6/5/2015 5:39:20 PM	R26653
Cadmium	ND	0.0020		mg/L	1	6/5/2015 5:39:20 PM	R26653
Chromium	ND	0.0060		mg/L	1	6/5/2015 5:39:20 PM	R26653
Copper	ND	0.0060		mg/L	1	6/5/2015 5:39:20 PM	R26653
Iron	0.34	0.020	*	mg/L	1	6/5/2015 5:39:20 PM	R26653
Manganese	0.29	0.0020	*	mg/L	1	6/5/2015 5:39:20 PM	R26653
Silver	ND	0.0050		mg/L	1	6/5/2015 5:39:20 PM	R26653
Zinc	ND	0.010		mg/L	1	6/5/2015 5:39:20 PM	R26653
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.060	0.0020		mg/L	1	6/9/2015 1:53:55 PM	19599
Cadmium	ND	0.0020		mg/L	1	6/9/2015 1:53:55 PM	19599
Chromium	ND	0.0060		mg/L	1	6/9/2015 1:53:55 PM	19599
Copper	ND	0.0060		mg/L	1	6/9/2015 1:53:55 PM	19599
Iron	0.35	0.020	*	mg/L	1	6/9/2015 1:53:55 PM	19599
Manganese	0.25	0.0020	*	mg/L	1	6/9/2015 1:53:55 PM	19599
Silver	ND	0.0050		mg/L	1	6/9/2015 1:53:55 PM	19599
Zinc	ND	0.010		mg/L	1	6/9/2015 1:53:55 PM	19599
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/16/2015 12:48:36 PM	19599
Lead	ND	0.0050		mg/L	10	6/16/2015 12:48:36 PM	19599
Selenium	ND	0.010		mg/L	10	6/16/2015 12:48:36 PM	19599
Uranium	0.054	0.0050	*	mg/L	10	6/16/2015 12:48:36 PM	19599
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/5/2015 2:38:10 PM	19589
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
Toluene	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
Ethylbenzene	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
Methyl tert-butyl ether (MTBE)	2600	100		µg/L	100	6/10/2015 12:18:01 AM	R26716
1,2,4-Trimethylbenzene	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506179

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-29

Project: 2015 2nd Quarter-OW Wells

Collection Date: 6/1/2015 11:18:00 AM

Lab ID: 1506179-003

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: DJF
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
Naphthalene	ND	10		µg/L	5	6/10/2015 12:45:39 AM	R26716
1-Methylnaphthalene	ND	20		µg/L	5	6/10/2015 12:45:39 AM	R26716
2-Methylnaphthalene	ND	20		µg/L	5	6/10/2015 12:45:39 AM	R26716
Acetone	ND	50		µg/L	5	6/10/2015 12:45:39 AM	R26716
Bromobenzene	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
Bromodichloromethane	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
Bromoform	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
Bromomethane	ND	15		µg/L	5	6/10/2015 12:45:39 AM	R26716
2-Butanone	ND	50		µg/L	5	6/10/2015 12:45:39 AM	R26716
Carbon disulfide	ND	50		µg/L	5	6/10/2015 12:45:39 AM	R26716
Carbon Tetrachloride	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
Chlorobenzene	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
Chloroethane	ND	10		µg/L	5	6/10/2015 12:45:39 AM	R26716
Chloroform	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
Chloromethane	ND	15		µg/L	5	6/10/2015 12:45:39 AM	R26716
2-Chlorotoluene	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
4-Chlorotoluene	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
cis-1,2-DCE	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	6/10/2015 12:45:39 AM	R26716
Dibromochloromethane	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
Dibromomethane	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
1,2-Dichlorobenzene	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
1,3-Dichlorobenzene	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
1,4-Dichlorobenzene	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
Dichlorodifluoromethane	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
1,1-Dichloroethane	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
1,1-Dichloroethene	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
1,2-Dichloropropane	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
1,3-Dichloropropane	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
2,2-Dichloropropane	ND	10		µg/L	5	6/10/2015 12:45:39 AM	R26716
1,1-Dichloropropene	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
Hexachlorobutadiene	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
2-Hexanone	ND	50		µg/L	5	6/10/2015 12:45:39 AM	R26716
Isopropylbenzene	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
4-Isopropyltoluene	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
4-Methyl-2-pentanone	ND	50		µg/L	5	6/10/2015 12:45:39 AM	R26716
Methylene Chloride	ND	15		µg/L	5	6/10/2015 12:45:39 AM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 7 of 26
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506179

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-29

Project: 2015 2nd Quarter-OW Wells

Collection Date: 6/1/2015 11:18:00 AM

Lab ID: 1506179-003

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: DJF
n-Butylbenzene	ND	15		µg/L	5	6/10/2015 12:45:39 AM	R26716
n-Propylbenzene	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
sec-Butylbenzene	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
Styrene	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
tert-Butylbenzene	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	6/10/2015 12:45:39 AM	R26716
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
trans-1,2-DCE	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
1,1,1-Trichloroethane	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
1,1,2-Trichloroethane	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
Trichloroethene (TCE)	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
Trichlorofluoromethane	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
1,2,3-Trichloropropane	ND	10		µg/L	5	6/10/2015 12:45:39 AM	R26716
Vinyl chloride	ND	5.0		µg/L	5	6/10/2015 12:45:39 AM	R26716
Xylenes, Total	ND	7.5		µg/L	5	6/10/2015 12:45:39 AM	R26716
Surr: 1,2-Dichloroethane-d4	93.5	70-130		%REC	5	6/10/2015 12:45:39 AM	R26716
Surr: 4-Bromofluorobenzene	99.4	70-130		%REC	5	6/10/2015 12:45:39 AM	R26716
Surr: Dibromofluoromethane	98.8	70-130		%REC	5	6/10/2015 12:45:39 AM	R26716
Surr: Toluene-d8	98.5	70-130		%REC	5	6/10/2015 12:45:39 AM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506179

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-13

Project: 2015 2nd Quarter-OW Wells

Collection Date: 6/1/2015 12:10:00 PM

Lab ID: 1506179-004

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/15/2015 4:24:56 PM	R26843
Lead	ND	0.010		mg/L	10	6/15/2015 4:24:56 PM	R26843
Selenium	ND	0.010		mg/L	10	6/15/2015 4:24:56 PM	R26843
Uranium	0.016	0.010		mg/L	10	6/15/2015 4:24:56 PM	R26843
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.020	0.0020		mg/L	1	6/5/2015 5:41:18 PM	R26653
Cadmium	ND	0.0020		mg/L	1	6/5/2015 5:41:18 PM	R26653
Chromium	ND	0.0060		mg/L	1	6/5/2015 5:41:18 PM	R26653
Copper	ND	0.0060		mg/L	1	6/5/2015 5:41:18 PM	R26653
Iron	ND	0.020		mg/L	1	6/5/2015 5:41:18 PM	R26653
Manganese	0.021	0.0020		mg/L	1	6/5/2015 5:41:18 PM	R26653
Silver	ND	0.0050		mg/L	1	6/5/2015 5:41:18 PM	R26653
Zinc	ND	0.010		mg/L	1	6/5/2015 5:41:18 PM	R26653
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.020	0.0020		mg/L	1	6/9/2015 1:55:57 PM	19599
Cadmium	ND	0.0020		mg/L	1	6/9/2015 1:55:57 PM	19599
Chromium	ND	0.0060		mg/L	1	6/9/2015 1:55:57 PM	19599
Copper	ND	0.0060		mg/L	1	6/9/2015 1:55:57 PM	19599
Iron	ND	0.020		mg/L	1	6/9/2015 1:55:57 PM	19599
Manganese	0.020	0.0020		mg/L	1	6/9/2015 1:55:57 PM	19599
Silver	ND	0.0050		mg/L	1	6/9/2015 1:55:57 PM	19599
Zinc	ND	0.010		mg/L	1	6/9/2015 1:55:57 PM	19599
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/16/2015 12:51:19 PM	19599
Lead	ND	0.0050		mg/L	10	6/16/2015 12:51:19 PM	19599
Selenium	ND	0.010		mg/L	10	6/16/2015 12:51:19 PM	19599
Uranium	0.017	0.0050		mg/L	10	6/16/2015 12:51:19 PM	19599
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/5/2015 2:40:15 PM	19589
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
Toluene	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
Ethylbenzene	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
Methyl tert-butyl ether (MTBE)	25	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506179

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-13

Project: 2015 2nd Quarter-OW Wells

Collection Date: 6/1/2015 12:10:00 PM

Lab ID: 1506179-004

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: DJF
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
Naphthalene	ND	2.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
1-Methylnaphthalene	ND	4.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
2-Methylnaphthalene	ND	4.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
Acetone	ND	10		µg/L	1	6/10/2015 1:13:19 AM	R26716
Bromobenzene	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
Bromodichloromethane	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
Bromoform	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
Bromomethane	ND	3.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
2-Butanone	ND	10		µg/L	1	6/10/2015 1:13:19 AM	R26716
Carbon disulfide	ND	10		µg/L	1	6/10/2015 1:13:19 AM	R26716
Carbon Tetrachloride	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
Chlorobenzene	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
Chloroethane	ND	2.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
Chloroform	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
Chloromethane	ND	3.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
2-Chlorotoluene	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
4-Chlorotoluene	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
cis-1,2-DCE	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
Dibromochloromethane	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
Dibromomethane	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
1,1-Dichloroethane	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
1,1-Dichloroethene	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
1,2-Dichloropropane	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
1,3-Dichloropropane	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
2,2-Dichloropropane	ND	2.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
1,1-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
Hexachlorobutadiene	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
2-Hexanone	ND	10		µg/L	1	6/10/2015 1:13:19 AM	R26716
Isopropylbenzene	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
4-Isopropyltoluene	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
4-Methyl-2-pentanone	ND	10		µg/L	1	6/10/2015 1:13:19 AM	R26716
Methylene Chloride	ND	3.0		µg/L	1	6/10/2015 1:13:19 AM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506179

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-13

Project: 2015 2nd Quarter-OW Wells

Collection Date: 6/1/2015 12:10:00 PM

Lab ID: 1506179-004

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: DJF	
n-Butylbenzene	ND	3.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
n-Propylbenzene	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
sec-Butylbenzene	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
Styrene	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
tert-Butylbenzene	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
trans-1,2-DCE	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
Trichlorofluoromethane	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
Vinyl chloride	ND	1.0		µg/L	1	6/10/2015 1:13:19 AM	R26716
Xylenes, Total	ND	1.5		µg/L	1	6/10/2015 1:13:19 AM	R26716
Surr: 1,2-Dichloroethane-d4	94.7	70-130		%REC	1	6/10/2015 1:13:19 AM	R26716
Surr: 4-Bromofluorobenzene	97.3	70-130		%REC	1	6/10/2015 1:13:19 AM	R26716
Surr: Dibromofluoromethane	95.0	70-130		%REC	1	6/10/2015 1:13:19 AM	R26716
Surr: Toluene-d8	101	70-130		%REC	1	6/10/2015 1:13:19 AM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 11 of 26
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506179

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R26653			RunNo: 26653					
Prep Date:		Analysis Date: 6/5/2015			SeqNo: 794009		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26653		RunNo: 26653					
Prep Date:			Analysis Date: 6/5/2015		SeqNo: 794010		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	98.0	85	115			
Cadmium	0.50	0.0020	0.5000	0	100	85	115			
Chromium	0.49	0.0060	0.5000	0	97.5	85	115			
Copper	0.50	0.0060	0.5000	0	99.3	85	115			
Iron	0.50	0.020	0.5000	0	99.1	85	115			
Manganese	0.48	0.0020	0.5000	0	95.8	85	115			
Silver	0.10	0.0050	0.1000	0	103	85	115			
Zinc	0.50	0.010	0.5000	0	99.0	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R26773			RunNo: 26773					
Prep Date:		Analysis Date: 6/11/2015			SeqNo: 798199		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26773		RunNo: 26773					
Prep Date:			Analysis Date: 6/11/2015		SeqNo: 798200		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.47	0.0020	0.5000	0	93.6	85	115			
Iron	0.49	0.020	0.5000	0	97.9	85	115			
Manganese	0.47	0.0020	0.5000	0	93.1	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506179

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals						
Client ID:	PBW	Batch ID: R26773			RunNo: 26773						
Prep Date:		Analysis Date: 6/11/2015			SeqNo: 798203			Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium		ND	0.0020								
Iron		ND	0.020								
Manganese		ND	0.0020								

Sample ID	LCS	SampType: LCS			TestCode: EPA Method 200.7: Dissolved Metals						
Client ID:	LCSW	Batch ID: R26773			RunNo: 26773						
Prep Date:		Analysis Date: 6/11/2015			SeqNo: 798204			Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium		0.49	0.0020	0.5000	0	97.9	85	115			
Iron		0.50	0.020	0.5000	0	101	85	115			
Manganese		0.49	0.0020	0.5000	0	97.7	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506179

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	MB-19599	SampType: MBLK			TestCode: EPA Method 200.7: Total Metals					
Client ID:	PBW	Batch ID: 19599			RunNo: 26704					
Prep Date:	6/6/2015	Analysis Date: 6/9/2015			SeqNo: 795801		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-19599		SampType: LCS		TestCode: EPA Method 200.7: Total Metals					
Client ID:	LCSW		Batch ID: 19599		RunNo: 26704					
Prep Date:	6/6/2015		Analysis Date: 6/9/2015		SeqNo: 795802		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0	99.7	85	115			
Cadmium	0.53	0.0020	0.5000	0	106	85	115			
Chromium	0.50	0.0060	0.5000	0	101	85	115			
Copper	0.49	0.0060	0.5000	0	97.9	85	115			
Iron	0.49	0.020	0.5000	0	98.7	85	115			
Manganese	0.48	0.0020	0.5000	0	95.3	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.51	0.010	0.5000	0	101	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506179

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26843		RunNo: 26843					
Prep Date:			Analysis Date: 6/15/2015		SeqNo: 801177		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	99.9	85	115			
Lead	0.012	0.00050	0.01250	0	99.2	85	115			
Selenium	0.024	0.0010	0.02500	0	95.5	85	115			
Uranium	0.012	0.00050	0.01250	0	93.4	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26843		RunNo: 26843					
Prep Date:			Analysis Date: 6/15/2015		SeqNo: 801178		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	96.4	85	115			
Lead	0.012	0.00050	0.01250	0	97.9	85	115			
Selenium	0.024	0.0010	0.02500	0	95.1	85	115			
Uranium	0.012	0.00050	0.01250	0	98.5	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R26843			RunNo: 26843					
Prep Date:		Analysis Date: 6/15/2015			SeqNo: 801182		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: R26843			RunNo: 26843					
Prep Date:		Analysis Date: 6/15/2015			SeqNo: 801183		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.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506179

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	LCSLL-19599		SampType: LCSLL		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	BatchQC		Batch ID: 19599		RunNo: 26682					
Prep Date:	6/6/2015		Analysis Date: 6/8/2015		SeqNo: 794999		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	94.2	85	115			
Lead	0.012	0.00050	0.01250	0	99.9	85	115			
Selenium	0.023	0.0010	0.02500	0	93.3	85	115			
Uranium	0.013	0.00050	0.01250	0	101	85	115			

Sample ID	MB-19599		SampType: MBLK		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	PBW		Batch ID: 19599		RunNo: 26682					
Prep Date:	6/6/2015		Analysis Date: 6/8/2015		SeqNo: 795000		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.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506179

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	MB-19589	SampType:	MBLK	TestCode:	EPA Method 245.1: Mercury					
Client ID:	PBW	Batch ID:	19589	RunNo:	26652					
Prep Date:	6/5/2015	Analysis Date:	6/5/2015	SeqNo:	793971	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	LCS-19589	SampType:	LCS	TestCode:	EPA Method 245.1: Mercury					
Client ID:	LCSW	Batch ID:	19589	RunNo:	26652					
Prep Date:	6/5/2015	Analysis Date:	6/5/2015	SeqNo:	793972	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	99.2	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506179

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R26716			RunNo: 26716					
Prep Date:		Analysis Date: 6/9/2015			SeqNo: 796185	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506179

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	5ml rb	SampType: MBLK				TestCode: EPA Method 8260B: VOLATILES				
Client ID:	PBW	Batch ID: R26716				RunNo: 26716				
Prep Date:		Analysis Date: 6/9/2015				SeqNo: 796185	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.5	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.3	70	130			
Surr: Dibromofluoromethane	8.7		10.00		86.9	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID	100nglcs,200ngT2st	SampType: LCS				TestCode: EPA Method 8260B: VOLATILES				
Client ID:	LCSW	Batch ID: R26716				RunNo: 26716				
Prep Date:		Analysis Date: 6/9/2015				SeqNo: 796187	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	96.5	70	130			
Toluene	19	1.0	20.00	0	94.7	70	130			
Chlorobenzene	18	1.0	20.00	0	90.3	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506179

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	100nglcs,200ngT2st			SampType:	LCS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	LCSW		Batch ID:	R26716		RunNo:	26716				
Prep Date:			Analysis Date:	6/9/2015		SeqNo:	796187		Units: µg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
1,1-Dichloroethene	22	1.0	20.00	0	108	75.6	144				
Trichloroethene (TCE)	18	1.0	20.00	0	90.8	70	130				
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.9	70	130				
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130				
Surr: Dibromofluoromethane	9.0		10.00		89.8	70	130				
Surr: Toluene-d8	10		10.00		104	70	130				

Sample ID	b3	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R26716			RunNo: 26716					
Prep Date:		Analysis Date: 6/9/2015			SeqNo: 796233		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506179

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	b3	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R26716	RunNo:	26716					
Prep Date:		Analysis Date:	6/9/2015	SeqNo:	796233	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		99.8	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506179

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID b3	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R26716			RunNo: 26716						
Prep Date:	Analysis Date: 6/9/2015			SeqNo: 796233		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	9.9		10.00		99.2	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	9.8		10.00		97.5	70	130			

Sample ID 100ng lcs2	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSW	Batch ID: R26716			RunNo: 26716						
Prep Date:	Analysis Date: 6/9/2015			SeqNo: 796235		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	70	130			
Toluene	21	1.0	20.00	0	104	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	114	75.6	144			
Trichloroethene (TCE)	19	1.0	20.00	0	94.7	70	130			
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID rb1	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R26729			RunNo: 26729						
Prep Date:	Analysis Date: 6/10/2015			SeqNo: 796751		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	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								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506179

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	rb1	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R26729	RunNo:	26729					
Prep Date:		Analysis Date:	6/10/2015	SeqNo:	796751	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
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								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506179

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	rb1		SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES				
Client ID:	PBW		Batch ID: R26729			RunNo: 26729				
Prep Date:			Analysis Date: 6/10/2015			SeqNo: 796751		Units: µg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.6		10.00		95.6	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	9.5		10.00		94.6	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID	100nglcs,200ngT2lc		SampType: LCS			TestCode: EPA Method 8260B: VOLATILES				
Client ID:	LCSW		Batch ID: R26729			RunNo: 26729				
Prep Date:			Analysis Date: 6/10/2015			SeqNo: 796753		Units: µg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	20	1.0	20.00	0	100	70	130			
Chlorobenzene	20	1.0	20.00	0	98.7	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	116	75.6	144			
Trichloroethene (TCE)	19	1.0	20.00	0	93.7	70	130			
Surr: 1,2-Dichloroethane-d4	9.6		10.00		96.2	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	9.3		10.00		92.9	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID	rb3		SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES				
Client ID:	PBW		Batch ID: R26729			RunNo: 26729				
Prep Date:			Analysis Date: 6/10/2015			SeqNo: 797455		Units: µg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506179

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	rb3	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R26729	RunNo:	26729					
Prep Date:		Analysis Date:	6/10/2015	SeqNo:	797455	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
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								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506179

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	rb3	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R26729	RunNo:	26729					
Prep Date:		Analysis Date:	6/10/2015	SeqNo:	797455	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	9.9		10.00		99.4	70	130			
Surr: Toluene-d8	11		10.00		106	70	130			

Sample ID	100ng lcs2	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID:	R26729	RunNo:	26729					
Prep Date:		Analysis Date:	6/11/2015	SeqNo:	797459	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	21	1.0	20.00	0	103	70	130			
Chlorobenzene	20	1.0	20.00	0	101	70	130			
1,1-Dichloroethene	24	1.0	20.00	0	118	75.6	144			
Trichloroethene (TCE)	19	1.0	20.00	0	95.9	70	130			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.4	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	9.7		10.00		97.1	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

Sample Log-In Check List

Client Name: **Western Refining Gallup**

Work Order Number: **1506179**

RcptNo: 1

Received by/date:

C.S.

06/03/15

Logged By: **Ashley Gallegos**

6/3/2015 4:07:00 PM

Ag

Completed By: **Ashley Gallegos**

6/3/2015 6:46:15 PM

Ag

Reviewed By:

Ja

06/04/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☒ No ☐ Not Present ☐
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☒ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐ # of preserved bottles checked for pH: *2* (≤ 2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐ Adjusted? *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 ☐ 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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.3	Good	Yes			



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 25, 2015

Cheryl Johnson

Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: 2015-2ND Qtr-NAPIS

OrderNo.: 1506182

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 10 sample(s) on 6/3/2015 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', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 8:00:00 AM

Lab ID: 1506182-001

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
Toluene	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
Ethylbenzene	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
Naphthalene	ND	2.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
1-Methylnaphthalene	ND	4.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
2-Methylnaphthalene	ND	4.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
Acetone	ND	10		µg/L	1	6/10/2015 1:40:58 AM	R26716
Bromobenzene	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
Bromodichloromethane	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
Bromoform	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
Bromomethane	ND	3.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
2-Butanone	ND	10		µg/L	1	6/10/2015 1:40:58 AM	R26716
Carbon disulfide	ND	10		µg/L	1	6/10/2015 1:40:58 AM	R26716
Carbon Tetrachloride	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
Chlorobenzene	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
Chloroethane	ND	2.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
Chloroform	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
Chloromethane	ND	3.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
2-Chlorotoluene	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
4-Chlorotoluene	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
cis-1,2-DCE	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
Dibromochloromethane	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
Dibromomethane	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
1,1-Dichloroethane	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
1,1-Dichloroethene	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
1,2-Dichloropropane	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
1,3-Dichloropropane	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
2,2-Dichloropropane	ND	2.0		µg/L	1	6/10/2015 1:40:58 AM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 1 of 59
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 8:00:00 AM

Lab ID: 1506182-001

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
Hexachlorobutadiene	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
2-Hexanone	ND	10		µg/L	1	6/10/2015 1:40:58 AM	R26716
Isopropylbenzene	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
4-Isopropyltoluene	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
4-Methyl-2-pentanone	ND	10		µg/L	1	6/10/2015 1:40:58 AM	R26716
Methylene Chloride	ND	3.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
n-Butylbenzene	ND	3.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
n-Propylbenzene	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
sec-Butylbenzene	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
Styrene	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
tert-Butylbenzene	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
trans-1,2-DCE	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
Trichlorofluoromethane	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
Vinyl chloride	ND	1.0		µg/L	1	6/10/2015 1:40:58 AM	R26716
Xylenes, Total	ND	1.5		µg/L	1	6/10/2015 1:40:58 AM	R26716
Surr: 1,2-Dichloroethane-d4	96.3	70-130		%REC	1	6/10/2015 1:40:58 AM	R26716
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	6/10/2015 1:40:58 AM	R26716
Surr: Dibromofluoromethane	96.2	70-130		%REC	1	6/10/2015 1:40:58 AM	R26716
Surr: Toluene-d8	99.7	70-130		%REC	1	6/10/2015 1:40:58 AM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 2 of 59
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-30

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 9:10:00 AM

Lab ID: 1506182-002

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/15/2015 4:34:09 PM	R26843
Lead	ND	0.010		mg/L	10	6/15/2015 4:34:09 PM	R26843
Selenium	ND	0.010		mg/L	10	6/15/2015 4:34:09 PM	R26843
Uranium	0.049	0.010	*	mg/L	10	6/15/2015 4:34:09 PM	R26843
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.082	0.0020		mg/L	1	6/12/2015 6:39:43 PM	R26820
Cadmium	ND	0.0020		mg/L	1	6/15/2015 6:08:06 PM	R26842
Chromium	ND	0.0060		mg/L	1	6/12/2015 6:39:43 PM	R26820
Copper	ND	0.0060		mg/L	1	6/15/2015 6:08:06 PM	R26842
Iron	0.067	0.020		mg/L	1	6/12/2015 6:39:43 PM	R26820
Manganese	0.031	0.0020		mg/L	1	6/12/2015 6:39:43 PM	R26820
Silver	ND	0.0050		mg/L	1	6/15/2015 6:08:06 PM	R26842
Zinc	0.017	0.010		mg/L	1	6/12/2015 6:39:43 PM	R26820
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.088	0.0020		mg/L	1	6/9/2015 1:57:58 PM	19600
Cadmium	ND	0.0020		mg/L	1	6/9/2015 1:57:58 PM	19600
Chromium	ND	0.0060		mg/L	1	6/9/2015 1:57:58 PM	19600
Copper	ND	0.0060		mg/L	1	6/9/2015 1:57:58 PM	19600
Iron	0.065	0.020		mg/L	1	6/9/2015 1:57:58 PM	19600
Manganese	0.036	0.0020		mg/L	1	6/9/2015 1:57:58 PM	19600
Silver	ND	0.0050		mg/L	1	6/9/2015 1:57:58 PM	19600
Zinc	ND	0.010		mg/L	1	6/9/2015 1:57:58 PM	19600
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/16/2015 12:54:03 PM	19600
Lead	ND	0.0050		mg/L	10	6/16/2015 12:54:03 PM	19600
Selenium	ND	0.010		mg/L	10	6/16/2015 12:54:03 PM	19600
Uranium	0.050	0.0050	*	mg/L	10	6/16/2015 12:54:03 PM	19600
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/5/2015 2:42:20 PM	19589
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
Toluene	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
Ethylbenzene	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
Methyl tert-butyl ether (MTBE)	3100	100		µg/L	100	6/10/2015 2:08:37 AM	R26716
1,2,4-Trimethylbenzene	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-30

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 9:10:00 AM

Lab ID: 1506182-002

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: DJF
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
Naphthalene	ND	10		µg/L	5	6/10/2015 2:36:17 AM	R26716
1-Methylnaphthalene	ND	20		µg/L	5	6/10/2015 2:36:17 AM	R26716
2-Methylnaphthalene	ND	20		µg/L	5	6/10/2015 2:36:17 AM	R26716
Acetone	ND	50		µg/L	5	6/10/2015 2:36:17 AM	R26716
Bromobenzene	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
Bromodichloromethane	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
Bromoform	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
Bromomethane	ND	15		µg/L	5	6/10/2015 2:36:17 AM	R26716
2-Butanone	ND	50		µg/L	5	6/10/2015 2:36:17 AM	R26716
Carbon disulfide	ND	50		µg/L	5	6/10/2015 2:36:17 AM	R26716
Carbon Tetrachloride	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
Chlorobenzene	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
Chloroethane	ND	10		µg/L	5	6/10/2015 2:36:17 AM	R26716
Chloroform	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
Chloromethane	ND	15		µg/L	5	6/10/2015 2:36:17 AM	R26716
2-Chlorotoluene	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
4-Chlorotoluene	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
cis-1,2-DCE	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	6/10/2015 2:36:17 AM	R26716
Dibromochloromethane	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
Dibromomethane	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
1,2-Dichlorobenzene	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
1,3-Dichlorobenzene	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
1,4-Dichlorobenzene	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
Dichlorodifluoromethane	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
1,1-Dichloroethane	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
1,1-Dichloroethene	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
1,2-Dichloropropane	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
1,3-Dichloropropane	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
2,2-Dichloropropane	ND	10		µg/L	5	6/10/2015 2:36:17 AM	R26716
1,1-Dichloropropene	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
Hexachlorobutadiene	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
2-Hexanone	ND	50		µg/L	5	6/10/2015 2:36:17 AM	R26716
Isopropylbenzene	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
4-Isopropyltoluene	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
4-Methyl-2-pentanone	ND	50		µg/L	5	6/10/2015 2:36:17 AM	R26716
Methylene Chloride	ND	15		µg/L	5	6/10/2015 2:36:17 AM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 4 of 59
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-30

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 9:10:00 AM

Lab ID: 1506182-002

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: DJF
n-Butylbenzene	ND	15		µg/L	5	6/10/2015 2:36:17 AM	R26716
n-Propylbenzene	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
sec-Butylbenzene	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
Styrene	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
tert-Butylbenzene	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	6/10/2015 2:36:17 AM	R26716
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
trans-1,2-DCE	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
1,1,1-Trichloroethane	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
1,1,2-Trichloroethane	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
Trichloroethene (TCE)	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
Trichlorofluoromethane	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
1,2,3-Trichloropropane	ND	10		µg/L	5	6/10/2015 2:36:17 AM	R26716
Vinyl chloride	ND	5.0		µg/L	5	6/10/2015 2:36:17 AM	R26716
Xylenes, Total	ND	7.5		µg/L	5	6/10/2015 2:36:17 AM	R26716
Surr: 1,2-Dichloroethane-d4	94.0	70-130		%REC	5	6/10/2015 2:36:17 AM	R26716
Surr: 4-Bromofluorobenzene	95.1	70-130		%REC	5	6/10/2015 2:36:17 AM	R26716
Surr: Dibromofluoromethane	97.5	70-130		%REC	5	6/10/2015 2:36:17 AM	R26716
Surr: Toluene-d8	98.7	70-130		%REC	5	6/10/2015 2:36:17 AM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 5 of 59
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OAPIS-1

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 12:00:00 PM

Lab ID: 1506182-003

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	0.012	0.010	*	mg/L	10	6/15/2015 4:37:13 PM	R26843
Lead	ND	0.010		mg/L	10	6/15/2015 4:37:13 PM	R26843
Selenium	0.017	0.010		mg/L	10	6/15/2015 4:37:13 PM	R26843
Uranium	0.021	0.010		mg/L	10	6/15/2015 4:37:13 PM	R26843
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	1.9	1.0		mg/L	10	6/5/2015 5:44:13 PM	R26681
Chloride	1800	100		mg/L	200	6/9/2015 11:12:24 PM	R26721
Bromide	5.4	1.0		mg/L	10	6/5/2015 5:44:13 PM	R26681
Phosphorus, Orthophosphate (As P)	ND	5.0	H	mg/L	10	6/5/2015 5:44:13 PM	R26681
Sulfate	26	5.0		mg/L	10	6/5/2015 5:44:13 PM	R26681
Nitrate+Nitrite as N	ND	2.0		mg/L	10	6/5/2015 9:02:47 PM	R26681
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.56	0.0020		mg/L	1	6/12/2015 6:43:38 PM	R26820
Cadmium	ND	0.0020		mg/L	1	6/15/2015 6:10:03 PM	R26842
Calcium	160	5.0		mg/L	5	6/12/2015 6:45:23 PM	R26820
Chromium	ND	0.0060		mg/L	1	6/12/2015 6:43:38 PM	R26820
Copper	ND	0.0060		mg/L	1	6/15/2015 6:10:03 PM	R26842
Iron	3.2	0.10	*	mg/L	5	6/12/2015 6:45:23 PM	R26820
Magnesium	29	1.0		mg/L	1	6/12/2015 6:43:38 PM	R26820
Manganese	1.7	0.010	*	mg/L	5	6/12/2015 6:45:23 PM	R26820
Potassium	4.6	1.0		mg/L	1	6/12/2015 6:43:38 PM	R26820
Silver	ND	0.0050		mg/L	1	6/15/2015 6:10:03 PM	R26842
Sodium	1300	50		mg/L	50	6/15/2015 6:11:55 PM	R26842
Zinc	0.015	0.010		mg/L	1	6/12/2015 6:43:38 PM	R26820
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.71	0.0020		mg/L	1	6/9/2015 2:04:12 PM	19600
Cadmium	ND	0.0020		mg/L	1	6/9/2015 2:04:12 PM	19600
Chromium	0.0086	0.0060		mg/L	1	6/9/2015 2:04:12 PM	19600
Copper	ND	0.0060		mg/L	1	6/9/2015 2:04:12 PM	19600
Iron	7.5	0.20	*	mg/L	10	6/10/2015 3:16:16 PM	19600
Manganese	1.9	0.020	*	mg/L	10	6/10/2015 3:16:16 PM	19600
Silver	ND	0.0050		mg/L	1	6/9/2015 2:04:12 PM	19600
Zinc	0.031	0.010		mg/L	1	6/9/2015 2:04:12 PM	19600
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.012	0.010	*	mg/L	10	6/16/2015 12:56:48 PM	19600
Lead	0.0071	0.0050		mg/L	10	6/16/2015 12:56:48 PM	19600
Selenium	0.018	0.010		mg/L	10	6/16/2015 12:56:48 PM	19600

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OAPIS-1

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 12:00:00 PM

Lab ID: 1506182-003

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Uranium	0.022	0.0050		mg/L	10	6/16/2015 12:56:48 PM	19600
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/5/2015 2:44:26 PM	19589
EPA METHOD 8015D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	4.4	1.0		mg/L	1	6/8/2015 8:46:42 PM	19569
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/8/2015 8:46:42 PM	19569
Surr: DNOP	89.9	76.5-150		%REC	1	6/8/2015 8:46:42 PM	19569
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Acenaphthylene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Aniline	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Anthracene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Azobenzene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Benz(a)anthracene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Benzo(a)pyrene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Benzo(b)fluoranthene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Benzo(k)fluoranthene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Benzoic acid	ND	20		µg/L	1	6/9/2015 11:44:32 AM	19583
Benzyl alcohol	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Butyl benzyl phthalate	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Carbazole	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
4-Chloroaniline	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
2-Chloronaphthalene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
2-Chlorophenol	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Chrysene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Di-n-butyl phthalate	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Di-n-octyl phthalate	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Dibenzofuran	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
1,2-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OAPIS-1

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 12:00:00 PM

Lab ID: 1506182-003

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
1,3-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
1,4-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Diethyl phthalate	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Dimethyl phthalate	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
2,4-Dichlorophenol	ND	20		µg/L	1	6/9/2015 11:44:32 AM	19583
2,4-Dimethylphenol	29	10		µg/L	1	6/9/2015 11:44:32 AM	19583
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/9/2015 11:44:32 AM	19583
2,4-Dinitrophenol	ND	20		µg/L	1	6/9/2015 11:44:32 AM	19583
2,4-Dinitrotoluene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
2,6-Dinitrotoluene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Fluoranthene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Fluorene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Hexachlorobenzene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Hexachlorobutadiene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Hexachloroethane	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Isophorone	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
1-Methylnaphthalene	23	10		µg/L	1	6/9/2015 11:44:32 AM	19583
2-Methylnaphthalene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
2-Methylphenol	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
3+4-Methylphenol	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
N-Nitrosodimethylamine	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Naphthalene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
2-Nitroaniline	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
3-Nitroaniline	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
4-Nitroaniline	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Nitrobenzene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
2-Nitrophenol	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
4-Nitrophenol	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Pentachlorophenol	ND	20		µg/L	1	6/9/2015 11:44:32 AM	19583
Phenanthrene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Phenol	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Pyrene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Pyridine	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OAPIS-1

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 12:00:00 PM

Lab ID: 1506182-003

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/9/2015 11:44:32 AM	19583
Surr: 2-Fluorophenol	83.1	14.9-111		%REC	1	6/9/2015 11:44:32 AM	19583
Surr: Phenol-d5	70.4	11.3-108		%REC	1	6/9/2015 11:44:32 AM	19583
Surr: 2,4,6-Tribromophenol	77.8	15.7-154		%REC	1	6/9/2015 11:44:32 AM	19583
Surr: Nitrobenzene-d5	108	47.8-106	S	%REC	1	6/9/2015 11:44:32 AM	19583
Surr: 2-Fluorobiphenyl	97.1	21.3-123		%REC	1	6/9/2015 11:44:32 AM	19583
Surr: 4-Terphenyl-d14	76.3	14.3-135		%REC	1	6/9/2015 11:44:32 AM	19583
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	90	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
Toluene	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
Ethylbenzene	9.0	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
Methyl tert-butyl ether (MTBE)	280	10		µg/L	10	6/10/2015 3:59:13 AM	R26716
1,2,4-Trimethylbenzene	5.1	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
Naphthalene	2.4	2.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
1-Methylnaphthalene	30	4.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
2-Methylnaphthalene	ND	4.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
Acetone	28	10		µg/L	1	6/10/2015 4:26:52 AM	R26716
Bromobenzene	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
Bromodichloromethane	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
Bromoform	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
Bromomethane	ND	3.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
2-Butanone	ND	10		µg/L	1	6/10/2015 4:26:52 AM	R26716
Carbon disulfide	ND	10		µg/L	1	6/10/2015 4:26:52 AM	R26716
Carbon Tetrachloride	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
Chlorobenzene	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
Chloroethane	ND	2.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
Chloroform	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
Chloromethane	ND	3.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
2-Chlorotoluene	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
4-Chlorotoluene	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
cis-1,2-DCE	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
Dibromochloromethane	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
Dibromomethane	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	Page 9 of 59
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OAPIS-1

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 12:00:00 PM

Lab ID: 1506182-003

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
1,1-Dichloroethane	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
1,1-Dichloroethene	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
1,2-Dichloropropane	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
1,3-Dichloropropane	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
2,2-Dichloropropane	ND	2.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
1,1-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
Hexachlorobutadiene	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
2-Hexanone	ND	10		µg/L	1	6/10/2015 4:26:52 AM	R26716
Isopropylbenzene	1.4	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
4-Isopropyltoluene	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
4-Methyl-2-pentanone	ND	10		µg/L	1	6/10/2015 4:26:52 AM	R26716
Methylene Chloride	ND	3.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
n-Butylbenzene	ND	3.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
n-Propylbenzene	1.8	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
sec-Butylbenzene	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
Styrene	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
tert-Butylbenzene	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
trans-1,2-DCE	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
Trichlorofluoromethane	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
Vinyl chloride	ND	1.0		µg/L	1	6/10/2015 4:26:52 AM	R26716
Xylenes, Total	4.3	1.5		µg/L	1	6/10/2015 4:26:52 AM	R26716
Surr: 1,2-Dichloroethane-d4	99.5	70-130		%REC	1	6/10/2015 4:26:52 AM	R26716
Surr: 4-Bromofluorobenzene	112	70-130		%REC	1	6/10/2015 4:26:52 AM	R26716
Surr: Dibromofluoromethane	96.5	70-130		%REC	1	6/10/2015 4:26:52 AM	R26716
Surr: Toluene-d8	97.1	70-130		%REC	1	6/10/2015 4:26:52 AM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-2

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 12:55:00 PM

Lab ID: 1506182-004

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/15/2015 4:40:16 PM	R26843
Lead	ND	0.010		mg/L	10	6/15/2015 4:40:16 PM	R26843
Selenium	ND	0.010		mg/L	10	6/15/2015 4:40:16 PM	R26843
Uranium	ND	0.010		mg/L	10	6/15/2015 4:40:16 PM	R26843
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	2.1	1.0		mg/L	10	6/5/2015 6:09:03 PM	R26681
Chloride	290	50		mg/L	100	6/5/2015 6:21:28 PM	R26681
Bromide	1.3	1.0		mg/L	10	6/5/2015 6:09:03 PM	R26681
Phosphorus, Orthophosphate (As P)	ND	5.0	H	mg/L	10	6/5/2015 6:09:03 PM	R26681
Sulfate	9.9	5.0		mg/L	10	6/5/2015 6:09:03 PM	R26681
Nitrate+Nitrite as N	ND	2.0		mg/L	10	6/5/2015 9:15:12 PM	R26681
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	1.5	0.010		mg/L	5	6/12/2015 6:49:28 PM	R26820
Cadmium	ND	0.0020		mg/L	1	6/15/2015 6:13:51 PM	R26842
Calcium	75	1.0		mg/L	1	6/12/2015 6:47:23 PM	R26820
Chromium	ND	0.0060		mg/L	1	6/12/2015 6:47:23 PM	R26820
Copper	ND	0.0060		mg/L	1	6/15/2015 6:13:51 PM	R26842
Iron	1.2	0.10	*	mg/L	5	6/12/2015 6:49:28 PM	R26820
Magnesium	14	1.0		mg/L	1	6/12/2015 6:47:23 PM	R26820
Manganese	1.1	0.010	*	mg/L	5	6/12/2015 6:49:28 PM	R26820
Potassium	ND	1.0		mg/L	1	6/12/2015 6:47:23 PM	R26820
Silver	ND	0.0050		mg/L	1	6/15/2015 6:13:51 PM	R26842
Sodium	370	5.0		mg/L	5	6/12/2015 6:49:28 PM	R26820
Zinc	ND	0.010		mg/L	1	6/12/2015 6:47:23 PM	R26820
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	1.6	0.010		mg/L	5	6/10/2015 3:25:35 PM	19600
Cadmium	ND	0.0020		mg/L	1	6/9/2015 2:06:10 PM	19600
Chromium	ND	0.0060		mg/L	1	6/9/2015 2:06:10 PM	19600
Copper	ND	0.0060		mg/L	1	6/9/2015 2:06:10 PM	19600
Iron	2.9	0.10	*	mg/L	5	6/10/2015 3:25:35 PM	19600
Manganese	1.2	0.010	*	mg/L	5	6/10/2015 3:25:35 PM	19600
Silver	ND	0.0050		mg/L	1	6/9/2015 2:06:10 PM	19600
Zinc	ND	0.010		mg/L	1	6/9/2015 2:06:10 PM	19600
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/16/2015 12:59:31 PM	19600
Lead	ND	0.0050		mg/L	10	6/16/2015 12:59:31 PM	19600
Selenium	ND	0.010		mg/L	10	6/16/2015 12:59:31 PM	19600

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-2

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 12:55:00 PM

Lab ID: 1506182-004

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Uranium	ND	0.0050		mg/L	10	6/16/2015 12:59:31 PM	19600
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/5/2015 2:46:24 PM	19589
EPA METHOD 8015D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/8/2015 9:50:46 PM	19569
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/8/2015 9:50:46 PM	19569
Surr: DNOP	90.5	76.5-150		%REC	1	6/8/2015 9:50:46 PM	19569
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	200	25		µg/L	10	6/10/2015 10:40:10 AM	R26751
Benzene	16	1.0		µg/L	1	6/8/2015 1:45:25 PM	R26688
Toluene	ND	1.0		µg/L	1	6/8/2015 1:45:25 PM	R26688
Ethylbenzene	7.3	1.0		µg/L	1	6/8/2015 1:45:25 PM	R26688
Xylenes, Total	ND	2.0		µg/L	1	6/8/2015 1:45:25 PM	R26688
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/8/2015 1:45:25 PM	R26688
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/8/2015 1:45:25 PM	R26688
Surr: 4-Bromofluorobenzene	145	80-120	S	%REC	1	6/8/2015 1:45:25 PM	R26688
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Acenaphthylene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Aniline	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Anthracene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Azobenzene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Benz(a)anthracene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Benzo(a)pyrene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Benzo(b)fluoranthene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Benzo(k)fluoranthene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Benzoic acid	ND	20		µg/L	1	6/9/2015 12:12:16 PM	19583
Benzyl alcohol	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Butyl benzyl phthalate	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Carbazole	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-2

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 12:55:00 PM

Lab ID: 1506182-004

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: DAM	
4-Chloroaniline	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
2-Chloronaphthalene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
2-Chlorophenol	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Chrysene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Di-n-butyl phthalate	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Di-n-octyl phthalate	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Dibenzofuran	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
1,2-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
1,3-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
1,4-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Diethyl phthalate	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Dimethyl phthalate	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
2,4-Dichlorophenol	ND	20		µg/L	1	6/9/2015 12:12:16 PM	19583
2,4-Dimethylphenol	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/9/2015 12:12:16 PM	19583
2,4-Dinitrophenol	ND	20		µg/L	1	6/9/2015 12:12:16 PM	19583
2,4-Dinitrotoluene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
2,6-Dinitrotoluene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Fluoranthene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Fluorene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Hexachlorobenzene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Hexachlorobutadiene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Hexachloroethane	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Isophorone	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
1-Methylnaphthalene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
2-Methylnaphthalene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
2-Methylphenol	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
3+4-Methylphenol	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
N-Nitrosodimethylamine	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Naphthalene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
2-Nitroaniline	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
3-Nitroaniline	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 13 of 59
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-2

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 12:55:00 PM

Lab ID: 1506182-004

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
4-Nitroaniline	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Nitrobenzene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
2-Nitrophenol	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
4-Nitrophenol	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Pentachlorophenol	ND	20		µg/L	1	6/9/2015 12:12:16 PM	19583
Phenanthrene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Phenol	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Pyrene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Pyridine	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/9/2015 12:12:16 PM	19583
Surr: 2-Fluorophenol	64.9	14.9-111		%REC	1	6/9/2015 12:12:16 PM	19583
Surr: Phenol-d5	57.4	11.3-108		%REC	1	6/9/2015 12:12:16 PM	19583
Surr: 2,4,6-Tribromophenol	96.4	15.7-154		%REC	1	6/9/2015 12:12:16 PM	19583
Surr: Nitrobenzene-d5	86.0	47.8-106		%REC	1	6/9/2015 12:12:16 PM	19583
Surr: 2-Fluorobiphenyl	94.9	21.3-123		%REC	1	6/9/2015 12:12:16 PM	19583
Surr: 4-Terphenyl-d14	84.2	14.3-135		%REC	1	6/9/2015 12:12:16 PM	19583

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 14 of 59
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: KA-3

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 1:30:00 PM

Lab ID: 1506182-005

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/15/2015 4:43:20 PM	R26843
Lead	ND	0.010		mg/L	10	6/15/2015 4:43:20 PM	R26843
Selenium	ND	0.010		mg/L	10	6/15/2015 4:43:20 PM	R26843
Uranium	0.019	0.010		mg/L	10	6/15/2015 4:43:20 PM	R26843
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	1.5	1.0		mg/L	10	6/5/2015 6:33:52 PM	R26681
Chloride	150	5.0		mg/L	10	6/5/2015 6:33:52 PM	R26681
Bromide	1.3	1.0		mg/L	10	6/5/2015 6:33:52 PM	R26681
Phosphorus, Orthophosphate (As P)	ND	5.0	H	mg/L	10	6/5/2015 6:33:52 PM	R26681
Sulfate	42	5.0		mg/L	10	6/5/2015 6:33:52 PM	R26681
Nitrate+Nitrite as N	ND	2.0		mg/L	10	6/5/2015 9:27:36 PM	R26681
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.28	0.0020		mg/L	1	6/12/2015 6:51:19 PM	R26820
Cadmium	ND	0.0020		mg/L	1	6/15/2015 6:15:46 PM	R26842
Calcium	69	1.0		mg/L	1	6/12/2015 6:51:19 PM	R26820
Chromium	ND	0.0060		mg/L	1	6/12/2015 6:51:19 PM	R26820
Copper	ND	0.0060		mg/L	1	6/15/2015 6:15:46 PM	R26842
Iron	ND	0.020		mg/L	1	6/12/2015 6:51:19 PM	R26820
Magnesium	11	1.0		mg/L	1	6/12/2015 6:51:19 PM	R26820
Manganese	0.77	0.0020	*	mg/L	1	6/12/2015 6:51:19 PM	R26820
Potassium	ND	1.0		mg/L	1	6/12/2015 6:51:19 PM	R26820
Silver	ND	0.0050		mg/L	1	6/15/2015 6:15:46 PM	R26842
Sodium	300	5.0		mg/L	5	6/12/2015 6:53:19 PM	R26820
Zinc	ND	0.010		mg/L	1	6/12/2015 6:51:19 PM	R26820
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.35	0.0020		mg/L	1	6/9/2015 2:13:41 PM	19600
Cadmium	ND	0.0020		mg/L	1	6/9/2015 2:13:41 PM	19600
Chromium	ND	0.0060		mg/L	1	6/9/2015 2:13:41 PM	19600
Copper	ND	0.0060		mg/L	1	6/9/2015 2:13:41 PM	19600
Iron	0.29	0.020		mg/L	1	6/9/2015 2:13:41 PM	19600
Manganese	3.0	0.010	*	mg/L	5	6/10/2015 3:27:28 PM	19600
Silver	ND	0.0050		mg/L	1	6/9/2015 2:13:41 PM	19600
Zinc	ND	0.010		mg/L	1	6/9/2015 2:13:41 PM	19600
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/16/2015 1:02:15 PM	19600
Lead	ND	0.0050		mg/L	10	6/16/2015 1:02:15 PM	19600
Selenium	ND	0.010		mg/L	10	6/16/2015 1:02:15 PM	19600

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: KA-3

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 1:30:00 PM

Lab ID: 1506182-005

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Uranium	0.018	0.0050		mg/L	10	6/16/2015 1:02:15 PM	19600
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/5/2015 2:48:23 PM	19589
EPA METHOD 8015D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/8/2015 10:12:09 PM	19569
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/8/2015 10:12:09 PM	19569
Surr: DNOP	92.2	76.5-150		%REC	1	6/8/2015 10:12:09 PM	19569
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	12	2.5		µg/L	1	6/8/2015 3:26:25 PM	R26688
Benzene	ND	1.0		µg/L	1	6/8/2015 3:26:25 PM	R26688
Toluene	ND	1.0		µg/L	1	6/8/2015 3:26:25 PM	R26688
Ethylbenzene	ND	1.0		µg/L	1	6/8/2015 3:26:25 PM	R26688
Xylenes, Total	ND	2.0		µg/L	1	6/8/2015 3:26:25 PM	R26688
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/8/2015 3:26:25 PM	R26688
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/8/2015 3:26:25 PM	R26688
Surr: 4-Bromofluorobenzene	117	80-120		%REC	1	6/8/2015 3:26:25 PM	R26688
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Acenaphthylene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Aniline	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Anthracene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Azobenzene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Benz(a)anthracene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Benzo(a)pyrene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Benzo(b)fluoranthene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Benzo(k)fluoranthene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Benzoic acid	ND	20		µg/L	1	6/9/2015 12:40:01 PM	19583
Benzyl alcohol	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Butyl benzyl phthalate	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Carbazole	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: KA-3

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 1:30:00 PM

Lab ID: 1506182-005

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: DAM	
4-Chloroaniline	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
2-Chloronaphthalene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
2-Chlorophenol	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Chrysene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Di-n-butyl phthalate	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Di-n-octyl phthalate	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Dibenzofuran	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
1,2-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
1,3-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
1,4-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Diethyl phthalate	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Dimethyl phthalate	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
2,4-Dichlorophenol	ND	20		µg/L	1	6/9/2015 12:40:01 PM	19583
2,4-Dimethylphenol	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/9/2015 12:40:01 PM	19583
2,4-Dinitrophenol	ND	20		µg/L	1	6/9/2015 12:40:01 PM	19583
2,4-Dinitrotoluene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
2,6-Dinitrotoluene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Fluoranthene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Fluorene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Hexachlorobenzene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Hexachlorobutadiene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Hexachloroethane	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Isophorone	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
1-Methylnaphthalene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
2-Methylnaphthalene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
2-Methylphenol	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
3+4-Methylphenol	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
N-Nitrosodimethylamine	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Naphthalene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
2-Nitroaniline	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
3-Nitroaniline	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 17 of 59
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: KA-3

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 1:30:00 PM

Lab ID: 1506182-005

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: DAM	
4-Nitroaniline	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Nitrobenzene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
2-Nitrophenol	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
4-Nitrophenol	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Pentachlorophenol	ND	20		µg/L	1	6/9/2015 12:40:01 PM	19583
Phenanthrene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Phenol	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Pyrene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Pyridine	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/9/2015 12:40:01 PM	19583
Surr: 2-Fluorophenol	62.2	14.9-111		%REC	1	6/9/2015 12:40:01 PM	19583
Surr: Phenol-d5	55.7	11.3-108		%REC	1	6/9/2015 12:40:01 PM	19583
Surr: 2,4,6-Tribromophenol	94.6	15.7-154		%REC	1	6/9/2015 12:40:01 PM	19583
Surr: Nitrobenzene-d5	91.4	47.8-106		%REC	1	6/9/2015 12:40:01 PM	19583
Surr: 2-Fluorobiphenyl	85.7	21.3-123		%REC	1	6/9/2015 12:40:01 PM	19583
Surr: 4-Terphenyl-d14	72.1	14.3-135		%REC	1	6/9/2015 12:40:01 PM	19583

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-3

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 1:45:00 PM

Lab ID: 1506182-006

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/15/2015 4:46:23 PM	R26843
Lead	ND	0.010		mg/L	10	6/15/2015 4:46:23 PM	R26843
Selenium	0.016	0.010		mg/L	10	6/15/2015 4:46:23 PM	R26843
Uranium	0.043	0.010	*	mg/L	10	6/15/2015 4:46:23 PM	R26843
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	ND	1.0		mg/L	10	6/5/2015 6:58:41 PM	R26681
Chloride	790	50		mg/L	100	6/5/2015 7:11:06 PM	R26681
Bromide	4.9	1.0		mg/L	10	6/5/2015 6:58:41 PM	R26681
Phosphorus, Orthophosphate (As P)	ND	5.0	H	mg/L	10	6/5/2015 6:58:41 PM	R26681
Sulfate	440	5.0		mg/L	10	6/5/2015 6:58:41 PM	R26681
Nitrate+Nitrite as N	15	2.0	*	mg/L	10	6/5/2015 9:40:00 PM	R26681
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.033	0.0020		mg/L	1	6/12/2015 6:55:11 PM	R26820
Cadmium	ND	0.0020		mg/L	1	6/15/2015 6:17:42 PM	R26842
Calcium	36	1.0		mg/L	1	6/12/2015 6:55:11 PM	R26820
Chromium	ND	0.0060		mg/L	1	6/12/2015 6:55:11 PM	R26820
Copper	ND	0.0060		mg/L	1	6/15/2015 6:17:42 PM	R26842
Iron	0.064	0.020		mg/L	1	6/12/2015 6:55:11 PM	R26820
Magnesium	6.3	1.0		mg/L	1	6/12/2015 6:55:11 PM	R26820
Manganese	0.0038	0.0020		mg/L	1	6/12/2015 6:55:11 PM	R26820
Potassium	7.7	1.0		mg/L	1	6/12/2015 6:55:11 PM	R26820
Silver	ND	0.0050		mg/L	1	6/15/2015 6:17:42 PM	R26842
Sodium	880	20		mg/L	20	6/15/2015 6:19:36 PM	R26842
Zinc	0.049	0.010		mg/L	1	6/12/2015 6:55:11 PM	R26820
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.10	0.0020		mg/L	1	6/9/2015 2:15:41 PM	19600
Cadmium	ND	0.0020		mg/L	1	6/9/2015 2:15:41 PM	19600
Chromium	0.0066	0.0060		mg/L	1	6/9/2015 2:15:41 PM	19600
Copper	0.0075	0.0060		mg/L	1	6/9/2015 2:15:41 PM	19600
Iron	1.4	0.10	*	mg/L	5	6/10/2015 3:29:21 PM	19600
Manganese	0.080	0.0020	*	mg/L	1	6/9/2015 2:15:41 PM	19600
Silver	ND	0.0050		mg/L	1	6/9/2015 2:15:41 PM	19600
Zinc	0.028	0.010		mg/L	1	6/9/2015 2:15:41 PM	19600
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/16/2015 1:04:58 PM	19600
Lead	ND	0.0050		mg/L	10	6/16/2015 1:04:58 PM	19600
Selenium	ND	0.020		mg/L	20	6/16/2015 1:21:22 PM	19600

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-3

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 1:45:00 PM

Lab ID: 1506182-006

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Uranium	0.038	0.0050	*	mg/L	10	6/16/2015 1:04:58 PM	19600
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/5/2015 2:50:23 PM	19589
EPA METHOD 8015D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/8/2015 10:33:25 PM	19569
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/8/2015 10:33:25 PM	19569
Surr: DNOP	87.6	76.5-150		%REC	1	6/8/2015 10:33:25 PM	19569
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	6/8/2015 3:51:44 PM	R26688
Benzene	ND	1.0		µg/L	1	6/8/2015 3:51:44 PM	R26688
Toluene	ND	1.0		µg/L	1	6/8/2015 3:51:44 PM	R26688
Ethylbenzene	ND	1.0		µg/L	1	6/8/2015 3:51:44 PM	R26688
Xylenes, Total	ND	2.0		µg/L	1	6/8/2015 3:51:44 PM	R26688
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/8/2015 3:51:44 PM	R26688
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/8/2015 3:51:44 PM	R26688
Surr: 4-Bromofluorobenzene	109	80-120		%REC	1	6/8/2015 3:51:44 PM	R26688
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Acenaphthylene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Aniline	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Anthracene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Azobenzene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Benz(a)anthracene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Benzo(a)pyrene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Benzo(b)fluoranthene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Benzo(k)fluoranthene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Benzoic acid	ND	20		µg/L	1	6/9/2015 1:07:52 PM	19583
Benzyl alcohol	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Butyl benzyl phthalate	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Carbazole	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-3

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 1:45:00 PM

Lab ID: 1506182-006

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
4-Chloroaniline	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
2-Chloronaphthalene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
2-Chlorophenol	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Chrysene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Di-n-butyl phthalate	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Di-n-octyl phthalate	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Dibenzofuran	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
1,2-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
1,3-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
1,4-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Diethyl phthalate	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Dimethyl phthalate	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
2,4-Dichlorophenol	ND	20		µg/L	1	6/9/2015 1:07:52 PM	19583
2,4-Dimethylphenol	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/9/2015 1:07:52 PM	19583
2,4-Dinitrophenol	ND	20		µg/L	1	6/9/2015 1:07:52 PM	19583
2,4-Dinitrotoluene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
2,6-Dinitrotoluene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Fluoranthene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Fluorene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Hexachlorobenzene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Hexachlorobutadiene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Hexachloroethane	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Isophorone	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
1-Methylnaphthalene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
2-Methylnaphthalene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
2-Methylphenol	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
3+4-Methylphenol	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
N-Nitrosodimethylamine	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Naphthalene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
2-Nitroaniline	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
3-Nitroaniline	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-3

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 1:45:00 PM

Lab ID: 1506182-006

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
4-Nitroaniline	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Nitrobenzene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
2-Nitrophenol	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
4-Nitrophenol	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Pentachlorophenol	ND	20		µg/L	1	6/9/2015 1:07:52 PM	19583
Phenanthrene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Phenol	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Pyrene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Pyridine	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/9/2015 1:07:52 PM	19583
Surr: 2-Fluorophenol	71.7	14.9-111		%REC	1	6/9/2015 1:07:52 PM	19583
Surr: Phenol-d5	67.6	11.3-108		%REC	1	6/9/2015 1:07:52 PM	19583
Surr: 2,4,6-Tribromophenol	97.1	15.7-154		%REC	1	6/9/2015 1:07:52 PM	19583
Surr: Nitrobenzene-d5	90.3	47.8-106		%REC	1	6/9/2015 1:07:52 PM	19583
Surr: 2-Fluorobiphenyl	92.6	21.3-123		%REC	1	6/9/2015 1:07:52 PM	19583
Surr: 4-Terphenyl-d14	77.4	14.3-135		%REC	1	6/9/2015 1:07:52 PM	19583

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 22 of 59
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-1

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 2:00:00 PM

Lab ID: 1506182-007

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/15/2015 4:49:26 PM	R26843
Lead	ND	0.010		mg/L	10	6/15/2015 4:49:26 PM	R26843
Selenium	ND	0.010		mg/L	10	6/15/2015 4:49:26 PM	R26843
Uranium	0.013	0.010		mg/L	10	6/15/2015 4:49:26 PM	R26843
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	ND	1.0		mg/L	10	6/5/2015 7:23:30 PM	R26681
Chloride	100	5.0		mg/L	10	6/5/2015 7:23:30 PM	R26681
Bromide	1.4	1.0		mg/L	10	6/5/2015 7:23:30 PM	R26681
Phosphorus, Orthophosphate (As P)	ND	5.0	H	mg/L	10	6/5/2015 7:23:30 PM	R26681
Sulfate	93	5.0		mg/L	10	6/5/2015 7:23:30 PM	R26681
Nitrate+Nitrite as N	9.1	2.0		mg/L	10	6/5/2015 9:52:25 PM	R26681
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.11	0.0020		mg/L	1	6/12/2015 7:06:08 PM	R26820
Cadmium	ND	0.0020		mg/L	1	6/15/2015 6:21:32 PM	R26842
Calcium	91	1.0		mg/L	1	6/12/2015 7:06:08 PM	R26820
Chromium	ND	0.0060		mg/L	1	6/12/2015 7:06:08 PM	R26820
Copper	ND	0.0060		mg/L	1	6/15/2015 6:21:32 PM	R26842
Iron	ND	0.020		mg/L	1	6/12/2015 7:06:08 PM	R26820
Magnesium	15	1.0		mg/L	1	6/12/2015 7:06:08 PM	R26820
Manganese	0.067	0.0020	*	mg/L	1	6/12/2015 7:06:08 PM	R26820
Potassium	ND	1.0		mg/L	1	6/12/2015 7:06:08 PM	R26820
Silver	ND	0.0050		mg/L	1	6/15/2015 6:21:32 PM	R26842
Sodium	320	5.0		mg/L	5	6/12/2015 7:08:11 PM	R26820
Zinc	0.010	0.010		mg/L	1	6/12/2015 7:06:08 PM	R26820
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.15	0.0020		mg/L	1	6/9/2015 2:17:48 PM	19600
Cadmium	ND	0.0020		mg/L	1	6/9/2015 2:17:48 PM	19600
Chromium	ND	0.0060		mg/L	1	6/9/2015 2:17:48 PM	19600
Copper	ND	0.0060		mg/L	1	6/9/2015 2:17:48 PM	19600
Iron	0.60	0.020	*	mg/L	1	6/9/2015 2:17:48 PM	19600
Manganese	0.25	0.0020	*	mg/L	1	6/9/2015 2:17:48 PM	19600
Silver	ND	0.0050		mg/L	1	6/9/2015 2:17:48 PM	19600
Zinc	ND	0.010		mg/L	1	6/9/2015 2:17:48 PM	19600
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/16/2015 1:07:41 PM	19600
Lead	ND	0.0050		mg/L	10	6/16/2015 1:07:41 PM	19600
Selenium	ND	0.010		mg/L	10	6/16/2015 1:07:41 PM	19600

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-1

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 2:00:00 PM

Lab ID: 1506182-007

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Uranium	0.014	0.0050		mg/L	10	6/16/2015 1:07:41 PM	19600
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/5/2015 2:52:23 PM	19589
EPA METHOD 8015D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/8/2015 10:54:50 PM	19569
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/8/2015 10:54:50 PM	19569
Surr: DNOP	96.1	76.5-150		%REC	1	6/8/2015 10:54:50 PM	19569
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	6/8/2015 4:17:16 PM	R26688
Benzene	ND	1.0		µg/L	1	6/8/2015 4:17:16 PM	R26688
Toluene	ND	1.0		µg/L	1	6/8/2015 4:17:16 PM	R26688
Ethylbenzene	ND	1.0		µg/L	1	6/8/2015 4:17:16 PM	R26688
Xylenes, Total	ND	2.0		µg/L	1	6/8/2015 4:17:16 PM	R26688
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/8/2015 4:17:16 PM	R26688
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/8/2015 4:17:16 PM	R26688
Surr: 4-Bromofluorobenzene	111	80-120		%REC	1	6/8/2015 4:17:16 PM	R26688
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Acenaphthylene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Aniline	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Anthracene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Azobenzene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Benz(a)anthracene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Benzo(a)pyrene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Benzo(b)fluoranthene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Benzo(k)fluoranthene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Benzoic acid	ND	20		µg/L	1	6/9/2015 1:35:43 PM	19583
Benzyl alcohol	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Butyl benzyl phthalate	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Carbazole	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-1

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 2:00:00 PM

Lab ID: 1506182-007

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
4-Chloroaniline	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
2-Chloronaphthalene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
2-Chlorophenol	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Chrysene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Di-n-butyl phthalate	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Di-n-octyl phthalate	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Dibenzofuran	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
1,2-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
1,3-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
1,4-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Diethyl phthalate	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Dimethyl phthalate	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
2,4-Dichlorophenol	ND	20		µg/L	1	6/9/2015 1:35:43 PM	19583
2,4-Dimethylphenol	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/9/2015 1:35:43 PM	19583
2,4-Dinitrophenol	ND	20		µg/L	1	6/9/2015 1:35:43 PM	19583
2,4-Dinitrotoluene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
2,6-Dinitrotoluene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Fluoranthene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Fluorene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Hexachlorobenzene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Hexachlorobutadiene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Hexachloroethane	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Isophorone	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
1-Methylnaphthalene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
2-Methylnaphthalene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
2-Methylphenol	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
3+4-Methylphenol	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
N-Nitrosodimethylamine	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Naphthalene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
2-Nitroaniline	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
3-Nitroaniline	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-1

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 2:00:00 PM

Lab ID: 1506182-007

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: DAM	
4-Nitroaniline	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Nitrobenzene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
2-Nitrophenol	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
4-Nitrophenol	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Pentachlorophenol	ND	20		µg/L	1	6/9/2015 1:35:43 PM	19583
Phenanthrene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Phenol	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Pyrene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Pyridine	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/9/2015 1:35:43 PM	19583
Surr: 2-Fluorophenol	53.9	14.9-111		%REC	1	6/9/2015 1:35:43 PM	19583
Surr: Phenol-d5	51.3	11.3-108		%REC	1	6/9/2015 1:35:43 PM	19583
Surr: 2,4,6-Tribromophenol	88.2	15.7-154		%REC	1	6/9/2015 1:35:43 PM	19583
Surr: Nitrobenzene-d5	74.0	47.8-106		%REC	1	6/9/2015 1:35:43 PM	19583
Surr: 2-Fluorobiphenyl	78.7	21.3-123		%REC	1	6/9/2015 1:35:43 PM	19583
Surr: 4-Terphenyl-d14	70.1	14.3-135		%REC	1	6/9/2015 1:35:43 PM	19583

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 26 of 59
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: GWM-1

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 10:40:00 AM

Lab ID: 1506182-008

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	0.11	0.010	*	mg/L	10	6/16/2015 5:41:07 PM	R26876
Lead	ND	0.010		mg/L	10	6/16/2015 5:41:07 PM	R26876
Selenium	0.011	0.010		mg/L	10	6/16/2015 5:41:07 PM	R26876
Uranium	0.015	0.010		mg/L	10	6/16/2015 5:41:07 PM	R26876
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	2.7	1.0		mg/L	10	6/5/2015 8:13:08 PM	R26681
Chloride	1100	50		mg/L	100	6/5/2015 8:25:34 PM	R26681
Bromide	2.7	1.0		mg/L	10	6/5/2015 8:13:08 PM	R26681
Phosphorus, Orthophosphate (As P)	ND	5.0	H	mg/L	10	6/5/2015 8:13:08 PM	R26681
Sulfate	97	5.0		mg/L	10	6/5/2015 8:13:08 PM	R26681
Nitrate+Nitrite as N	ND	2.0		mg/L	10	6/5/2015 10:42:03 PM	R26681
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.38	0.0020		mg/L	1	6/12/2015 7:10:03 PM	R26820
Cadmium	ND	0.0020		mg/L	1	6/16/2015 3:17:20 PM	R26882
Calcium	220	5.0		mg/L	5	6/12/2015 7:15:07 PM	R26820
Chromium	0.0080	0.0060		mg/L	1	6/12/2015 7:10:03 PM	R26820
Copper	ND	0.0060		mg/L	1	6/16/2015 3:17:20 PM	R26882
Iron	11	1.0	*	mg/L	50	6/15/2015 6:34:29 PM	R26842
Magnesium	56	1.0		mg/L	1	6/12/2015 7:10:03 PM	R26820
Manganese	1.9	0.010	*	mg/L	5	6/12/2015 7:15:07 PM	R26820
Potassium	3.0	1.0		mg/L	1	6/12/2015 7:10:03 PM	R26820
Silver	ND	0.0050		mg/L	1	6/16/2015 3:17:20 PM	R26882
Sodium	1100	50		mg/L	50	6/15/2015 6:34:29 PM	R26842
Zinc	0.027	0.010		mg/L	1	6/12/2015 7:10:03 PM	R26820
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.43	0.0020		mg/L	1	6/9/2015 2:19:51 PM	19600
Cadmium	ND	0.0020		mg/L	1	6/9/2015 2:19:51 PM	19600
Chromium	0.0072	0.0060		mg/L	1	6/9/2015 2:19:51 PM	19600
Copper	ND	0.0060		mg/L	1	6/9/2015 2:19:51 PM	19600
Iron	11	0.40	*	mg/L	20	6/10/2015 3:33:31 PM	19600
Manganese	2.0	0.020	*	mg/L	10	6/10/2015 3:31:21 PM	19600
Silver	ND	0.0050		mg/L	1	6/9/2015 2:19:51 PM	19600
Zinc	0.022	0.010		mg/L	1	6/9/2015 2:19:51 PM	19600
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.11	0.010	*	mg/L	10	6/16/2015 1:10:24 PM	19600
Lead	0.0079	0.0050		mg/L	10	6/16/2015 1:10:24 PM	19600
Selenium	ND	0.020		mg/L	20	6/17/2015 2:03:12 PM	19600

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: GWM-1

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015 10:40:00 AM

Lab ID: 1506182-008

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Uranium	0.016	0.0050		mg/L	10	6/16/2015 1:10:24 PM	19600
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/5/2015 2:58:24 PM	19589
EPA METHOD 8015D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	1.7	1.0		mg/L	1	6/9/2015 7:13:49 AM	19569
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/9/2015 7:13:49 AM	19569
Surr: DNOP	85.4	76.5-150		%REC	1	6/9/2015 7:13:49 AM	19569
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	51	2.5		µg/L	1	6/8/2015 4:42:55 PM	R26688
Benzene	12	1.0		µg/L	1	6/8/2015 4:42:55 PM	R26688
Toluene	3.3	1.0		µg/L	1	6/8/2015 4:42:55 PM	R26688
Ethylbenzene	5.6	1.0		µg/L	1	6/8/2015 4:42:55 PM	R26688
Xylenes, Total	24	2.0		µg/L	1	6/8/2015 4:42:55 PM	R26688
1,2,4-Trimethylbenzene	4.7	1.0		µg/L	1	6/8/2015 4:42:55 PM	R26688
1,3,5-Trimethylbenzene	1.2	1.0		µg/L	1	6/8/2015 4:42:55 PM	R26688
Surr: 4-Bromofluorobenzene	521	80-120	S	%REC	1	6/8/2015 4:42:55 PM	R26688

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 28 of 59
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015

Lab ID: 1506182-009

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
Acenaphthene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Acenaphthylene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Aniline	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Anthracene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Azobenzene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Benz(a)anthracene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Benzo(a)pyrene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Benzo(b)fluoranthene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Benzo(k)fluoranthene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Benzoic acid	ND	20		µg/L	1	6/9/2015 2:03:30 PM	19583
Benzyl alcohol	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Butyl benzyl phthalate	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Carbazole	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
4-Chloroaniline	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
2-Chloronaphthalene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
2-Chlorophenol	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Chrysene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Di-n-butyl phthalate	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Di-n-octyl phthalate	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Dibenzofuran	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
1,2-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
1,3-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
1,4-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Diethyl phthalate	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Dimethyl phthalate	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
2,4-Dichlorophenol	ND	20		µg/L	1	6/9/2015 2:03:30 PM	19583
2,4-Dimethylphenol	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/9/2015 2:03:30 PM	19583
2,4-Dinitrophenol	ND	20		µg/L	1	6/9/2015 2:03:30 PM	19583

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015-2ND Qtr-NAPIS

Collection Date: 6/2/2015

Lab ID: 1506182-009

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
2,4-Dinitrotoluene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
2,6-Dinitrotoluene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Fluoranthene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Fluorene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Hexachlorobenzene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Hexachlorobutadiene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Hexachloroethane	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Isophorone	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
1-Methylnaphthalene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
2-Methylnaphthalene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
2-Methylphenol	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
3+4-Methylphenol	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
N-Nitrosodimethylamine	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Naphthalene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
2-Nitroaniline	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
3-Nitroaniline	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
4-Nitroaniline	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Nitrobenzene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
2-Nitrophenol	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
4-Nitrophenol	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Pentachlorophenol	ND	20		µg/L	1	6/9/2015 2:03:30 PM	19583
Phenanthrene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Phenol	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Pyrene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Pyridine	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/9/2015 2:03:30 PM	19583
Surr: 2-Fluorophenol	64.8	14.9-111		%REC	1	6/9/2015 2:03:30 PM	19583
Surr: Phenol-d5	60.4	11.3-108		%REC	1	6/9/2015 2:03:30 PM	19583
Surr: 2,4,6-Tribromophenol	100	15.7-154		%REC	1	6/9/2015 2:03:30 PM	19583
Surr: Nitrobenzene-d5	91.3	47.8-106		%REC	1	6/9/2015 2:03:30 PM	19583
Surr: 2-Fluorobiphenyl	84.6	21.3-123		%REC	1	6/9/2015 2:03:30 PM	19583
Surr: 4-Terphenyl-d14	72.7	14.3-135		%REC	1	6/9/2015 2:03:30 PM	19583

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: 2015-2ND Qtr-NAPIS

Collection Date:

Lab ID: 1506182-010

Matrix: TRIP BLANK

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/8/2015 5:33:35 PM	R26688
Surr: BFB	91.0	57.8-137		%REC	1	6/8/2015 5:33:35 PM	R26688
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	6/8/2015 5:33:35 PM	R26688
Benzene	ND	1.0		µg/L	1	6/8/2015 5:33:35 PM	R26688
Toluene	ND	1.0		µg/L	1	6/8/2015 5:33:35 PM	R26688
Ethylbenzene	ND	1.0		µg/L	1	6/8/2015 5:33:35 PM	R26688
Xylenes, Total	ND	2.0		µg/L	1	6/8/2015 5:33:35 PM	R26688
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/8/2015 5:33:35 PM	R26688
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/8/2015 5:33:35 PM	R26688
Surr: 4-Bromofluorobenzene	113	80-120		%REC	1	6/8/2015 5:33:35 PM	R26688
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
Toluene	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
Ethylbenzene	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
Naphthalene	ND	2.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
1-Methylnaphthalene	ND	4.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
2-Methylnaphthalene	ND	4.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
Acetone	ND	10		µg/L	1	6/10/2015 5:22:12 AM	R26716
Bromobenzene	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
Bromodichloromethane	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
Bromoform	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
Bromomethane	ND	3.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
2-Butanone	ND	10		µg/L	1	6/10/2015 5:22:12 AM	R26716
Carbon disulfide	ND	10		µg/L	1	6/10/2015 5:22:12 AM	R26716
Carbon Tetrachloride	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
Chlorobenzene	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
Chloroethane	ND	2.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
Chloroform	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
Chloromethane	ND	3.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
2-Chlorotoluene	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
4-Chlorotoluene	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
cis-1,2-DCE	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: 2015-2ND Qtr-NAPIS

Collection Date:

Lab ID: 1506182-010

Matrix: TRIP BLANK

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: DJF
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
Dibromochloromethane	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
Dibromomethane	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
1,1-Dichloroethane	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
1,1-Dichloroethene	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
1,2-Dichloropropane	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
1,3-Dichloropropane	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
2,2-Dichloropropane	ND	2.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
1,1-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
Hexachlorobutadiene	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
2-Hexanone	ND	10		µg/L	1	6/10/2015 5:22:12 AM	R26716
Isopropylbenzene	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
4-Isopropyltoluene	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
4-Methyl-2-pentanone	ND	10		µg/L	1	6/10/2015 5:22:12 AM	R26716
Methylene Chloride	ND	3.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
n-Butylbenzene	ND	3.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
n-Propylbenzene	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
sec-Butylbenzene	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
Styrene	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
tert-Butylbenzene	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
trans-1,2-DCE	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
Trichlorofluoromethane	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
Vinyl chloride	ND	1.0		µg/L	1	6/10/2015 5:22:12 AM	R26716
Xylenes, Total	ND	1.5		µg/L	1	6/10/2015 5:22:12 AM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506182

Date Reported: 6/25/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: 2015-2ND Qtr-NAPIS

Collection Date:

Lab ID: 1506182-010

Matrix: TRIP BLANK

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: DJF	
Surr: 1,2-Dichloroethane-d4	95.8	70-130		%REC	1	6/10/2015 5:22:12 AM	R26716
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	6/10/2015 5:22:12 AM	R26716
Surr: Dibromofluoromethane	97.6	70-130		%REC	1	6/10/2015 5:22:12 AM	R26716
Surr: Toluene-d8	101	70-130		%REC	1	6/10/2015 5:22:12 AM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 33 of 59
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

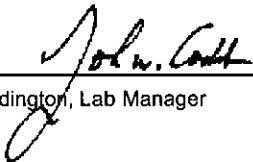
Batch #: 150612030
Project Name: 1506182

Analytical Results Report

Sample Number	150612030-001	Sampling Date	6/2/2015	Date/Time Received	6/12/2015 12:15 PM
Client Sample ID	1506182-003G / OAPIS-1	Sampling Time	12:00 PM		
Matrix	Water				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.0887	mg/L	0.01	6/16/2015	CRW	EPA 335.4	

Authorized Signature


John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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 #: 150612030
Project Name: 1506182

Analytical Results Report Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Cyanide	0.503	mg/L	0.5	100.6	90-110	6/16/2015	6/16/2015

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
150612028-002	Cyanide	ND	0.505	mg/L	0.5	101.0	90-110	6/16/2015	6/16/2015

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Cyanide	0.500	mg/L	0.5	100.0	1.0	0-20	6/16/2015	6/16/2015

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Cyanide	ND	mg/L	0.01	6/16/2015	6/16/2015

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; CO:ID00013; FL(NELAP):E87893; ID:ID00013; MT:Cert0028; NM:ID00013; OR:ID200001-002; WA:C595
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#: 1506182

25-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015-2ND Qtr-NAPIS

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID:	R26820	RunNo:	26820					
Prep Date:		Analysis Date:	6/12/2015	SeqNo:	799877	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Barium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Sodium	ND	1.0								
Zinc	ND	0.010								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW	Batch ID:	R26820	RunNo:	26820					
Prep Date:		Analysis Date:	6/12/2015	SeqNo:	799878	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Barium	0.47	0.0020	0.5000	0	93.7	85	115			
Calcium	51	1.0	50.00	0	101	85	115			
Chromium	0.48	0.0060	0.5000	0	95.6	85	115			
Iron	0.50	0.020	0.5000	0	100	85	115			
Magnesium	50	1.0	50.00	0	99.8	85	115			
Manganese	0.47	0.0020	0.5000	0	94.3	85	115			
Potassium	48	1.0	50.00	0	96.2	85	115			
Sodium	49	1.0	50.00	0	98.4	85	115			
Zinc	0.47	0.010	0.5000	0	94.6	85	115			

Sample ID	1506182-008DMS	SampType:	MS	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	GWM-1	Batch ID:	R26820	RunNo:	26820					
Prep Date:		Analysis Date:	6/12/2015	SeqNo:	799929	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Barium	0.79	0.0020	0.5000	0.3789	82.3	70	130			
Chromium	0.46	0.0060	0.5000	0.008020	90.4	70	130			
Magnesium	97	1.0	50.00	55.93	82.1	70	130			
Potassium	55	1.0	50.00	2.953	103	70	130			
Zinc	0.46	0.010	0.5000	0.02662	86.1	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506182

25-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015-2ND Qtr-NAPIS

Sample ID	1506182-008DMSD		SampType:	MSD		TestCode:	EPA Method 200.7: Dissolved Metals			
Client ID:	GWM-1		Batch ID:	R26820		RunNo:	26820			
Prep Date:			Analysis Date:	6/12/2015		SeqNo:	799930		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.78	0.0020	0.5000	0.3789	80.5	70	130	1.16	20	
Chromium	0.46	0.0060	0.5000	0.008020	90.5	70	130	0.0348	20	
Magnesium	97	1.0	50.00	55.93	81.2	70	130	0.492	20	
Potassium	55	1.0	50.00	2.953	104	70	130	0.735	20	
Zinc	0.45	0.010	0.5000	0.02662	85.0	70	130	1.22	20	

Sample ID	1506182-008DMS		SampType:	MS		TestCode:	EPA Method 200.7: Dissolved Metals			
Client ID:	GWM-1		Batch ID:	R26820		RunNo:	26820			
Prep Date:			Analysis Date:	6/12/2015		SeqNo:	799932		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	450	5.0	250.0	223.5	89.4	70	130			
Manganese	4.1	0.010	2.500	1.925	88.9	70	130			

Sample ID	1506182-008DMSD		SampType:	MSD		TestCode:	EPA Method 200.7: Dissolved Metals			
Client ID:	GWM-1		Batch ID:	R26820		RunNo:	26820			
Prep Date:			Analysis Date:	6/12/2015		SeqNo:	799933		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	450	5.0	250.0	223.5	90.3	70	130	0.487	20	
Manganese	4.1	0.010	2.500	1.925	87.8	70	130	0.694	20	

Sample ID	MB		SampType:	MBLK		TestCode:	EPA Method 200.7: Dissolved Metals			
Client ID:	PBW		Batch ID:	R26842		RunNo:	26842			
Prep Date:			Analysis Date:	6/15/2015		SeqNo:	800962		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	ND	0.0020								
Copper	ND	0.0060								
Iron	ND	0.020								
Silver	ND	0.0050								
Sodium	ND	1.0								

Sample ID	LCS		SampType:	LCS		TestCode:	EPA Method 200.7: Dissolved Metals			
Client ID:	LCSW		Batch ID:	R26842		RunNo:	26842			
Prep Date:			Analysis Date:	6/15/2015		SeqNo:	800963		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.49	0.0020	0.5000	0	98.9	85	115			
Copper	0.49	0.0060	0.5000	0	97.9	85	115			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506182

25-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015-2ND Qtr-NAPIS

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26842		RunNo: 26842					
Prep Date:			Analysis Date: 6/15/2015		SeqNo: 800963		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	95.8	85	115			
Silver	0.10	0.0050	0.1000	0	99.8	85	115			
Sodium	48	1.0	50.00	0	96.7	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R26842			RunNo: 26842					
Prep Date:		Analysis Date: 6/15/2015			SeqNo: 801190		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	ND	0.0020								
Copper	ND	0.0060								
Iron	ND	0.020								
Silver	ND	0.0050								
Sodium	ND	1.0								

Sample ID	LCS		SampType: LCS			TestCode: EPA Method 200.7: Dissolved Metals				
Client ID:	LCSW		Batch ID: R26842			RunNo: 26842				
Prep Date:	Analysis Date: 6/15/2015			SeqNo: 801191		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.49	0.0020	0.5000	0	98.0	85	115			
Copper	0.49	0.0060	0.5000	0	97.7	85	115			
Iron	0.49	0.020	0.5000	0	97.1	85	115			
Silver	0.10	0.0050	0.1000	0	99.6	85	115			
Sodium	52	1.0	50.00	0	103	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R26882			RunNo: 26882					
Prep Date:		Analysis Date: 6/16/2015			SeqNo: 802272		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	ND	0.0020								
Copper	ND	0.0060								
Silver	ND	0.0050								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26882		RunNo: 26882					
Prep Date:			Analysis Date: 6/16/2015		SeqNo: 802273		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506182

25-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015-2ND Qtr-NAPIS

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26882		RunNo: 26882					
Prep Date:			Analysis Date: 6/16/2015		SeqNo: 802273		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.54	0.0020	0.5000	0	107	85	115			
Copper	0.49	0.0060	0.5000	0	97.4	85	115			
Silver	0.10	0.0050	0.1000	0	101	85	115			

Sample ID	1506182-008DMS			SampType: MS		TestCode: EPA Method 200.7: Dissolved Metals				
Client ID:	GWM-1			Batch ID: R26882		RunNo: 26882				
Prep Date:				Analysis Date: 6/16/2015		SeqNo: 802323		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.53	0.0020	0.5000	0	105	70	130			
Copper	0.52	0.0060	0.5000	0	103	70	130			
Silver	0.084	0.0050	0.1000	0	84.5	70	130			

Sample ID	1506182-008DMSD			SampType: MSD	TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	GWM-1			Batch ID: R26882	RunNo: 26882					
Prep Date:				Analysis Date: 6/16/2015	SeqNo: 802324		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.53	0.0020	0.5000	0	106	70	130	0.338	20	
Copper	0.51	0.0060	0.5000	0	102	70	130	0.815	20	
Silver	0.083	0.0050	0.1000	0	82.8	70	130	1.96	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506182

25-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015-2ND Qtr-NAPIS

Sample ID	1506182-002CMS		SampType: MS		TestCode: EPA Method 200.7: Total Metals					
Client ID:	OW-30		Batch ID: 19600		RunNo: 26704					
Prep Date:	6/6/2015		Analysis Date: 6/9/2015		SeqNo: 795782		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.57	0.0020	0.5000	0.08841	96.1	70	130			
Cadmium	0.54	0.0020	0.5000	0	107	70	130			
Chromium	0.50	0.0060	0.5000	0	99.6	70	130			
Copper	0.51	0.0060	0.5000	0	102	70	130			
Iron	0.56	0.020	0.5000	0.06520	99.2	70	130			
Manganese	0.49	0.0020	0.5000	0.03561	91.6	70	130			
Silver	0.10	0.0050	0.1000	0	103	70	130			
Zinc	0.49	0.010	0.5000	0	98.2	70	130			

Sample ID	1506182-002CMSD		SampType: MSD		TestCode: EPA Method 200.7: Total Metals					
Client ID:	OW-30		Batch ID: 19600		RunNo: 26704					
Prep Date:	6/6/2015		Analysis Date: 6/9/2015		SeqNo: 795783		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.57	0.0020	0.5000	0.08841	96.8	70	130	0.671	20	
Cadmium	0.54	0.0020	0.5000	0	108	70	130	1.01	20	
Chromium	0.50	0.0060	0.5000	0	101	70	130	0.962	20	
Copper	0.52	0.0060	0.5000	0	103	70	130	0.580	20	
Iron	0.58	0.020	0.5000	0.06520	103	70	130	3.23	20	
Manganese	0.50	0.0020	0.5000	0.03561	92.6	70	130	0.939	20	
Silver	0.10	0.0050	0.1000	0	101	70	130	1.86	20	
Zinc	0.50	0.010	0.5000	0	100	70	130	1.91	20	

Sample ID	MB-19600	SampType: MBLK			TestCode: EPA Method 200.7: Total Metals					
Client ID:	PBW	Batch ID: 19600			RunNo: 26704					
Prep Date:	6/6/2015	Analysis Date: 6/9/2015			SeqNo: 795803		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506182

25-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015-2ND Qtr-NAPIS

Sample ID	LCS-19600		SampType: LCS		TestCode: EPA Method 200.7: Total Metals					
Client ID:	LCSW		Batch ID: 19600		RunNo: 26704					
Prep Date:	6/6/2015		Analysis Date: 6/9/2015		SeqNo: 795804		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.51	0.0020	0.5000	0	102	85	115			
Cadmium	0.53	0.0020	0.5000	0	107	85	115			
Chromium	0.51	0.0060	0.5000	0	102	85	115			
Copper	0.50	0.0060	0.5000	0	99.2	85	115			
Iron	0.52	0.020	0.5000	0	104	85	115			
Manganese	0.49	0.0020	0.5000	0	97.1	85	115			
Silver	0.098	0.0050	0.1000	0	98.2	85	115			
Zinc	0.51	0.010	0.5000	0	102	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506182

25-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015-2ND Qtr-NAPIS

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26843		RunNo: 26843					
Prep Date:			Analysis Date: 6/15/2015		SeqNo: 801177		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	99.9	85	115			
Lead	0.012	0.00050	0.01250	0	99.2	85	115			
Selenium	0.024	0.0010	0.02500	0	95.5	85	115			
Uranium	0.012	0.00050	0.01250	0	93.4	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26843		RunNo: 26843					
Prep Date:			Analysis Date: 6/15/2015		SeqNo: 801178		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	96.4	85	115			
Lead	0.012	0.00050	0.01250	0	97.9	85	115			
Selenium	0.024	0.0010	0.02500	0	95.1	85	115			
Uranium	0.012	0.00050	0.01250	0	98.5	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R26843			RunNo: 26843					
Prep Date:		Analysis Date: 6/15/2015			SeqNo: 801182		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: R26843			RunNo: 26843					
Prep Date:		Analysis Date: 6/15/2015			SeqNo: 801183		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: R26876		RunNo: 26876					
Prep Date:			Analysis Date: 6/16/2015		SeqNo: 802096		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506182

25-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015-2ND Qtr-NAPIS

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26876		RunNo: 26876					
Prep Date:			Analysis Date: 6/16/2015		SeqNo: 802096		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	99.0	85	115			
Lead	0.013	0.00050	0.01250	0	101	85	115			
Selenium	0.025	0.0010	0.02500	0	99.4	85	115			
Uranium	0.013	0.00050	0.01250	0	102	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26876		RunNo: 26876					
Prep Date:			Analysis Date: 6/16/2015		SeqNo: 802099		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	98.9	85	115			
Lead	0.012	0.00050	0.01250	0	96.3	85	115			
Selenium	0.025	0.0010	0.02500	0	100	85	115			
Uranium	0.012	0.00050	0.01250	0	96.9	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R26876			RunNo: 26876					
Prep Date:		Analysis Date: 6/16/2015			SeqNo: 802100		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: R26876			RunNo: 26876					
Prep Date:		Analysis Date: 6/16/2015			SeqNo: 802101		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.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506182

25-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015-2ND Qtr-NAPIS

Sample ID	LCSLL-19600		SampType: LCSLL		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	BatchQC		Batch ID: 19600		RunNo: 26682					
Prep Date:	6/6/2015		Analysis Date: 6/8/2015		SeqNo: 794942		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	100	85	115			
Lead	0.012	0.00050	0.01250	0	98.6	85	115			
Selenium	0.024	0.0010	0.02500	0	94.3	85	115			
Uranium	0.012	0.00050	0.01250	0	96.8	85	115			

Sample ID	MB-19600		SampType: MBLK		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	PBW		Batch ID: 19600		RunNo: 26682					
Prep Date:	6/6/2015		Analysis Date: 6/8/2015		SeqNo: 794947		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.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506182

25-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015-2ND Qtr-NAPIS

Sample ID	MB-19589	SampType:	MBLK	TestCode:	EPA Method 245.1: Mercury					
Client ID:	PBW	Batch ID:	19589	RunNo:	26652					
Prep Date:	6/5/2015	Analysis Date:	6/5/2015	SeqNo:	793971	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	LCS-19589	SampType:	LCS	TestCode:	EPA Method 245.1: Mercury					
Client ID:	LCSW	Batch ID:	19589	RunNo:	26652					
Prep Date:	6/5/2015	Analysis Date:	6/5/2015	SeqNo:	793972	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	99.2	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506182

25-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015-2ND Qtr-NAPIS

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID: R26681			RunNo: 26681					
Prep Date:		Analysis Date: 6/5/2015			SeqNo: 794808		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	MB	SampType: MBLK			TestCode: EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID: R26681			RunNo: 26681					
Prep Date:		Analysis Date: 6/5/2015			SeqNo: 794872		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: R26681			RunNo: 26681				
Prep Date:	Analysis Date: 6/6/2015			SeqNo: 794873		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.49	0.10	0.5000	0	98.1	90	110			
Chloride	4.6	0.50	5.000	0	91.6	90	110			
Bromide	2.4	0.10	2.500	0	94.5	90	110			
Phosphorus, Orthophosphate (As P	4.7	0.50	5.000	0	94.5	90	110			
Sulfate	9.4	0.50	10.00	0	94.1	90	110			
Nitrate+Nitrite as N	3.3	0.20	3.500	0	95.3	90	110			

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID: R26721			RunNo: 26721					
Prep Date:		Analysis Date: 6/9/2015			SeqNo: 796475		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506182

25-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015-2ND Qtr-NAPIS

Sample ID	LCS	SampType: LCS			TestCode: EPA Method 300.0: Anions					
Client ID:	LCSW	Batch ID: R26721			RunNo: 26721					
Prep Date:		Analysis Date: 6/9/2015			SeqNo: 796476		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	103	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506182

25-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015-2ND Qtr-NAPIS

Sample ID	MB-19569		SampType: MBLK		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	PBW		Batch ID: 19569		RunNo: 26673					
Prep Date:	6/4/2015		Analysis Date: 6/8/2015		SeqNo: 795204		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	0.94		1.000		94.1	76.5	150			

Sample ID	LCS-19569		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	LCSW		Batch ID: 19569		RunNo: 26673					
Prep Date:	6/4/2015		Analysis Date: 6/8/2015		SeqNo: 795205		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	3.8	1.0	5.000	0	75.9	60.1	156			
Surr: DNOP	0.33		0.5000		66.9	76.5	150			S

Sample ID	1506182-003BMS	SampType: MS			TestCode: EPA Method 8015D: Diesel Range					
Client ID:	OAPIS-1	Batch ID: 19569			RunNo: 26673					
Prep Date:	6/4/2015	Analysis Date: 6/8/2015			SeqNo: 795207		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	8.6	1.0	5.000	4.362	84.8	75.9	164			
Surr: DNOP	0.43		0.5000		86.3	76.5	150			

Sample ID	1506182-003BMSD		SampType: MSD		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	OAPIS-1		Batch ID: 19569		RunNo: 26673					
Prep Date:	6/4/2015		Analysis Date: 6/8/2015		SeqNo: 795208		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	8.8	1.0	5.000	4.362	88.1	75.9	164	1.88	22.1	
Surr: DNOP	0.45		0.5000		89.4	76.5	150	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506182

25-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015-2ND Qtr-NAPIS

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID:	R26688	RunNo:	26688					
Prep Date:		Analysis Date:	6/8/2015	SeqNo:	795136	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		88.0	57.8	137			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	R26688	RunNo:	26688					
Prep Date:		Analysis Date:	6/8/2015	SeqNo:	795137	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.49	0.050	0.5000	0	97.0	80	120			
Surr: BFB	20		20.00		100	57.8	137			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506182

25-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015-2ND Qtr-NAPIS

Sample ID	5ML RB	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBW	Batch ID: R26688			RunNo: 26688					
Prep Date:		Analysis Date: 6/8/2015			SeqNo: 795172		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5								
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
Surr: 4-Bromofluorobenzene	23		20.00		115	80	120			

Sample ID	100NG BTEX LCS	SampType: LCS			TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSW	Batch ID: R26688			RunNo: 26688					
Prep Date:	Analysis Date: 6/8/2015			SeqNo: 795173		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	17	2.5	20.00	0	85.4	72.5	125			
Benzene	19	1.0	20.00	0	94.1	80	120			
Toluene	23	1.0	20.00	0	113	80	120			
Ethylbenzene	22	1.0	20.00	0	110	80	120			
Xylenes, Total	65	2.0	60.00	0	108	80	120			
1,2,4-Trimethylbenzene	22	1.0	20.00	0	109	80	120			
1,3,5-Trimethylbenzene	22	1.0	20.00	0	109	80	120			
Surr: 4-Bromofluorobenzene	26		20.00		128	80	120			S

Sample ID	1506182-004AMS		SampType: MS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	NAPIS-2		Batch ID: R26688		RunNo: 26688					
Prep Date:			Analysis Date: 6/8/2015		SeqNo: 795176		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	150	2.5	20.00	139.9	64.7	64.7	132			ES
Benzene	31	1.0	20.00	15.82	77.5	77.5	121			S
Toluene	23	1.0	20.00	0.4760	114	78.6	122			
Ethylbenzene	29	1.0	20.00	7.342	108	78.1	128			
Xylenes, Total	69	2.0	60.00	8.126	102	80	120			
1,2,4-Trimethylbenzene	24	1.0	20.00	0.9720	116	79.1	128			
1,3,5-Trimethylbenzene	23	1.0	20.00	0.4140	115	80	120			
Surr: 4-Bromofluorobenzene	31		20.00		155	80	120			S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506182

25-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015-2ND Qtr-NAPIS

Sample ID	1506182-004AMSD		SampType:	MSD		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	NAPIS-2		Batch ID:	R26688		RunNo:	26688			
Prep Date:			Analysis Date:	6/8/2015		SeqNo:	795177		Units: µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	210	2.5	20.00	139.9	355	64.7	132	31.9	20	ERS
Benzene	37	1.0	20.00	15.82	106	77.5	121	16.5	20	
Toluene	23	1.0	20.00	0.4760	113	78.6	122	0.415	20	
Ethylbenzene	29	1.0	20.00	7.342	108	78.1	128	0.0276	20	
Xylenes, Total	68	2.0	60.00	8.126	99.8	80	120	2.07	20	
1,2,4-Trimethylbenzene	23	1.0	20.00	0.9720	112	79.1	128	3.13	20	
1,3,5-Trimethylbenzene	22	1.0	20.00	0.4140	110	80	120	3.84	20	
Surr: 4-Bromofluorobenzene	30		20.00		150	80	120	0	0	S

Sample ID	B21		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBW		Batch ID:	R26751		RunNo:	26751			
Prep Date:			Analysis Date:	6/10/2015		SeqNo:	797214		Units: µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5								
Surr: 4-Bromofluorobenzene	19		20.00		94.0	80	120			

Sample ID	100NG BTEX LCS		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSW		Batch ID:	R26751		RunNo:	26751			
Prep Date:			Analysis Date:	6/10/2015		SeqNo:	797215		Units: µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	21	2.5	20.00	0	103	72.5	125			
Surr: 4-Bromofluorobenzene	21		20.00		104	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506182

25-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015-2ND Qtr-NAPIS

Sample ID	5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R26716			RunNo: 26716					
Prep Date:		Analysis Date: 6/9/2015			SeqNo: 796185	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506182

25-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015-2ND Qtr-NAPIS

Sample ID	5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R26716			RunNo: 26716					
Prep Date:		Analysis Date: 6/9/2015			SeqNo: 796185		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.5	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.3	70	130			
Surr: Dibromofluoromethane	8.7		10.00		86.9	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID	100nglcs,200ngT2st	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R26716			RunNo: 26716					
Prep Date:		Analysis Date: 6/9/2015			SeqNo: 796187		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	96.5	70	130			
Toluene	19	1.0	20.00	0	94.7	70	130			
Chlorobenzene	18	1.0	20.00	0	90.3	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506182

25-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015-2ND Qtr-NAPIS

Sample ID	100nglcs,200ngT2st			SampType:	LCS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	LCSW			Batch ID:	R26716		RunNo:	26716			
Prep Date:				Analysis Date:	6/9/2015		SeqNo:	796187	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
1,1-Dichloroethene	22	1.0	20.00	0	108	75.6	144				
Trichloroethene (TCE)	18	1.0	20.00	0	90.8	70	130				
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.9	70	130				
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130				
Surr: Dibromofluoromethane	9.0		10.00		89.8	70	130				
Surr: Toluene-d8	10		10.00		104	70	130				

Sample ID	b3	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R26716			RunNo: 26716					
Prep Date:		Analysis Date: 6/9/2015			SeqNo: 796233		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506182

25-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015-2ND Qtr-NAPIS

Sample ID	b3	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R26716	RunNo:	26716					
Prep Date:		Analysis Date:	6/9/2015	SeqNo:	796233	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		99.8	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506182

25-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015-2ND Qtr-NAPIS

Sample ID b3	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R26716			RunNo: 26716						
Prep Date:	Analysis Date: 6/9/2015			SeqNo: 796233		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	9.9		10.00		99.2	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	9.8		10.00		97.5	70	130			

Sample ID 100ng lcs2	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSW	Batch ID: R26716			RunNo: 26716						
Prep Date:	Analysis Date: 6/9/2015			SeqNo: 796235		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	70	130			
Toluene	21	1.0	20.00	0	104	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	114	75.6	144			
Trichloroethene (TCE)	19	1.0	20.00	0	94.7	70	130			
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID 1506182-002a ms2	SampType: MS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: OW-30	Batch ID: R26716			RunNo: 26716						
Prep Date:	Analysis Date: 6/10/2015			SeqNo: 796245		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	100	5.0	100.0	0	99.8	70	130			
Toluene	99	5.0	100.0	0	98.9	70	130			
Chlorobenzene	98	5.0	100.0	0	98.1	70	130			
1,1-Dichloroethene	110	5.0	100.0	0	112	70	130			
Trichloroethene (TCE)	92	5.0	100.0	0	92.0	70	130			
Surr: 1,2-Dichloroethane-d4	46		50.00		92.9	70	130			
Surr: 4-Bromofluorobenzene	47		50.00		94.3	70	130			
Surr: Dibromofluoromethane	48		50.00		96.9	70	130			
Surr: Toluene-d8	48		50.00		95.6	70	130			

Sample ID 1506182-002a msd2	SampType: MSD			TestCode: EPA Method 8260B: VOLATILES						
Client ID: OW-30	Batch ID: R26716			RunNo: 26716						
Prep Date:	Analysis Date: 6/10/2015			SeqNo: 796246		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	96	5.0	100.0	0	96.4	70	130	3.50	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
E Value above quantitation range	H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit	P Sample pH Not In Range
R RPD outside accepted recovery limits	RL Reporting Detection Limit
S Spike Recovery outside accepted recovery limits	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506182

25-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015-2ND Qtr-NAPIS

Sample ID	1506182-002a msd2			SampType: MSD	TestCode: EPA Method 8260B: VOLATILES					
Client ID:	OW-30		Batch ID: R26716		RunNo: 26716					
Prep Date:	Analysis Date: 6/10/2015			SeqNo: 796246		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	100	5.0	100.0	0	102	70	130	3.24	20	
Chlorobenzene	100	5.0	100.0	0	100	70	130	2.10	20	
1,1-Dichloroethene	110	5.0	100.0	0	112	70	130	0.251	20	
Trichloroethene (TCE)	92	5.0	100.0	0	92.5	70	130	0.518	20	
Surr: 1,2-Dichloroethane-d4	49		50.00		97.8	70	130	0	0	
Surr: 4-Bromofluorobenzene	51		50.00		103	70	130	0	0	
Surr: Dibromofluoromethane	50		50.00		99.4	70	130	0	0	
Surr: Toluene-d8	50		50.00		101	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506182

25-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015-2ND Qtr-NAPIS

Sample ID	mb-19583	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	19583	RunNo:	26697					
Prep Date:	6/5/2015	Analysis Date:	6/9/2015	SeqNo:	795540	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506182

25-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015-2ND Qtr-NAPIS

Sample ID	mb-19583	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	19583	RunNo:	26697					
Prep Date:	6/5/2015	Analysis Date:	6/9/2015	SeqNo:	795540	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		53.6	14.9	111			
Surr: Phenol-d5	120		200.0		59.4	11.3	108			
Surr: 2,4,6-Tribromophenol	130		200.0		66.3	15.7	154			
Surr: Nitrobenzene-d5	62		100.0		61.7	47.8	106			
Surr: 2-Fluorobiphenyl	61		100.0		61.0	21.3	123			
Surr: 4-Terphenyl-d14	65		100.0		65.3	14.3	135			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506182

25-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015-2ND Qtr-NAPIS

Sample ID	lcs-19583		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 19583		RunNo: 26697					
Prep Date:	6/5/2015		Analysis Date: 6/9/2015		SeqNo: 795541		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	61	10	100.0	0	61.0	47.8	99.7			
4-Chloro-3-methylphenol	130	10	200.0	0	65.4	58.1	103			
2-Chlorophenol	110	10	200.0	0	55.9	49.5	96.8			
1,4-Dichlorobenzene	53	10	100.0	0	52.7	40.4	89.4			
2,4-Dinitrotoluene	59	10	100.0	0	59.4	38.6	91.3			
N-Nitrosodi-n-propylamine	63	10	100.0	0	62.9	53.9	95.6			
4-Nitrophenol	120	10	200.0	0	60.7	26.4	108			
Pentachlorophenol	120	20	200.0	0	58.6	36.5	86.6			
Phenol	110	10	200.0	0	53.8	29.3	108			
Pyrene	67	10	100.0	0	67.2	45.7	100			
1,2,4-Trichlorobenzene	55	10	100.0	0	54.9	39.3	94.5			
Surr: 2-Fluorophenol	97		200.0		48.6	14.9	111			
Surr: Phenol-d5	110		200.0		57.2	11.3	108			
Surr: 2,4,6-Tribromophenol	140		200.0		70.8	15.7	154			
Surr: Nitrobenzene-d5	56		100.0		56.1	47.8	106			
Surr: 2-Fluorobiphenyl	53		100.0		53.4	21.3	123			
Surr: 4-Terphenyl-d14	63		100.0		62.6	14.3	135			

Sample ID	lcsd-19583		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 19583		RunNo: 26697					
Prep Date:	6/5/2015		Analysis Date: 6/9/2015		SeqNo: 795542		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	81	10	100.0	0	81.4	47.8	99.7	28.7	28.2	R
4-Chloro-3-methylphenol	160	10	200.0	0	78.7	58.1	103	18.5	24.4	
2-Chlorophenol	150	10	200.0	0	72.7	49.5	96.8	26.1	28.1	
1,4-Dichlorobenzene	66	10	100.0	0	66.2	40.4	89.4	22.8	31.2	
2,4-Dinitrotoluene	68	10	100.0	0	67.9	38.6	91.3	13.4	44.4	
N-Nitrosodi-n-propylamine	73	10	100.0	0	72.8	53.9	95.6	14.6	24.2	
4-Nitrophenol	150	10	200.0	0	75.4	26.4	108	21.5	36.6	
Pentachlorophenol	140	20	200.0	0	71.7	36.5	86.6	20.2	29.5	
Phenol	140	10	200.0	0	69.4	29.3	108	25.4	30	
Pyrene	74	10	100.0	0	73.8	45.7	100	9.39	31	
1,2,4-Trichlorobenzene	76	10	100.0	0	76.1	39.3	94.5	32.2	24	R
Surr: 2-Fluorophenol	130		200.0		65.3	14.9	111	0	0	
Surr: Phenol-d5	150		200.0		74.0	11.3	108	0	0	
Surr: 2,4,6-Tribromophenol	180		200.0		91.8	15.7	154	0	0	
Surr: Nitrobenzene-d5	76		100.0		76.5	47.8	106	0	0	
Surr: 2-Fluorobiphenyl	77		100.0		77.5	21.3	123	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506182

25-Jun-15

Client: Western Refining Southwest, Gallup**Project:** 2015-2ND Qtr-NAPIS

Sample ID	lcsd-19583		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 19583		RunNo: 26697					
Prep Date:	6/5/2015		Analysis Date: 6/9/2015		SeqNo: 795542		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	63		100.0		63.3	14.3	135	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

Sample Log-In Check List

Client Name: **Western Refining Gallup**

Work Order Number: **1506182**

RcptNo: 1

Received by/date:

CS

06/03/15

Logged By: **Ashley Gallegos**

6/3/2015 4:07:00 PM

AG

Completed By: **Ashley Gallegos**

6/4/2015 7:31:39 AM

AG

Reviewed By:

JA

06/04/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☒ No ☐ Not Present ☐
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☒
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☒ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(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 ☐

06/04/15
SEE REMARKS.
of preserved bottles checked for pH: *20*
(<2 or >12 unless noted)
Adjusted? *YES*
Checked by: *JA*

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: *FOR DISSOLVED METALS ANALYSIS: ADDED 0.4mL HNO₃ TO -00SE, -000TE, -000ET, -000SI FOR ACCEPTABLE PH. FOR TOTAL METALS ANALYSIS: ADDED 1mL HNO₃ TO 00SE FOR ACCEPTABLE PH. HEL*
18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.3	Good	Yes			

IN LOGS FOR 24 HOURS AFTER PRESERVATION.
06/04/15
@ 13415



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 24, 2015

Cheryl Johnson

Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: 2015 2nd Quarter-OW Wells

OrderNo.: 1506184

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 5 sample(s) on 6/3/2015 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', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506184

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015 2nd Quarter-OW Wells

Collection Date: 6/3/2015 7:00:00 AM

Lab ID: 1506184-001

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
Benzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Toluene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Ethylbenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Naphthalene	ND	2.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1-Methylnaphthalene	ND	4.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
2-Methylnaphthalene	ND	4.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Acetone	ND	10		µg/L	1	6/10/2015 5:49:53 AM	R26716
Bromobenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Bromodichloromethane	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Bromoform	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Bromomethane	ND	3.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
2-Butanone	ND	10		µg/L	1	6/10/2015 5:49:53 AM	R26716
Carbon disulfide	ND	10		µg/L	1	6/10/2015 5:49:53 AM	R26716
Carbon Tetrachloride	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Chlorobenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Chloroethane	ND	2.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Chloroform	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Chloromethane	ND	3.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
2-Chlorotoluene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
4-Chlorotoluene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
cis-1,2-DCE	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Dibromochloromethane	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Dibromomethane	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,1-Dichloroethane	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,1-Dichloroethene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,2-Dichloropropane	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,3-Dichloropropane	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
2,2-Dichloropropane	ND	2.0		µg/L	1	6/10/2015 5:49:53 AM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506184

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015 2nd Quarter-OW Wells

Collection Date: 6/3/2015 7:00:00 AM

Lab ID: 1506184-001

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,1-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Hexachlorobutadiene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
2-Hexanone	ND	10		µg/L	1	6/10/2015 5:49:53 AM	R26716
Isopropylbenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
4-Isopropyltoluene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
4-Methyl-2-pentanone	ND	10		µg/L	1	6/10/2015 5:49:53 AM	R26716
Methylene Chloride	ND	3.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
n-Butylbenzene	ND	3.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
n-Propylbenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
sec-Butylbenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Styrene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
tert-Butylbenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
trans-1,2-DCE	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Trichlorofluoromethane	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Vinyl chloride	ND	1.0		µg/L	1	6/10/2015 5:49:53 AM	R26716
Xylenes, Total	ND	1.5		µg/L	1	6/10/2015 5:49:53 AM	R26716
Surr: 1,2-Dichloroethane-d4	99.7	70-130		%REC	1	6/10/2015 5:49:53 AM	R26716
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	6/10/2015 5:49:53 AM	R26716
Surr: Dibromofluoromethane	98.9	70-130		%REC	1	6/10/2015 5:49:53 AM	R26716
Surr: Toluene-d8	97.2	70-130		%REC	1	6/10/2015 5:49:53 AM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506184

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-1

Project: 2015 2nd Quarter-OW Wells

Collection Date: 6/3/2015 10:15:00 AM

Lab ID: 1506184-002

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/16/2015 5:47:18 PM	R26876
Lead	ND	0.010		mg/L	10	6/16/2015 5:47:18 PM	R26876
Selenium	ND	0.010		mg/L	10	6/16/2015 5:47:18 PM	R26876
Uranium	0.041	0.010	*	mg/L	10	6/16/2015 5:47:18 PM	R26876
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	ND	0.50		mg/L	5	6/5/2015 4:29:45 PM	R26681
Chloride	77	2.5		mg/L	5	6/5/2015 4:29:45 PM	R26681
Bromide	ND	0.50		mg/L	5	6/5/2015 4:29:45 PM	R26681
Phosphorus, Orthophosphate (As P)	ND	2.5	H	mg/L	5	6/5/2015 4:29:45 PM	R26681
Sulfate	190	2.5		mg/L	5	6/5/2015 4:29:45 PM	R26681
Nitrate+Nitrite as N	ND	1.0		mg/L	5	6/5/2015 8:37:58 PM	R26681
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.033	0.0020		mg/L	1	6/15/2015 6:36:25 PM	R26842
Cadmium	ND	0.0020		mg/L	1	6/15/2015 6:36:25 PM	R26842
Calcium	2.0	1.0		mg/L	1	6/15/2015 6:36:25 PM	R26842
Chromium	ND	0.0060		mg/L	1	6/15/2015 6:36:25 PM	R26842
Copper	ND	0.0060		mg/L	1	6/15/2015 6:36:25 PM	R26842
Iron	ND	0.020		mg/L	1	6/15/2015 6:36:25 PM	R26842
Magnesium	ND	1.0		mg/L	1	6/15/2015 6:36:25 PM	R26842
Manganese	0.0060	0.0020		mg/L	1	6/15/2015 6:36:25 PM	R26842
Potassium	ND	1.0		mg/L	1	6/15/2015 6:36:25 PM	R26842
Silver	ND	0.0050		mg/L	1	6/16/2015 3:24:53 PM	R26882
Sodium	300	5.0		mg/L	5	6/15/2015 6:38:30 PM	R26842
Zinc	0.034	0.010		mg/L	1	6/15/2015 6:36:25 PM	R26842
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.047	0.0020		mg/L	1	6/9/2015 2:21:38 PM	19599
Cadmium	ND	0.0020		mg/L	1	6/9/2015 2:21:38 PM	19599
Chromium	ND	0.0060		mg/L	1	6/9/2015 2:21:38 PM	19599
Copper	ND	0.0060		mg/L	1	6/9/2015 2:21:38 PM	19599
Iron	1.0	0.10	*	mg/L	5	6/10/2015 3:35:36 PM	19599
Manganese	0.050	0.0020		mg/L	1	6/9/2015 2:21:38 PM	19599
Silver	ND	0.0050		mg/L	1	6/9/2015 2:21:38 PM	19599
Zinc	ND	0.010		mg/L	1	6/9/2015 2:21:38 PM	19599
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/16/2015 1:18:38 PM	19599
Lead	ND	0.0050		mg/L	10	6/16/2015 1:18:38 PM	19599
Selenium	ND	0.010		mg/L	10	6/16/2015 1:18:38 PM	19599

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506184

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-1

Project: 2015 2nd Quarter-OW Wells

Collection Date: 6/3/2015 10:15:00 AM

Lab ID: 1506184-002

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Uranium	0.042	0.0050	*	mg/L	10	6/16/2015 1:18:38 PM	19599
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/5/2015 3:00:25 PM	19589
EPA METHOD 8015D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/9/2015 7:35:07 AM	19569
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/9/2015 7:35:07 AM	19569
Surr: DNOP	89.9	76.5-150		%REC	1	6/9/2015 7:35:07 AM	19569
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/8/2015 7:14:28 PM	R26688
Surr: BFB	90.4	57.8-137		%REC	1	6/8/2015 7:14:28 PM	R26688
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Acenaphthylene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Aniline	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Anthracene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Azobenzene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Benz(a)anthracene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Benzo(a)pyrene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Benzo(b)fluoranthene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Benzo(k)fluoranthene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Benzoic acid	ND	20		µg/L	1	6/9/2015 2:31:22 PM	19583
Benzyl alcohol	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Butyl benzyl phthalate	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Carbazole	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
4-Chloroaniline	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
2-Chloronaphthalene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
2-Chlorophenol	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Chrysene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Di-n-butyl phthalate	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 4 of 37
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506184

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-1

Project: 2015 2nd Quarter-OW Wells

Collection Date: 6/3/2015 10:15:00 AM

Lab ID: 1506184-002

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Di-n-octyl phthalate	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Dibenzofuran	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
1,2-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
1,3-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
1,4-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Diethyl phthalate	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Dimethyl phthalate	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
2,4-Dichlorophenol	ND	20		µg/L	1	6/9/2015 2:31:22 PM	19583
2,4-Dimethylphenol	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/9/2015 2:31:22 PM	19583
2,4-Dinitrophenol	ND	20		µg/L	1	6/9/2015 2:31:22 PM	19583
2,4-Dinitrotoluene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
2,6-Dinitrotoluene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Fluoranthene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Fluorene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Hexachlorobenzene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Hexachlorobutadiene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Hexachloroethane	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Isophorone	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
1-Methylnaphthalene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
2-Methylnaphthalene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
2-Methylphenol	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
3+4-Methylphenol	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
N-Nitrosodimethylamine	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Naphthalene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
2-Nitroaniline	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
3-Nitroaniline	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
4-Nitroaniline	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Nitrobenzene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
2-Nitrophenol	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
4-Nitrophenol	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Pentachlorophenol	ND	20		µg/L	1	6/9/2015 2:31:22 PM	19583
Phenanthrene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506184

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-1

Project: 2015 2nd Quarter-OW Wells

Collection Date: 6/3/2015 10:15:00 AM

Lab ID: 1506184-002

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Phenol	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Pyrene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Pyridine	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/9/2015 2:31:22 PM	19583
Surr: 2-Fluorophenol	65.0	14.9-111		%REC	1	6/9/2015 2:31:22 PM	19583
Surr: Phenol-d5	58.7	11.3-108		%REC	1	6/9/2015 2:31:22 PM	19583
Surr: 2,4,6-Tribromophenol	82.8	15.7-154		%REC	1	6/9/2015 2:31:22 PM	19583
Surr: Nitrobenzene-d5	81.3	47.8-106		%REC	1	6/9/2015 2:31:22 PM	19583
Surr: 2-Fluorobiphenyl	75.6	21.3-123		%REC	1	6/9/2015 2:31:22 PM	19583
Surr: 4-Terphenyl-d14	59.9	14.3-135		%REC	1	6/9/2015 2:31:22 PM	19583
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Toluene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Ethylbenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Naphthalene	ND	2.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1-Methylnaphthalene	ND	4.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
2-Methylnaphthalene	ND	4.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Acetone	ND	10		µg/L	1	6/10/2015 6:17:34 AM	R26716
Bromobenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Bromodichloromethane	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Bromoform	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Bromomethane	ND	3.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
2-Butanone	ND	10		µg/L	1	6/10/2015 6:17:34 AM	R26716
Carbon disulfide	ND	10		µg/L	1	6/10/2015 6:17:34 AM	R26716
Carbon Tetrachloride	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Chlorobenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Chloroethane	ND	2.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Chloroform	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Chloromethane	ND	3.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
2-Chlorotoluene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
4-Chlorotoluene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
cis-1,2-DCE	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506184

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-1

Project: 2015 2nd Quarter-OW Wells

Collection Date: 6/3/2015 10:15:00 AM

Lab ID: 1506184-002

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Dibromochloromethane	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Dibromomethane	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,1-Dichloroethane	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,1-Dichloroethene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,2-Dichloropropane	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,3-Dichloropropane	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
2,2-Dichloropropane	ND	2.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,1-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Hexachlorobutadiene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
2-Hexanone	ND	10		µg/L	1	6/10/2015 6:17:34 AM	R26716
Isopropylbenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
4-Isopropyltoluene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
4-Methyl-2-pentanone	ND	10		µg/L	1	6/10/2015 6:17:34 AM	R26716
Methylene Chloride	ND	3.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
n-Butylbenzene	ND	3.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
n-Propylbenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
sec-Butylbenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Styrene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
tert-Butylbenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
trans-1,2-DCE	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Trichlorofluoromethane	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Vinyl chloride	ND	1.0		µg/L	1	6/10/2015 6:17:34 AM	R26716
Xylenes, Total	ND	1.5		µg/L	1	6/10/2015 6:17:34 AM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 7 of 37
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506184

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-1

Project: 2015 2nd Quarter-OW Wells

Collection Date: 6/3/2015 10:15:00 AM

Lab ID: 1506184-002

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: DJF	
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%REC	1	6/10/2015 6:17:34 AM	R26716
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	6/10/2015 6:17:34 AM	R26716
Surr: Dibromofluoromethane	98.6	70-130		%REC	1	6/10/2015 6:17:34 AM	R26716
Surr: Toluene-d8	96.0	70-130		%REC	1	6/10/2015 6:17:34 AM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 8 of 37
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506184

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-10

Project: 2015 2nd Quarter-OW Wells

Collection Date: 6/3/2015 11:30:00 AM

Lab ID: 1506184-003

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/16/2015 5:50:21 PM	R26876
Lead	ND	0.010		mg/L	10	6/16/2015 5:50:21 PM	R26876
Selenium	0.014	0.010		mg/L	10	6/16/2015 5:50:21 PM	R26876
Uranium	0.059	0.010	*	mg/L	10	6/16/2015 5:50:21 PM	R26876
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	ND	0.50		mg/L	5	6/5/2015 4:54:34 PM	R26681
Chloride	1500	50		mg/L	100	6/9/2015 10:59:59 PM	R26721
Bromide	1.6	0.50		mg/L	5	6/5/2015 4:54:34 PM	R26681
Phosphorus, Orthophosphate (As P)	ND	2.5	H	mg/L	5	6/5/2015 4:54:34 PM	R26681
Sulfate	240	2.5		mg/L	5	6/5/2015 4:54:34 PM	R26681
Nitrate+Nitrite as N	ND	1.0		mg/L	5	6/5/2015 8:50:22 PM	R26681
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.074	0.0020		mg/L	1	6/15/2015 6:40:19 PM	R26842
Cadmium	ND	0.0020		mg/L	1	6/15/2015 6:40:19 PM	R26842
Calcium	100	5.0		mg/L	5	6/15/2015 6:42:15 PM	R26842
Chromium	ND	0.0060		mg/L	1	6/15/2015 6:40:19 PM	R26842
Copper	ND	0.0060		mg/L	1	6/15/2015 6:40:19 PM	R26842
Iron	ND	0.020		mg/L	1	6/15/2015 6:40:19 PM	R26842
Magnesium	18	1.0		mg/L	1	6/15/2015 6:40:19 PM	R26842
Manganese	0.075	0.0020	*	mg/L	1	6/15/2015 6:40:19 PM	R26842
Potassium	1.4	1.0		mg/L	1	6/15/2015 6:40:19 PM	R26842
Silver	ND	0.0050		mg/L	1	6/16/2015 3:26:53 PM	R26882
Sodium	660	10		mg/L	10	6/16/2015 3:28:48 PM	R26882
Zinc	0.010	0.010		mg/L	1	6/15/2015 6:40:19 PM	R26842
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.095	0.0020		mg/L	1	6/9/2015 2:23:41 PM	19599
Cadmium	ND	0.0020		mg/L	1	6/9/2015 2:23:41 PM	19599
Chromium	ND	0.0060		mg/L	1	6/9/2015 2:23:41 PM	19599
Copper	ND	0.0060		mg/L	1	6/9/2015 2:23:41 PM	19599
Iron	ND	0.020		mg/L	1	6/9/2015 2:23:41 PM	19599
Manganese	0.15	0.0020	*	mg/L	1	6/9/2015 2:23:41 PM	19599
Silver	ND	0.0050		mg/L	1	6/9/2015 2:23:41 PM	19599
Zinc	ND	0.010		mg/L	1	6/9/2015 2:23:41 PM	19599
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/16/2015 1:24:07 PM	19599
Lead	ND	0.0050		mg/L	10	6/16/2015 1:24:07 PM	19599
Selenium	ND	0.020		mg/L	20	6/16/2015 2:35:00 PM	19599

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 9 of 37
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506184

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-10

Project: 2015 2nd Quarter-OW Wells

Collection Date: 6/3/2015 11:30:00 AM

Lab ID: 1506184-003

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Uranium	0.063	0.0050	*	mg/L	10	6/16/2015 1:24:07 PM	19599
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/5/2015 3:02:27 PM	19589
EPA METHOD 8015D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/9/2015 7:56:25 AM	19569
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/9/2015 7:56:25 AM	19569
Surr: DNOP	96.2	76.5-150		%REC	1	6/9/2015 7:56:25 AM	19569
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.067	0.050		mg/L	1	6/8/2015 7:39:47 PM	R26688
Surr: BFB	94.2	57.8-137		%REC	1	6/8/2015 7:39:47 PM	R26688
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Acenaphthylene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Aniline	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Anthracene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Azobenzene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Benz(a)anthracene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Benzo(a)pyrene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Benzo(b)fluoranthene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Benzo(k)fluoranthene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Benzoic acid	ND	20		µg/L	1	6/9/2015 2:59:11 PM	19583
Benzyl alcohol	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Butyl benzyl phthalate	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Carbazole	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
4-Chloroaniline	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
2-Chloronaphthalene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
2-Chlorophenol	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Chrysene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Di-n-butyl phthalate	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506184

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-10

Project: 2015 2nd Quarter-OW Wells

Collection Date: 6/3/2015 11:30:00 AM

Lab ID: 1506184-003

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Di-n-octyl phthalate	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Dibenzofuran	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
1,2-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
1,3-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
1,4-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Diethyl phthalate	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Dimethyl phthalate	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
2,4-Dichlorophenol	ND	20		µg/L	1	6/9/2015 2:59:11 PM	19583
2,4-Dimethylphenol	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/9/2015 2:59:11 PM	19583
2,4-Dinitrophenol	ND	20		µg/L	1	6/9/2015 2:59:11 PM	19583
2,4-Dinitrotoluene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
2,6-Dinitrotoluene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Fluoranthene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Fluorene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Hexachlorobenzene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Hexachlorobutadiene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Hexachloroethane	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Isophorone	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
1-Methylnaphthalene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
2-Methylnaphthalene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
2-Methylphenol	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
3+4-Methylphenol	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
N-Nitrosodimethylamine	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Naphthalene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
2-Nitroaniline	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
3-Nitroaniline	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
4-Nitroaniline	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Nitrobenzene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
2-Nitrophenol	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
4-Nitrophenol	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Pentachlorophenol	ND	20		µg/L	1	6/9/2015 2:59:11 PM	19583
Phenanthrene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506184

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-10

Project: 2015 2nd Quarter-OW Wells

Collection Date: 6/3/2015 11:30:00 AM

Lab ID: 1506184-003

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Phenol	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Pyrene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Pyridine	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/9/2015 2:59:11 PM	19583
Surr: 2-Fluorophenol	43.8	14.9-111		%REC	1	6/9/2015 2:59:11 PM	19583
Surr: Phenol-d5	55.9	11.3-108		%REC	1	6/9/2015 2:59:11 PM	19583
Surr: 2,4,6-Tribromophenol	66.2	15.7-154		%REC	1	6/9/2015 2:59:11 PM	19583
Surr: Nitrobenzene-d5	79.0	47.8-106		%REC	1	6/9/2015 2:59:11 PM	19583
Surr: 2-Fluorobiphenyl	71.8	21.3-123		%REC	1	6/9/2015 2:59:11 PM	19583
Surr: 4-Terphenyl-d14	60.9	14.3-135		%REC	1	6/9/2015 2:59:11 PM	19583
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Toluene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Ethylbenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Methyl tert-butyl ether (MTBE)	55	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Naphthalene	ND	2.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1-Methylnaphthalene	ND	4.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
2-Methylnaphthalene	ND	4.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Acetone	ND	10		µg/L	1	6/10/2015 6:45:18 AM	R26716
Bromobenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Bromodichloromethane	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Bromoform	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Bromomethane	ND	3.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
2-Butanone	ND	10		µg/L	1	6/10/2015 6:45:18 AM	R26716
Carbon disulfide	ND	10		µg/L	1	6/10/2015 6:45:18 AM	R26716
Carbon Tetrachloride	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Chlorobenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Chloroethane	ND	2.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Chloroform	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Chloromethane	ND	3.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
2-Chlorotoluene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
4-Chlorotoluene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
cis-1,2-DCE	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506184

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-10

Project: 2015 2nd Quarter-OW Wells

Collection Date: 6/3/2015 11:30:00 AM

Lab ID: 1506184-003

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: DJF
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Dibromochloromethane	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Dibromomethane	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,1-Dichloroethane	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,1-Dichloroethene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,2-Dichloropropane	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,3-Dichloropropane	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
2,2-Dichloropropane	ND	2.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,1-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Hexachlorobutadiene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
2-Hexanone	ND	10		µg/L	1	6/10/2015 6:45:18 AM	R26716
Isopropylbenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
4-Isopropyltoluene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
4-Methyl-2-pentanone	ND	10		µg/L	1	6/10/2015 6:45:18 AM	R26716
Methylene Chloride	ND	3.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
n-Butylbenzene	ND	3.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
n-Propylbenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
sec-Butylbenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Styrene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
tert-Butylbenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
trans-1,2-DCE	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Trichlorofluoromethane	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Vinyl chloride	ND	1.0		µg/L	1	6/10/2015 6:45:18 AM	R26716
Xylenes, Total	ND	1.5		µg/L	1	6/10/2015 6:45:18 AM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506184

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-10

Project: 2015 2nd Quarter-OW Wells

Collection Date: 6/3/2015 11:30:00 AM

Lab ID: 1506184-003

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: DJF	
Surr: 1,2-Dichloroethane-d4	90.8	70-130		%REC	1	6/10/2015 6:45:18 AM	R26716
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	6/10/2015 6:45:18 AM	R26716
Surr: Dibromofluoromethane	95.7	70-130		%REC	1	6/10/2015 6:45:18 AM	R26716
Surr: Toluene-d8	104	70-130		%REC	1	6/10/2015 6:45:18 AM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 14 of 37
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506184

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Blind Duplicate

Project: 2015 2nd Quarter-OW Wells

Collection Date: 6/3/2015

Lab ID: 1506184-004

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
Acenaphthene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Acenaphthylene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Aniline	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Anthracene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Azobenzene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Benz(a)anthracene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Benzo(a)pyrene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Benzo(b)fluoranthene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Benzo(k)fluoranthene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Benzoic acid	ND	20		µg/L	1	6/9/2015 3:27:09 PM	19583
Benzyl alcohol	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Butyl benzyl phthalate	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Carbazole	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
4-Chloroaniline	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
2-Chloronaphthalene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
2-Chlorophenol	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Chrysene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Di-n-butyl phthalate	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Di-n-octyl phthalate	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Dibenzofuran	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
1,2-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
1,3-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
1,4-Dichlorobenzene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Diethyl phthalate	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Dimethyl phthalate	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
2,4-Dichlorophenol	ND	20		µg/L	1	6/9/2015 3:27:09 PM	19583
2,4-Dimethylphenol	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/9/2015 3:27:09 PM	19583
2,4-Dinitrophenol	ND	20		µg/L	1	6/9/2015 3:27:09 PM	19583

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506184

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Blind Duplicate

Project: 2015 2nd Quarter-OW Wells

Collection Date: 6/3/2015

Lab ID: 1506184-004

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
2,4-Dinitrotoluene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
2,6-Dinitrotoluene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Fluoranthene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Fluorene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Hexachlorobenzene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Hexachlorobutadiene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Hexachloroethane	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Isophorone	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
1-Methylnaphthalene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
2-Methylnaphthalene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
2-Methylphenol	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
3+4-Methylphenol	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
N-Nitrosodimethylamine	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Naphthalene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
2-Nitroaniline	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
3-Nitroaniline	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
4-Nitroaniline	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Nitrobenzene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
2-Nitrophenol	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
4-Nitrophenol	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Pentachlorophenol	ND	20		µg/L	1	6/9/2015 3:27:09 PM	19583
Phenanthrene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Phenol	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Pyrene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Pyridine	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/9/2015 3:27:09 PM	19583
Surr: 2-Fluorophenol	35.5	14.9-111		%REC	1	6/9/2015 3:27:09 PM	19583
Surr: Phenol-d5	41.4	11.3-108		%REC	1	6/9/2015 3:27:09 PM	19583
Surr: 2,4,6-Tribromophenol	67.3	15.7-154		%REC	1	6/9/2015 3:27:09 PM	19583
Surr: Nitrobenzene-d5	58.8	47.8-106		%REC	1	6/9/2015 3:27:09 PM	19583
Surr: 2-Fluorobiphenyl	67.6	21.3-123		%REC	1	6/9/2015 3:27:09 PM	19583
Surr: 4-Terphenyl-d14	65.4	14.3-135		%REC	1	6/9/2015 3:27:09 PM	19583

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506184

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: 2015 2nd Quarter-OW Wells

Collection Date:

Lab ID: 1506184-005

Matrix: TRIP BLANK

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/8/2015 11:27:02 PM	R26688
Surr: BFB	88.4	57.8-137		%REC	1	6/8/2015 11:27:02 PM	R26688
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Toluene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Ethylbenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Naphthalene	ND	2.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1-Methylnaphthalene	ND	4.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
2-Methylnaphthalene	ND	4.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Acetone	ND	10		µg/L	1	6/10/2015 7:12:58 AM	R26716
Bromobenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Bromodichloromethane	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Bromoform	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Bromomethane	ND	3.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
2-Butanone	ND	10		µg/L	1	6/10/2015 7:12:58 AM	R26716
Carbon disulfide	ND	10		µg/L	1	6/10/2015 7:12:58 AM	R26716
Carbon Tetrachloride	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Chlorobenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Chloroethane	ND	2.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Chloroform	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Chloromethane	ND	3.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
2-Chlorotoluene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
4-Chlorotoluene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
cis-1,2-DCE	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Dibromochloromethane	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Dibromomethane	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,1-Dichloroethane	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,1-Dichloroethene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506184

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: 2015 2nd Quarter-OW Wells

Collection Date:

Lab ID: 1506184-005

Matrix: TRIP BLANK

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
1,2-Dichloropropane	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,3-Dichloropropane	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
2,2-Dichloropropane	ND	2.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,1-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Hexachlorobutadiene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
2-Hexanone	ND	10		µg/L	1	6/10/2015 7:12:58 AM	R26716
Isopropylbenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
4-Isopropyltoluene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
4-Methyl-2-pentanone	ND	10		µg/L	1	6/10/2015 7:12:58 AM	R26716
Methylene Chloride	ND	3.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
n-Butylbenzene	ND	3.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
n-Propylbenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
sec-Butylbenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Styrene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
tert-Butylbenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
trans-1,2-DCE	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Trichlorofluoromethane	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Vinyl chloride	ND	1.0		µg/L	1	6/10/2015 7:12:58 AM	R26716
Xylenes, Total	ND	1.5		µg/L	1	6/10/2015 7:12:58 AM	R26716
Surr: 1,2-Dichloroethane-d4	93.1	70-130		%REC	1	6/10/2015 7:12:58 AM	R26716
Surr: 4-Bromofluorobenzene	108	70-130		%REC	1	6/10/2015 7:12:58 AM	R26716
Surr: Dibromofluoromethane	92.3	70-130		%REC	1	6/10/2015 7:12:58 AM	R26716
Surr: Toluene-d8	101	70-130		%REC	1	6/10/2015 7:12:58 AM	R26716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 18 of 37
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506184

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID:	R26842	RunNo:	26842					
Prep Date:		Analysis Date:	6/15/2015	SeqNo:	800962	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								
Sodium	ND	1.0								
Zinc	ND	0.010								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW	Batch ID:	R26842	RunNo:	26842					
Prep Date:		Analysis Date:	6/15/2015	SeqNo:	800963	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	95.1	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.9	85	115			
Calcium	49	1.0	50.00	0	98.7	85	115			
Chromium	0.48	0.0060	0.5000	0	96.8	85	115			
Copper	0.49	0.0060	0.5000	0	97.9	85	115			
Iron	0.48	0.020	0.5000	0	95.8	85	115			
Magnesium	50	1.0	50.00	0	99.1	85	115			
Manganese	0.46	0.0020	0.5000	0	92.8	85	115			
Potassium	49	1.0	50.00	0	98.6	85	115			
Sodium	48	1.0	50.00	0	96.7	85	115			
Zinc	0.47	0.010	0.5000	0	94.6	85	115			

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID:	R26842	RunNo:	26842					
Prep Date:		Analysis Date:	6/15/2015	SeqNo:	801190	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								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506184

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R26842			RunNo: 26842					
Prep Date:		Analysis Date: 6/15/2015			SeqNo: 801190		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Sodium	ND	1.0								
Zinc	ND	0.010								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26842		RunNo: 26842					
Prep Date:			Analysis Date: 6/15/2015		SeqNo: 801191		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.47	0.0020	0.5000	0	94.7	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.0	85	115			
Calcium	52	1.0	50.00	0	104	85	115			
Chromium	0.48	0.0060	0.5000	0	95.8	85	115			
Copper	0.49	0.0060	0.5000	0	97.7	85	115			
Iron	0.49	0.020	0.5000	0	97.1	85	115			
Magnesium	52	1.0	50.00	0	105	85	115			
Manganese	0.46	0.0020	0.5000	0	92.4	85	115			
Potassium	51	1.0	50.00	0	102	85	115			
Sodium	52	1.0	50.00	0	103	85	115			
Zinc	0.47	0.010	0.5000	0	94.9	85	115			

Sample ID	MB	SampType:	MBLK		TestCode:	EPA Method 200.7: Dissolved Metals				
Client ID:	PBW	Batch ID:	R26882		RunNo:	26882				
Prep Date:		Analysis Date:	6/16/2015		SeqNo:	802272	Units:	mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	ND	0.0050								
Sodium	ND	1.0								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26882		RunNo: 26882					
Prep Date:			Analysis Date: 6/16/2015		SeqNo: 802273		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.10	0.0050	0.1000	0	101	85	115			
Sodium	49	1.0	50.00	0	97.8	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506184

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	MB-19599	SampType: MBLK			TestCode: EPA Method 200.7: Total Metals					
Client ID:	PBW	Batch ID: 19599			RunNo: 26704					
Prep Date:	6/6/2015	Analysis Date: 6/9/2015			SeqNo: 795801		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-19599		SampType: LCS		TestCode: EPA Method 200.7: Total Metals					
Client ID:	LCSW		Batch ID: 19599		RunNo: 26704					
Prep Date:	6/6/2015		Analysis Date: 6/9/2015		SeqNo: 795802		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0	99.7	85	115			
Cadmium	0.53	0.0020	0.5000	0	106	85	115			
Chromium	0.50	0.0060	0.5000	0	101	85	115			
Copper	0.49	0.0060	0.5000	0	97.9	85	115			
Iron	0.49	0.020	0.5000	0	98.7	85	115			
Manganese	0.48	0.0020	0.5000	0	95.3	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.51	0.010	0.5000	0	101	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506184

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID LCS	SampType: LCS				TestCode: EPA 200.8: Dissolved Metals					
Client ID: LCSW	Batch ID: R26876				RunNo: 26876					
Prep Date:	Analysis Date: 6/16/2015				SeqNo: 802096		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	99.0	85	115			
Lead	0.013	0.00050	0.01250	0	101	85	115			
Selenium	0.025	0.0010	0.02500	0	99.4	85	115			
Uranium	0.013	0.00050	0.01250	0	102	85	115			

Sample ID LCS	SampType: LCS				TestCode: EPA 200.8: Dissolved Metals					
Client ID: LCSW	Batch ID: R26876				RunNo: 26876					
Prep Date:	Analysis Date: 6/16/2015				SeqNo: 802099		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	98.9	85	115			
Lead	0.012	0.00050	0.01250	0	96.3	85	115			
Selenium	0.025	0.0010	0.02500	0	100	85	115			
Uranium	0.012	0.00050	0.01250	0	96.9	85	115			

Sample ID MB	SampType: MBLK				TestCode: EPA 200.8: Dissolved Metals					
Client ID: PBW	Batch ID: R26876				RunNo: 26876					
Prep Date:	Analysis Date: 6/16/2015				SeqNo: 802100		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: R26876				RunNo: 26876					
Prep Date:	Analysis Date: 6/16/2015				SeqNo: 802101		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.
 E Value above quantitation range
 J Analyte detected below quantitation limits
 O RSD is greater than RSDlimit
 R RPD outside accepted recovery limits
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 P Sample pH Not In Range
 RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506184

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	LCSLL-19599		SampType: LCSLL		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	BatchQC		Batch ID: 19599		RunNo: 26682					
Prep Date:	6/6/2015		Analysis Date: 6/8/2015		SeqNo: 794999		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	94.2	85	115			
Lead	0.012	0.00050	0.01250	0	99.9	85	115			
Selenium	0.023	0.0010	0.02500	0	93.3	85	115			
Uranium	0.013	0.00050	0.01250	0	101	85	115			

Sample ID	MB-19599		SampType: MBLK		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	PBW		Batch ID: 19599		RunNo: 26682					
Prep Date:	6/6/2015		Analysis Date: 6/8/2015		SeqNo: 795000		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.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506184

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	MB-19589	SampType:	MBLK	TestCode:	EPA Method 245.1: Mercury					
Client ID:	PBW	Batch ID:	19589	RunNo:	26652					
Prep Date:	6/5/2015	Analysis Date:	6/5/2015	SeqNo:	793971	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	LCS-19589	SampType:	LCS	TestCode:	EPA Method 245.1: Mercury					
Client ID:	LCSW	Batch ID:	19589	RunNo:	26652					
Prep Date:	6/5/2015	Analysis Date:	6/5/2015	SeqNo:	793972	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	99.2	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506184

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R26681	RunNo:	26681					
Prep Date:		Analysis Date:	6/5/2015	SeqNo:	794808	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	MB	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R26681	RunNo:	26681					
Prep Date:		Analysis Date:	6/5/2015	SeqNo:	794872	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:	R26681	RunNo:	26681					
Prep Date:		Analysis Date:	6/6/2015	SeqNo:	794873	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.49	0.10	0.5000	0	98.1	90	110			
Chloride	4.6	0.50	5.000	0	91.6	90	110			
Bromide	2.4	0.10	2.500	0	94.5	90	110			
Phosphorus, Orthophosphate (As P	4.7	0.50	5.000	0	94.5	90	110			
Sulfate	9.4	0.50	10.00	0	94.1	90	110			
Nitrate+Nitrite as N	3.3	0.20	3.500	0	95.3	90	110			

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R26721	RunNo:	26721					
Prep Date:		Analysis Date:	6/9/2015	SeqNo:	796475	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506184

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSW	Batch ID:	R26721	RunNo:	26721					
Prep Date:		Analysis Date:	6/9/2015	SeqNo:	796476	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	103	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506184

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	MB-19569	SampType: MBLK		TestCode: EPA Method 8015D: Diesel Range						
Client ID:	PBW	Batch ID: 19569		RunNo: 26673						
Prep Date:	6/4/2015	Analysis Date: 6/8/2015		SeqNo: 795204			Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	0.94		1.000		94.1	76.5	150			

Sample ID	LCS-19569		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	LCSW		Batch ID: 19569		RunNo: 26673					
Prep Date:	6/4/2015		Analysis Date: 6/8/2015		SeqNo: 795205		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	3.8	1.0	5.000	0	75.9	60.1	156			
Surr: DNOP	0.33		0.5000		66.9	76.5	150			S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506184

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID:	R26688	RunNo:	26688					
Prep Date:		Analysis Date:	6/8/2015	SeqNo:	795136	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		88.0	57.8	137			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	R26688	RunNo:	26688					
Prep Date:		Analysis Date:	6/8/2015	SeqNo:	795137	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.49	0.050	0.5000	0	97.0	80	120			
Surr: BFB	20		20.00		100	57.8	137			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506184

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	5ml rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R26716	RunNo:	26716					
Prep Date:		Analysis Date:	6/9/2015	SeqNo:	796185	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506184

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R26716			RunNo: 26716					
Prep Date:		Analysis Date: 6/9/2015			SeqNo: 796185		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.5	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.3	70	130			
Surr: Dibromofluoromethane	8.7		10.00		86.9	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID	100nglcs,200ngT2st			SampType: LCS	TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW		Batch ID: R26716		RunNo: 26716					
Prep Date:			Analysis Date: 6/9/2015		SeqNo: 796187		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	96.5	70	130			
Toluene	19	1.0	20.00	0	94.7	70	130			
Chlorobenzene	18	1.0	20.00	0	90.3	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506184

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	100nglcs,200ngT2st			SampType:	LCS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	LCSW			Batch ID:	R26716		RunNo:	26716			
Prep Date:				Analysis Date:	6/9/2015		SeqNo:	796187	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
1,1-Dichloroethene	22	1.0	20.00	0	108	75.6	144				
Trichloroethene (TCE)	18	1.0	20.00	0	90.8	70	130				
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.9	70	130				
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130				
Surr: Dibromofluoromethane	9.0		10.00		89.8	70	130				
Surr: Toluene-d8	10		10.00		104	70	130				

Sample ID	b3	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R26716			RunNo: 26716					
Prep Date:		Analysis Date: 6/9/2015			SeqNo: 796233		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506184

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	b3	SampType:	MBLK		TestCode:	EPA Method 8260B: VOLATILES				
Client ID:	PBW	Batch ID:	R26716		RunNo:	26716				
Prep Date:		Analysis Date:	6/9/2015		SeqNo:	796233	Units:	µg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		99.8	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506184

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID b3	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R26716			RunNo: 26716						
Prep Date:	Analysis Date: 6/9/2015			SeqNo: 796233		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	9.9		10.00		99.2	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	9.8		10.00		97.5	70	130			

Sample ID 100ng lcs2	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSW	Batch ID: R26716			RunNo: 26716						
Prep Date:	Analysis Date: 6/9/2015			SeqNo: 796235		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	70	130			
Toluene	21	1.0	20.00	0	104	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	114	75.6	144			
Trichloroethene (TCE)	19	1.0	20.00	0	94.7	70	130			
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506184

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	mb-19583		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 19583		RunNo: 26697					
Prep Date:	6/5/2015		Analysis Date: 6/9/2015		SeqNo: 795540		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506184

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	mb-19583	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	19583	RunNo:	26697					
Prep Date:	6/5/2015	Analysis Date:	6/9/2015	SeqNo:	795540	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		53.6	14.9	111			
Surr: Phenol-d5	120		200.0		59.4	11.3	108			
Surr: 2,4,6-Tribromophenol	130		200.0		66.3	15.7	154			
Surr: Nitrobenzene-d5	62		100.0		61.7	47.8	106			
Surr: 2-Fluorobiphenyl	61		100.0		61.0	21.3	123			
Surr: 4-Terphenyl-d14	65		100.0		65.3	14.3	135			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506184

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	lcs-19583		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 19583		RunNo: 26697					
Prep Date:	6/5/2015		Analysis Date: 6/9/2015		SeqNo: 795541		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	61	10	100.0	0	61.0	47.8	99.7			
4-Chloro-3-methylphenol	130	10	200.0	0	65.4	58.1	103			
2-Chlorophenol	110	10	200.0	0	55.9	49.5	96.8			
1,4-Dichlorobenzene	53	10	100.0	0	52.7	40.4	89.4			
2,4-Dinitrotoluene	59	10	100.0	0	59.4	38.6	91.3			
N-Nitrosodi-n-propylamine	63	10	100.0	0	62.9	53.9	95.6			
4-Nitrophenol	120	10	200.0	0	60.7	26.4	108			
Pentachlorophenol	120	20	200.0	0	58.6	36.5	86.6			
Phenol	110	10	200.0	0	53.8	29.3	108			
Pyrene	67	10	100.0	0	67.2	45.7	100			
1,2,4-Trichlorobenzene	55	10	100.0	0	54.9	39.3	94.5			
Surr: 2-Fluorophenol	97		200.0		48.6	14.9	111			
Surr: Phenol-d5	110		200.0		57.2	11.3	108			
Surr: 2,4,6-Tribromophenol	140		200.0		70.8	15.7	154			
Surr: Nitrobenzene-d5	56		100.0		56.1	47.8	106			
Surr: 2-Fluorobiphenyl	53		100.0		53.4	21.3	123			
Surr: 4-Terphenyl-d14	63		100.0		62.6	14.3	135			

Sample ID	lcsd-19583		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 19583		RunNo: 26697					
Prep Date:	6/5/2015		Analysis Date: 6/9/2015		SeqNo: 795542		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	81	10	100.0	0	81.4	47.8	99.7	28.7	28.2	R
4-Chloro-3-methylphenol	160	10	200.0	0	78.7	58.1	103	18.5	24.4	
2-Chlorophenol	150	10	200.0	0	72.7	49.5	96.8	26.1	28.1	
1,4-Dichlorobenzene	66	10	100.0	0	66.2	40.4	89.4	22.8	31.2	
2,4-Dinitrotoluene	68	10	100.0	0	67.9	38.6	91.3	13.4	44.4	
N-Nitrosodi-n-propylamine	73	10	100.0	0	72.8	53.9	95.6	14.6	24.2	
4-Nitrophenol	150	10	200.0	0	75.4	26.4	108	21.5	36.6	
Pentachlorophenol	140	20	200.0	0	71.7	36.5	86.6	20.2	29.5	
Phenol	140	10	200.0	0	69.4	29.3	108	25.4	30	
Pyrene	74	10	100.0	0	73.8	45.7	100	9.39	31	
1,2,4-Trichlorobenzene	76	10	100.0	0	76.1	39.3	94.5	32.2	24	R
Surr: 2-Fluorophenol	130		200.0		65.3	14.9	111	0	0	
Surr: Phenol-d5	150		200.0		74.0	11.3	108	0	0	
Surr: 2,4,6-Tribromophenol	180		200.0		91.8	15.7	154	0	0	
Surr: Nitrobenzene-d5	76		100.0		76.5	47.8	106	0	0	
Surr: 2-Fluorobiphenyl	77		100.0		77.5	21.3	123	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506184

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter-OW Wells

Sample ID	lcscd-19583	SampType:	LCSD	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02	Batch ID:	19583	RunNo:	26697					
Prep Date:	6/5/2015	Analysis Date:	6/9/2015	SeqNo:	795542	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	63		100.0		63.3	14.3	135	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

Sample Log-In Check List

Client Name: **Western Refining Gallup**

Work Order Number: **1506184**

RcptNo: 1

Received by/date:

CS

06/03/15

Logged By: **Ashley Gallegos**

6/3/2015 4:07:00 PM

Ag

Completed By: **Ashley Gallegos**

6/4/2015 7:25:18 AM

Ag

Reviewed By:

Ja

06/04/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☒ No ☐ Not Present ☐
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☒ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐ # of preserved bottles checked for pH: 6 (2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐ Adjusted? 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 ☐ Checked by:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.3	Good	Yes			



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 24, 2015

Cheryl Johnson

Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: 2015 - 2ND Qtr STP1-NW

OrderNo.: 1506270

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/3/2015 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', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506270

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: STP1-NW

Project: 2015 - 2ND Qtr STP1-NW

Collection Date: 6/2/2015 10:05:00 AM

Lab ID: 1506270-001

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/16/2015 5:53:24 PM	R26876
Lead	ND	0.010		mg/L	10	6/16/2015 5:53:24 PM	R26876
Selenium	0.020	0.010		mg/L	10	6/16/2015 5:53:24 PM	R26876
Uranium	0.021	0.010		mg/L	10	6/16/2015 5:53:24 PM	R26876
EPA METHOD 300.0: ANIONS							Analyst: LGT
Fluoride	ND	0.50		mg/L	5	6/5/2015 10:28:53 PM	R26674
Chloride	2100	100		mg/L	200	6/9/2015 10:47:34 PM	R26721
Bromide	3.7	0.50		mg/L	5	6/5/2015 10:28:53 PM	R26674
Phosphorus, Orthophosphate (As P)	ND	2.5	H	mg/L	5	6/5/2015 10:28:53 PM	R26674
Sulfate	130	2.5		mg/L	5	6/5/2015 10:28:53 PM	R26674
Nitrate+Nitrite as N	25	1.0	*	mg/L	5	6/5/2015 10:53:43 PM	R26674
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.13	0.0020		mg/L	1	6/15/2015 6:44:07 PM	R26842
Cadmium	ND	0.0020		mg/L	1	6/15/2015 6:44:07 PM	R26842
Calcium	79	1.0		mg/L	1	6/15/2015 6:44:07 PM	R26842
Chromium	ND	0.0060		mg/L	1	6/15/2015 6:44:07 PM	R26842
Copper	ND	0.0060		mg/L	1	6/15/2015 6:44:07 PM	R26842
Iron	0.045	0.020		mg/L	1	6/15/2015 6:44:07 PM	R26842
Magnesium	11	1.0		mg/L	1	6/15/2015 6:44:07 PM	R26842
Manganese	ND	0.0020		mg/L	1	6/15/2015 6:44:07 PM	R26842
Potassium	5.7	1.0		mg/L	1	6/15/2015 6:44:07 PM	R26842
Silver	ND	0.0050		mg/L	1	6/16/2015 3:30:53 PM	R26882
Sodium	1300	50		mg/L	50	6/16/2015 3:35:04 PM	R26882
Zinc	ND	0.010		mg/L	1	6/15/2015 6:44:07 PM	R26842
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.24	0.0020		mg/L	1	6/9/2015 2:25:36 PM	19599
Cadmium	ND	0.0020		mg/L	1	6/9/2015 2:25:36 PM	19599
Chromium	0.0066	0.0060		mg/L	1	6/9/2015 2:25:36 PM	19599
Copper	ND	0.0060		mg/L	1	6/9/2015 2:25:36 PM	19599
Iron	3.2	0.10	*	mg/L	5	6/10/2015 3:37:34 PM	19599
Manganese	0.095	0.0020	*	mg/L	1	6/9/2015 2:25:36 PM	19599
Silver	ND	0.0050		mg/L	1	6/9/2015 2:25:36 PM	19599
Zinc	0.061	0.010		mg/L	1	6/9/2015 2:25:36 PM	19599
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/16/2015 1:26:50 PM	19599
Lead	ND	0.0050		mg/L	10	6/16/2015 1:26:50 PM	19599
Selenium	ND	0.020		mg/L	20	6/16/2015 2:37:44 PM	19599

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506270

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: STP1-NW

Project: 2015 - 2ND Qtr STP1-NW

Collection Date: 6/2/2015 10:05:00 AM

Lab ID: 1506270-001

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Uranium	0.022	0.0050		mg/L	10	6/16/2015 1:26:50 PM	19599
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/15/2015 2:19:17 PM	19717
EPA METHOD 8015D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/9/2015 9:14:42 AM	19569
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/9/2015 9:14:42 AM	19569
Surr: DNOP	98.5	76.5-150		%REC	1	6/9/2015 9:14:42 AM	19569
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/9/2015 12:17:43 AM	R26688
Surr: BFB	87.3	57.8-137		%REC	1	6/9/2015 12:17:43 AM	R26688
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Acenaphthylene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Aniline	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Anthracene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Azobenzene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Benz(a)anthracene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Benzo(a)pyrene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Benzo(b)fluoranthene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Benzo(k)fluoranthene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Benzoic acid	ND	20		µg/L	1	6/10/2015 11:16:43 AM	19625
Benzyl alcohol	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Butyl benzyl phthalate	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Carbazole	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
4-Chloroaniline	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
2-Chloronaphthalene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
2-Chlorophenol	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Chrysene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Di-n-butyl phthalate	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506270

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: STP1-NW

Project: 2015 - 2ND Qtr STP1-NW

Collection Date: 6/2/2015 10:05:00 AM

Lab ID: 1506270-001

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Di-n-octyl phthalate	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Dibenzofuran	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
1,2-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
1,3-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
1,4-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Diethyl phthalate	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Dimethyl phthalate	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
2,4-Dichlorophenol	ND	20		µg/L	1	6/10/2015 11:16:43 AM	19625
2,4-Dimethylphenol	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/10/2015 11:16:43 AM	19625
2,4-Dinitrophenol	ND	20		µg/L	1	6/10/2015 11:16:43 AM	19625
2,4-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
2,6-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Fluoranthene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Fluorene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Hexachlorobenzene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Hexachlorobutadiene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Hexachloroethane	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Isophorone	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
1-Methylnaphthalene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
2-Methylnaphthalene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
2-Methylphenol	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
3+4-Methylphenol	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
N-Nitrosodimethylamine	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Naphthalene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
2-Nitroaniline	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
3-Nitroaniline	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
4-Nitroaniline	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Nitrobenzene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
2-Nitrophenol	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
4-Nitrophenol	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Pentachlorophenol	ND	20		µg/L	1	6/10/2015 11:16:43 AM	19625
Phenanthrene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506270

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: STP1-NW

Project: 2015 - 2ND Qtr STP1-NW

Collection Date: 6/2/2015 10:05:00 AM

Lab ID: 1506270-001

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Phenol	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Pyrene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Pyridine	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/10/2015 11:16:43 AM	19625
Surr: 2-Fluorophenol	50.0	14.9-111		%REC	1	6/10/2015 11:16:43 AM	19625
Surr: Phenol-d5	61.7	11.3-108		%REC	1	6/10/2015 11:16:43 AM	19625
Surr: 2,4,6-Tribromophenol	63.4	15.7-154		%REC	1	6/10/2015 11:16:43 AM	19625
Surr: Nitrobenzene-d5	91.1	47.8-106		%REC	1	6/10/2015 11:16:43 AM	19625
Surr: 2-Fluorobiphenyl	90.5	21.3-123		%REC	1	6/10/2015 11:16:43 AM	19625
Surr: 4-Terphenyl-d14	87.8	14.3-135		%REC	1	6/10/2015 11:16:43 AM	19625
EPA METHOD 8260B: VOLATILES							Analyst: DJF
Benzene	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
Toluene	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
Ethylbenzene	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
Naphthalene	ND	2.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
1-Methylnaphthalene	ND	4.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
2-Methylnaphthalene	ND	4.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
Acetone	ND	10		µg/L	1	6/11/2015 5:51:49 AM	R26729
Bromobenzene	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
Bromodichloromethane	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
Bromoform	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
Bromomethane	ND	3.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
2-Butanone	ND	10		µg/L	1	6/11/2015 5:51:49 AM	R26729
Carbon disulfide	ND	10		µg/L	1	6/11/2015 5:51:49 AM	R26729
Carbon Tetrachloride	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
Chlorobenzene	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
Chloroethane	ND	2.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
Chloroform	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
Chloromethane	ND	3.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
2-Chlorotoluene	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
4-Chlorotoluene	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
cis-1,2-DCE	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506270

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: STP1-NW

Project: 2015 - 2ND Qtr STP1-NW

Collection Date: 6/2/2015 10:05:00 AM

Lab ID: 1506270-001

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: DJF			
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
Dibromochloromethane	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
Dibromomethane	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
1,1-Dichloroethane	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
1,1-Dichloroethene	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
1,2-Dichloropropane	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
1,3-Dichloropropane	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
2,2-Dichloropropane	ND	2.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
1,1-Dichloropropene	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
Hexachlorobutadiene	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
2-Hexanone	ND	10		µg/L	1	6/11/2015 5:51:49 AM	R26729
Isopropylbenzene	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
4-Isopropyltoluene	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
4-Methyl-2-pentanone	ND	10		µg/L	1	6/11/2015 5:51:49 AM	R26729
Methylene Chloride	ND	3.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
n-Butylbenzene	ND	3.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
n-Propylbenzene	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
sec-Butylbenzene	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
Styrene	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
tert-Butylbenzene	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
trans-1,2-DCE	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
Trichlorofluoromethane	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
Vinyl chloride	ND	1.0		µg/L	1	6/11/2015 5:51:49 AM	R26729
Xylenes, Total	ND	1.5		µg/L	1	6/11/2015 5:51:49 AM	R26729

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 5 of 25
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506270

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: STP1-NW

Project: 2015 - 2ND Qtr STP1-NW

Collection Date: 6/2/2015 10:05:00 AM

Lab ID: 1506270-001

Matrix: AQUEOUS

Received Date: 6/3/2015 4:07:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: DJF	
Surr: 1,2-Dichloroethane-d4	97.1	70-130		%REC	1	6/11/2015 5:51:49 AM	R26729
Surr: 4-Bromofluorobenzene	94.2	70-130		%REC	1	6/11/2015 5:51:49 AM	R26729
Surr: Dibromofluoromethane	99.9	70-130		%REC	1	6/11/2015 5:51:49 AM	R26729
Surr: Toluene-d8	101	70-130		%REC	1	6/11/2015 5:51:49 AM	R26729

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 6 of 25
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506270

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 - 2ND Qtr STP1-NW

Sample ID	MB		SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals				
Client ID:	PBW		Batch ID: R26842			RunNo: 26842				
Prep Date:			Analysis Date: 6/15/2015			SeqNo: 800962		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Zinc	ND	0.010								

Sample ID	LCS		SampType: LCS			TestCode: EPA Method 200.7: Dissolved Metals				
Client ID:	LCSW		Batch ID: R26842			RunNo: 26842				
Prep Date:			Analysis Date: 6/15/2015			SeqNo: 800963		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	95.1	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.9	85	115			
Calcium	49	1.0	50.00	0	98.7	85	115			
Chromium	0.48	0.0060	0.5000	0	96.8	85	115			
Copper	0.49	0.0060	0.5000	0	97.9	85	115			
Iron	0.48	0.020	0.5000	0	95.8	85	115			
Magnesium	50	1.0	50.00	0	99.1	85	115			
Manganese	0.46	0.0020	0.5000	0	92.8	85	115			
Potassium	49	1.0	50.00	0	98.6	85	115			
Zinc	0.47	0.010	0.5000	0	94.6	85	115			

Sample ID	MB		SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals				
Client ID:	PBW		Batch ID: R26842			RunNo: 26842				
Prep Date:			Analysis Date: 6/15/2015			SeqNo: 801190		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								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506270

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 - 2ND Qtr STP1-NW

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID:	R26842	RunNo:	26842					
Prep Date:		Analysis Date:	6/15/2015	SeqNo:	801190	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	ND	1.0								
Zinc	ND	0.010								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW	Batch ID:	R26842	RunNo:	26842					
Prep Date:		Analysis Date:	6/15/2015	SeqNo:	801191	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.47	0.0020	0.5000	0	94.7	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.0	85	115			
Calcium	52	1.0	50.00	0	104	85	115			
Chromium	0.48	0.0060	0.5000	0	95.8	85	115			
Copper	0.49	0.0060	0.5000	0	97.7	85	115			
Iron	0.49	0.020	0.5000	0	97.1	85	115			
Magnesium	52	1.0	50.00	0	105	85	115			
Manganese	0.46	0.0020	0.5000	0	92.4	85	115			
Potassium	51	1.0	50.00	0	102	85	115			
Zinc	0.47	0.010	0.5000	0	94.9	85	115			

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID:	R26882	RunNo:	26882					
Prep Date:		Analysis Date:	6/16/2015	SeqNo:	802272	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	ND	0.0050								
Sodium	ND	1.0								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW	Batch ID:	R26882	RunNo:	26882					
Prep Date:		Analysis Date:	6/16/2015	SeqNo:	802273	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.10	0.0050	0.1000	0	101	85	115			
Sodium	49	1.0	50.00	0	97.8	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506270

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 - 2ND Qtr STP1-NW

Sample ID	MB-19599	SampType: MBLK			TestCode: EPA Method 200.7: Total Metals					
Client ID:	PBW	Batch ID: 19599			RunNo: 26704					
Prep Date:	6/6/2015	Analysis Date: 6/9/2015			SeqNo: 795801		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-19599		SampType: LCS		TestCode: EPA Method 200.7: Total Metals					
Client ID:	LCSW		Batch ID: 19599		RunNo: 26704					
Prep Date:	6/6/2015		Analysis Date: 6/9/2015		SeqNo: 795802		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0	99.7	85	115			
Cadmium	0.53	0.0020	0.5000	0	106	85	115			
Chromium	0.50	0.0060	0.5000	0	101	85	115			
Copper	0.49	0.0060	0.5000	0	97.9	85	115			
Iron	0.49	0.020	0.5000	0	98.7	85	115			
Manganese	0.48	0.0020	0.5000	0	95.3	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.51	0.010	0.5000	0	101	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506270

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 - 2ND Qtr STP1-NW

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26876		RunNo: 26876					
Prep Date:			Analysis Date: 6/16/2015		SeqNo: 802096		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	99.0	85	115			
Lead	0.013	0.00050	0.01250	0	101	85	115			
Selenium	0.025	0.0010	0.02500	0	99.4	85	115			
Uranium	0.013	0.00050	0.01250	0	102	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26876		RunNo: 26876					
Prep Date:			Analysis Date: 6/16/2015		SeqNo: 802099		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	98.9	85	115			
Lead	0.012	0.00050	0.01250	0	96.3	85	115			
Selenium	0.025	0.0010	0.02500	0	100	85	115			
Uranium	0.012	0.00050	0.01250	0	96.9	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R26876			RunNo: 26876					
Prep Date:		Analysis Date: 6/16/2015			SeqNo: 802100		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: R26876			RunNo: 26876					
Prep Date:		Analysis Date: 6/16/2015			SeqNo: 802101		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.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506270

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 - 2ND Qtr STP1-NW

Sample ID	LCSLL-19599		SampType: LCSLL		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	BatchQC		Batch ID: 19599		RunNo: 26682					
Prep Date:	6/6/2015		Analysis Date: 6/8/2015		SeqNo: 794999		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	94.2	85	115			
Lead	0.012	0.00050	0.01250	0	99.9	85	115			
Selenium	0.023	0.0010	0.02500	0	93.3	85	115			
Uranium	0.013	0.00050	0.01250	0	101	85	115			

Sample ID	MB-19599		SampType: MBLK		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	PBW		Batch ID: 19599		RunNo: 26682					
Prep Date:	6/6/2015		Analysis Date: 6/8/2015		SeqNo: 795000		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.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506270

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 - 2ND Qtr STP1-NW

Sample ID	MB-19717	SampType:	MBLK	TestCode:	EPA Method 245.1: Mercury					
Client ID:	PBW	Batch ID:	19717	RunNo:	26833					
Prep Date:	6/15/2015	Analysis Date:	6/15/2015	SeqNo:	800384	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	LCS-19717	SampType:	LCS	TestCode:	EPA Method 245.1: Mercury					
Client ID:	LCSW	Batch ID:	19717	RunNo:	26833					
Prep Date:	6/15/2015	Analysis Date:	6/15/2015	SeqNo:	800385	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	100	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506270

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 - 2ND Qtr STP1-NW

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R26674	RunNo:	26674					
Prep Date:		Analysis Date:	6/5/2015	SeqNo:	794611	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								
Nitrate+Nitrite as N	ND	0.20								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSW	Batch ID:	R26674	RunNo:	26674					
Prep Date:		Analysis Date:	6/5/2015	SeqNo:	794612	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.53	0.10	0.5000	0	106	90	110			
Bromide	2.5	0.10	2.500	0	100	90	110			
Phosphorus, Orthophosphate (As P	5.0	0.50	5.000	0	99.9	90	110			
Sulfate	9.9	0.50	10.00	0	98.9	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:	R26674	RunNo:	26674					
Prep Date:		Analysis Date:	6/6/2015	SeqNo:	794669	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								
Nitrate+Nitrite as N	ND	0.20								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSW	Batch ID:	R26674	RunNo:	26674					
Prep Date:		Analysis Date:	6/6/2015	SeqNo:	794670	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.49	0.10	0.5000	0	98.8	90	110			
Bromide	2.3	0.10	2.500	0	91.5	90	110			
Phosphorus, Orthophosphate (As P	4.6	0.50	5.000	0	92.1	90	110			
Sulfate	9.1	0.50	10.00	0	90.5	90	110			
Nitrate+Nitrite as N	3.2	0.20	3.500	0	92.7	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506270

24-Jun-15

Client: Western Refining Southwest, Gallup**Project:** 2015 - 2ND Qtr STP1-NW

Sample ID MB	SampType: MBLK		TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch ID: R26721		RunNo: 26721							
Prep Date:	Analysis Date: 6/9/2015		SeqNo: 796475		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID LCS	SampType: LCS		TestCode: EPA Method 300.0: Anions							
Client ID: LCSW	Batch ID: R26721		RunNo: 26721							
Prep Date:	Analysis Date: 6/9/2015		SeqNo: 796476		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	103	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506270

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 - 2ND Qtr STP1-NW

Sample ID	MB-19569		SampType: MBLK		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	PBW		Batch ID: 19569		RunNo: 26673					
Prep Date:	6/4/2015		Analysis Date: 6/8/2015		SeqNo: 795204		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	0.94		1.000		94.1	76.5	150			

Sample ID	LCS-19569		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	LCSW		Batch ID: 19569		RunNo: 26673					
Prep Date:	6/4/2015		Analysis Date: 6/8/2015		SeqNo: 795205		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	3.8	1.0	5.000	0	75.9	60.1	156			
Surr: DNOP	0.33		0.5000		66.9	76.5	150			S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506270

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 - 2ND Qtr STP1-NW

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID:	R26688	RunNo:	26688					
Prep Date:		Analysis Date:	6/8/2015	SeqNo:	795136	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		88.0	57.8	137			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	R26688	RunNo:	26688					
Prep Date:		Analysis Date:	6/8/2015	SeqNo:	795137	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.49	0.050	0.5000	0	97.0	80	120			
Surr: BFB	20		20.00		100	57.8	137			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506270

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 - 2ND Qtr STP1-NW

Sample ID	rb1	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R26729			RunNo: 26729					
Prep Date:		Analysis Date: 6/10/2015			SeqNo: 796751		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506270

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 - 2ND Qtr STP1-NW

Sample ID	rb1	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R26729	RunNo:	26729					
Prep Date:		Analysis Date:	6/10/2015	SeqNo:	796751	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.6		10.00		95.6	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	9.5		10.00		94.6	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID	100nglcs,200ngT2lc	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID:	R26729	RunNo:	26729					
Prep Date:		Analysis Date:	6/10/2015	SeqNo:	796753	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	20	1.0	20.00	0	100	70	130			
Chlorobenzene	20	1.0	20.00	0	98.7	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506270

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 - 2ND Qtr STP1-NW

Sample ID	100nglcs,200ngT2lc			SampType:	LCS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	LCSW		Batch ID:	R26729		RunNo:	26729				
Prep Date:			Analysis Date:	6/10/2015		SeqNo:	796753		Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
1,1-Dichloroethene	23	1.0	20.00	0	116	75.6	144				
Trichloroethene (TCE)	19	1.0	20.00	0	93.7	70	130				
Surr: 1,2-Dichloroethane-d4	9.6		10.00		96.2	70	130				
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130				
Surr: Dibromofluoromethane	9.3		10.00		92.9	70	130				
Surr: Toluene-d8	10		10.00		100	70	130				

Sample ID	rb3	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R26729			RunNo: 26729					
Prep Date:		Analysis Date: 6/10/2015			SeqNo: 797455		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506270

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 - 2ND Qtr STP1-NW

Sample ID	rb3	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R26729	RunNo:	26729					
Prep Date:		Analysis Date:	6/10/2015	SeqNo:	797455	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.7	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506270

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 - 2ND Qtr STP1-NW

Sample ID rb3		SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID: PBW		Batch ID: R26729			RunNo: 26729					
Prep Date:		Analysis Date: 6/10/2015			SeqNo: 797455		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	9.9		10.00		99.4	70	130			
Surr: Toluene-d8	11		10.00		106	70	130			

Sample ID	100ng lcs2		SampType: LCS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW		Batch ID: R26729		RunNo: 26729					
Prep Date:			Analysis Date: 6/11/2015		SeqNo: 797459		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	70	130			
Toluene	21	1.0	20.00	0	103	70	130			
Chlorobenzene	20	1.0	20.00	0	101	70	130			
1,1-Dichloroethene	24	1.0	20.00	0	118	75.6	144			
Trichloroethene (TCE)	19	1.0	20.00	0	95.9	70	130			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.4	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	9.7		10.00		97.1	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506270

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 - 2ND Qtr STP1-NW

Sample ID	mb-19625	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	19625	RunNo:	26748					
Prep Date:	6/9/2015	Analysis Date:	6/10/2015	SeqNo:	797128	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506270

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 - 2ND Qtr STP1-NW

Sample ID	mb-19625	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	19625	RunNo:	26748					
Prep Date:	6/9/2015	Analysis Date:	6/10/2015	SeqNo:	797128	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	140		200.0		68.9	14.9	111			
Surr: Phenol-d5	150		200.0		75.0	11.3	108			
Surr: 2,4,6-Tribromophenol	160		200.0		78.5	15.7	154			
Surr: Nitrobenzene-d5	73		100.0		73.2	47.8	106			
Surr: 2-Fluorobiphenyl	74		100.0		73.6	21.3	123			
Surr: 4-Terphenyl-d14	69		100.0		69.3	14.3	135			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506270

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 - 2ND Qtr STP1-NW

Sample ID	lcs-19625		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 19625		RunNo: 26748					
Prep Date:	6/9/2015		Analysis Date: 6/10/2015		SeqNo: 797129		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	77	10	100.0	0	76.8	47.8	99.7			
4-Chloro-3-methylphenol	150	10	200.0	0	72.6	58.1	103			
2-Chlorophenol	150	10	200.0	0	73.3	49.5	96.8			
1,4-Dichlorobenzene	70	10	100.0	0	70.4	40.4	89.4			
2,4-Dinitrotoluene	54	10	100.0	0	54.4	38.6	91.3			
N-Nitrosodi-n-propylamine	69	10	100.0	0	68.7	53.9	95.6			
4-Nitrophenol	110	10	200.0	0	57.1	26.4	108			
Pentachlorophenol	130	20	200.0	0	62.6	36.5	86.6			
Phenol	140	10	200.0	0	68.9	29.3	108			
Pyrene	65	10	100.0	0	65.0	45.7	100			
1,2,4-Trichlorobenzene	75	10	100.0	0	74.6	39.3	94.5			
Surr: 2-Fluorophenol	140		200.0		68.8	14.9	111			
Surr: Phenol-d5	150		200.0		73.5	11.3	108			
Surr: 2,4,6-Tribromophenol	170		200.0		82.7	15.7	154			
Surr: Nitrobenzene-d5	77		100.0		77.2	47.8	106			
Surr: 2-Fluorobiphenyl	80		100.0		80.0	21.3	123			
Surr: 4-Terphenyl-d14	68		100.0		67.8	14.3	135			

Sample ID	lcsd-19625		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 19625		RunNo: 26748					
Prep Date:	6/9/2015		Analysis Date: 6/10/2015		SeqNo: 797133		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	61	10	100.0	0	61.4	47.8	99.7	22.3	28.2	
4-Chloro-3-methylphenol	140	10	200.0	0	67.7	58.1	103	6.93	24.4	
2-Chlorophenol	130	10	200.0	0	66.6	49.5	96.8	9.63	28.1	
1,4-Dichlorobenzene	65	10	100.0	0	65.0	40.4	89.4	8.03	31.2	
2,4-Dinitrotoluene	50	10	100.0	0	50.2	38.6	91.3	8.07	44.4	
N-Nitrosodi-n-propylamine	64	10	100.0	0	64.2	53.9	95.6	6.68	24.2	
4-Nitrophenol	110	10	200.0	0	53.0	26.4	108	7.34	36.6	
Pentachlorophenol	110	20	200.0	0	55.8	36.5	86.6	11.5	29.5	
Phenol	130	10	200.0	0	64.0	29.3	108	7.44	30	
Pyrene	65	10	100.0	0	65.0	45.7	100	0.0923	31	
1,2,4-Trichlorobenzene	68	10	100.0	0	67.6	39.3	94.5	9.84	24	
Surr: 2-Fluorophenol	120		200.0		60.8	14.9	111	0	0	
Surr: Phenol-d5	130		200.0		66.4	11.3	108	0	0	
Surr: 2,4,6-Tribromophenol	140		200.0		69.1	15.7	154	0	0	
Surr: Nitrobenzene-d5	61		100.0		61.5	47.8	106	0	0	
Surr: 2-Fluorobiphenyl	56		100.0		55.7	21.3	123	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506270

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 - 2ND Qtr STP1-NW

Sample ID	lcsd-19625	SampType:	LCSD	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02	Batch ID:	19625	RunNo:	26748					
Prep Date:	6/9/2015	Analysis Date:	6/10/2015	SeqNo:	797133	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	48		100.0		47.7	14.3	135	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

Sample Log-In Check List

Client Name: **Western Refining Gallup**

Work Order Number: **1506270**

RcptNo: 1

Received by/date:

Ag

06/03/15

Logged By: **Ashley Gallegos**

6/3/2015 4:07:00 PM

Ag

Completed By: **Ashley Gallegos**

6/5/2015 10:53:59 AM

Ag

Reviewed By:

IO

06/05/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☒
9. Was preservative added to bottles? Yes ☒ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☒ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(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:

For Metals analysis: Added 0.4 mL HNO₃ to 10 - 201F for accepted pH. Ag

3 06/05/15

yes

Ag

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.3	Good	Yes			



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 29, 2015

Cheryl Johnson

Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: 2015 2nd Quarter MKTF WELLS

OrderNo.: 1506309

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 10 sample(s) on 6/6/2015 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', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FIELD BLANK

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 7:00:00 AM

Lab ID: 1506309-001

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Toluene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Ethylbenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Naphthalene	ND	2.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1-Methylnaphthalene	ND	4.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
2-Methylnaphthalene	ND	4.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Acetone	ND	10		µg/L	1	6/13/2015 6:35:19 AM	R26816
Bromobenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Bromodichloromethane	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Bromoform	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Bromomethane	ND	3.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
2-Butanone	ND	10		µg/L	1	6/13/2015 6:35:19 AM	R26816
Carbon disulfide	ND	10		µg/L	1	6/13/2015 6:35:19 AM	R26816
Carbon Tetrachloride	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Chlorobenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Chloroethane	ND	2.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Chloroform	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Chloromethane	ND	3.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
2-Chlorotoluene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
4-Chlorotoluene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
cis-1,2-DCE	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Dibromochloromethane	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Dibromomethane	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,1-Dichloroethane	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,1-Dichloroethene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,2-Dichloropropane	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,3-Dichloropropane	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
2,2-Dichloropropane	ND	2.0		µg/L	1	6/13/2015 6:35:19 AM	R26816

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FIELD BLANK

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 7:00:00 AM

Lab ID: 1506309-001

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
1,1-Dichloropropene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Hexachlorobutadiene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
2-Hexanone	ND	10		µg/L	1	6/13/2015 6:35:19 AM	R26816
Isopropylbenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
4-Isopropyltoluene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
4-Methyl-2-pentanone	ND	10		µg/L	1	6/13/2015 6:35:19 AM	R26816
Methylene Chloride	ND	3.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
n-Butylbenzene	ND	3.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
n-Propylbenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
sec-Butylbenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Styrene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
tert-Butylbenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
trans-1,2-DCE	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Trichlorofluoromethane	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Vinyl chloride	ND	1.0		µg/L	1	6/13/2015 6:35:19 AM	R26816
Xylenes, Total	ND	1.5		µg/L	1	6/13/2015 6:35:19 AM	R26816
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	6/13/2015 6:35:19 AM	R26816
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	6/13/2015 6:35:19 AM	R26816
Surr: Dibromofluoromethane	102	70-130		%REC	1	6/13/2015 6:35:19 AM	R26816
Surr: Toluene-d8	97.7	70-130		%REC	1	6/13/2015 6:35:19 AM	R26816

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-9

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 10:05:00 AM

Lab ID: 1506309-002

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/16/2015 7:55:55 PM	R26876
Lead	ND	0.010		mg/L	10	6/16/2015 7:55:55 PM	R26876
Selenium	ND	0.010		mg/L	10	6/16/2015 7:55:55 PM	R26876
Uranium	ND	0.010		mg/L	10	6/16/2015 7:55:55 PM	R26876
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.31	0.0020		mg/L	1	6/15/2015 7:14:27 PM	R26842
Cadmium	ND	0.0020		mg/L	1	6/15/2015 7:14:27 PM	R26842
Chromium	ND	0.0060		mg/L	1	6/15/2015 7:14:27 PM	R26842
Copper	ND	0.0060		mg/L	1	6/15/2015 7:14:27 PM	R26842
Iron	1.9	0.10	*	mg/L	5	6/15/2015 7:16:11 PM	R26842
Manganese	3.2	0.010	*	mg/L	5	6/15/2015 7:16:11 PM	R26842
Silver	ND	0.0050		mg/L	1	6/17/2015 5:36:11 PM	R26895
Zinc	0.012	0.010		mg/L	1	6/15/2015 7:14:27 PM	R26842
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.34	0.0020		mg/L	1	6/11/2015 6:29:05 PM	19666
Cadmium	ND	0.0020		mg/L	1	6/11/2015 6:29:05 PM	19666
Chromium	ND	0.0060		mg/L	1	6/11/2015 6:29:05 PM	19666
Copper	ND	0.0060		mg/L	1	6/15/2015 5:06:00 PM	19666
Iron	3.1	0.10	*	mg/L	5	6/11/2015 6:30:54 PM	19666
Manganese	3.0	0.010	*	mg/L	5	6/11/2015 6:30:54 PM	19666
Silver	ND	0.0050		mg/L	1	6/15/2015 5:06:00 PM	19666
Zinc	ND	0.010		mg/L	1	6/11/2015 6:29:05 PM	19666
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	6/16/2015 2:10:26 PM	19666
Lead	ND	0.0025		mg/L	5	6/16/2015 2:10:26 PM	19666
Selenium	ND	0.0050		mg/L	5	6/16/2015 2:10:26 PM	19666
Uranium	0.0076	0.0025		mg/L	5	6/16/2015 2:10:26 PM	19666
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/15/2015 2:23:26 PM	19717
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	1.8	1.0		mg/L	1	6/9/2015 6:57:04 PM	19616
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/9/2015 6:57:04 PM	19616
Surr: DNOP	98.0	76.5-150		%REC	1	6/9/2015 6:57:04 PM	19616
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	4.1	0.25		mg/L	5	6/9/2015 12:42:57 AM	R26688
Surr: BFB	110	57.8-137		%REC	5	6/9/2015 12:42:57 AM	R26688

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-9

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 10:05:00 AM

Lab ID: 1506309-002

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Acenaphthylene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Aniline	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Anthracene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Azobenzene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Benz(a)anthracene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Benzo(a)pyrene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Benzo(b)fluoranthene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Benzo(k)fluoranthene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Benzoic acid	ND	20		µg/L	1	6/10/2015 11:44:31 AM	19625
Benzyl alcohol	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Butyl benzyl phthalate	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Carbazole	10	10		µg/L	1	6/10/2015 11:44:31 AM	19625
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
4-Chloroaniline	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
2-Chloronaphthalene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
2-Chlorophenol	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Chrysene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Di-n-butyl phthalate	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Di-n-octyl phthalate	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Dibenzofuran	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
1,2-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
1,3-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
1,4-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Diethyl phthalate	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Dimethyl phthalate	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
2,4-Dichlorophenol	ND	20		µg/L	1	6/10/2015 11:44:31 AM	19625
2,4-Dimethylphenol	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/10/2015 11:44:31 AM	19625
2,4-Dinitrophenol	ND	20		µg/L	1	6/10/2015 11:44:31 AM	19625

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 4 of 63
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-9

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 10:05:00 AM

Lab ID: 1506309-002

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
2,6-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Fluoranthene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Fluorene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Hexachlorobenzene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Hexachlorobutadiene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Hexachloroethane	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Isophorone	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
1-Methylnaphthalene	36	10		µg/L	1	6/10/2015 11:44:31 AM	19625
2-Methylnaphthalene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
2-Methylphenol	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
3+4-Methylphenol	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
N-Nitrosodimethylamine	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Naphthalene	12	10		µg/L	1	6/10/2015 11:44:31 AM	19625
2-Nitroaniline	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
3-Nitroaniline	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
4-Nitroaniline	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Nitrobenzene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
2-Nitrophenol	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
4-Nitrophenol	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Pentachlorophenol	ND	20		µg/L	1	6/10/2015 11:44:31 AM	19625
Phenanthrene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Phenol	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Pyrene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Pyridine	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/10/2015 11:44:31 AM	19625
Surr: 2-Fluorophenol	53.0	14.9-111		%REC	1	6/10/2015 11:44:31 AM	19625
Surr: Phenol-d5	61.8	11.3-108		%REC	1	6/10/2015 11:44:31 AM	19625
Surr: 2,4,6-Tribromophenol	82.1	15.7-154		%REC	1	6/10/2015 11:44:31 AM	19625
Surr: Nitrobenzene-d5	91.0	47.8-106		%REC	1	6/10/2015 11:44:31 AM	19625
Surr: 2-Fluorobiphenyl	84.8	21.3-123		%REC	1	6/10/2015 11:44:31 AM	19625
Surr: 4-Terphenyl-d14	92.2	14.3-135		%REC	1	6/10/2015 11:44:31 AM	19625

EPA METHOD 8260B: VOLATILES

Analyst: **cadg**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-9

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 10:05:00 AM

Lab ID: 1506309-002

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: cadg	
Benzene	890	50		µg/L	50	6/15/2015 2:23:44 PM	R26844
Toluene	25	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Ethylbenzene	150	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Methyl tert-butyl ether (MTBE)	430	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,2,4-Trimethylbenzene	33	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Naphthalene	15	10		µg/L	5	6/13/2015 7:04:10 AM	R26816
1-Methylnaphthalene	51	20		µg/L	5	6/13/2015 7:04:10 AM	R26816
2-Methylnaphthalene	ND	20		µg/L	5	6/13/2015 7:04:10 AM	R26816
Acetone	ND	50		µg/L	5	6/13/2015 7:04:10 AM	R26816
Bromobenzene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Bromodichloromethane	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Bromoform	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Bromomethane	ND	15		µg/L	5	6/13/2015 7:04:10 AM	R26816
2-Butanone	ND	50		µg/L	5	6/13/2015 7:04:10 AM	R26816
Carbon disulfide	ND	50		µg/L	5	6/13/2015 7:04:10 AM	R26816
Carbon Tetrachloride	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Chlorobenzene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Chloroethane	ND	10		µg/L	5	6/13/2015 7:04:10 AM	R26816
Chloroform	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Chloromethane	ND	15		µg/L	5	6/13/2015 7:04:10 AM	R26816
2-Chlorotoluene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
4-Chlorotoluene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
cis-1,2-DCE	30	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	6/13/2015 7:04:10 AM	R26816
Dibromochloromethane	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Dibromomethane	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,2-Dichlorobenzene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,3-Dichlorobenzene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,4-Dichlorobenzene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Dichlorodifluoromethane	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,1-Dichloroethane	28	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,1-Dichloroethene	55	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,2-Dichloropropane	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,3-Dichloropropane	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
2,2-Dichloropropane	ND	10		µg/L	5	6/13/2015 7:04:10 AM	R26816

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 6 of 63
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-9

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 10:05:00 AM

Lab ID: 1506309-002

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: cadg			
1,1-Dichloropropene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Hexachlorobutadiene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
2-Hexanone	ND	50		µg/L	5	6/13/2015 7:04:10 AM	R26816
Isopropylbenzene	15	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
4-Isopropyltoluene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
4-Methyl-2-pentanone	ND	50		µg/L	5	6/13/2015 7:04:10 AM	R26816
Methylene Chloride	ND	15		µg/L	5	6/13/2015 7:04:10 AM	R26816
n-Butylbenzene	ND	15		µg/L	5	6/13/2015 7:04:10 AM	R26816
n-Propylbenzene	22	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
sec-Butylbenzene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Styrene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
tert-Butylbenzene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	6/13/2015 7:04:10 AM	R26816
Tetrachloroethene (PCE)	7.8	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
trans-1,2-DCE	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,1,1-Trichloroethane	67	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,1,2-Trichloroethane	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Trichloroethene (TCE)	7.6	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Trichlorofluoromethane	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
1,2,3-Trichloropropane	ND	10		µg/L	5	6/13/2015 7:04:10 AM	R26816
Vinyl chloride	ND	5.0		µg/L	5	6/13/2015 7:04:10 AM	R26816
Xylenes, Total	39	7.5		µg/L	5	6/13/2015 7:04:10 AM	R26816
Surr: 1,2-Dichloroethane-d4	99.1	70-130		%REC	5	6/13/2015 7:04:10 AM	R26816
Surr: 4-Bromofluorobenzene	85.0	70-130		%REC	5	6/13/2015 7:04:10 AM	R26816
Surr: Dibromofluoromethane	93.5	70-130		%REC	5	6/13/2015 7:04:10 AM	R26816
Surr: Toluene-d8	104	70-130		%REC	5	6/13/2015 7:04:10 AM	R26816

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-10

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 10:35:00 AM

Lab ID: 1506309-003

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/16/2015 7:58:59 PM	R26876
Lead	ND	0.010		mg/L	10	6/16/2015 7:58:59 PM	R26876
Selenium	ND	0.010		mg/L	10	6/16/2015 7:58:59 PM	R26876
Uranium	ND	0.010		mg/L	10	6/16/2015 7:58:59 PM	R26876
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	12	0.040	*	mg/L	20	6/18/2015 5:30:35 PM	R26942
Cadmium	ND	0.0020		mg/L	1	6/15/2015 7:25:22 PM	R26842
Chromium	ND	0.0060		mg/L	1	6/15/2015 7:25:22 PM	R26842
Copper	ND	0.0060		mg/L	1	6/15/2015 7:25:22 PM	R26842
Iron	53	2.0	*	mg/L	100	6/18/2015 5:32:31 PM	R26942
Manganese	18	0.040	*	mg/L	20	6/18/2015 5:30:35 PM	R26942
Silver	ND	0.0050		mg/L	1	6/15/2015 7:25:22 PM	R26842
Zinc	0.034	0.010		mg/L	1	6/15/2015 7:25:22 PM	R26842
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	19	0.10	*	mg/L	50	6/15/2015 5:09:50 PM	19666
Cadmium	ND	0.0020		mg/L	1	6/11/2015 6:33:01 PM	19666
Chromium	0.077	0.0060		mg/L	1	6/11/2015 6:33:01 PM	19666
Copper	0.10	0.0060		mg/L	1	6/15/2015 5:07:41 PM	19666
Iron	120	10	*	mg/L	500	6/15/2015 5:11:38 PM	19666
Manganese	24	0.10	*	mg/L	50	6/15/2015 5:09:50 PM	19666
Silver	ND	0.0050		mg/L	1	6/15/2015 5:07:41 PM	19666
Zinc	0.15	0.010		mg/L	1	6/11/2015 6:33:01 PM	19666
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.015	0.0050	*	mg/L	5	6/16/2015 2:18:40 PM	19666
Lead	0.19	0.0025	*	mg/L	5	6/16/2015 2:18:40 PM	19666
Selenium	ND	0.010		mg/L	10	6/16/2015 2:40:27 PM	19666
Uranium	0.014	0.0025		mg/L	5	6/16/2015 2:18:40 PM	19666
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/15/2015 2:25:31 PM	19717
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	23	1.0		mg/L	1	6/9/2015 8:00:49 PM	19616
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/9/2015 8:00:49 PM	19616
Surr: DNOP	108	76.5-150		%REC	1	6/9/2015 8:00:49 PM	19616
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	79	2.5		mg/L	50	6/9/2015 1:08:15 AM	R26688
Surr: BFB	103	57.8-137		%REC	50	6/9/2015 1:08:15 AM	R26688

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-10

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 10:35:00 AM

Lab ID: 1506309-003

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Acenaphthylene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Aniline	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Anthracene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Azobenzene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Benz(a)anthracene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Benzo(a)pyrene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Benzo(b)fluoranthene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Benzo(k)fluoranthene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Benzoic acid	ND	20		µg/L	1	6/10/2015 12:12:33 PM	19625
Benzyl alcohol	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Butyl benzyl phthalate	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Carbazole	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
4-Chloroaniline	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
2-Chloronaphthalene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
2-Chlorophenol	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Chrysene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Di-n-butyl phthalate	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Di-n-octyl phthalate	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Dibenzofuran	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
1,2-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
1,3-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
1,4-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Diethyl phthalate	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Dimethyl phthalate	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
2,4-Dichlorophenol	ND	20		µg/L	1	6/10/2015 12:12:33 PM	19625
2,4-Dimethylphenol	100	10		µg/L	1	6/10/2015 12:12:33 PM	19625
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/10/2015 12:12:33 PM	19625
2,4-Dinitrophenol	ND	20		µg/L	1	6/10/2015 12:12:33 PM	19625

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 9 of 63
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-10

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 10:35:00 AM

Lab ID: 1506309-003

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
2,6-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Fluoranthene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Fluorene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Hexachlorobenzene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Hexachlorobutadiene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Hexachloroethane	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Isophorone	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
1-Methylnaphthalene	66	10		µg/L	1	6/10/2015 12:12:33 PM	19625
2-Methylnaphthalene	84	10		µg/L	1	6/10/2015 12:12:33 PM	19625
2-Methylphenol	350	50		µg/L	5	6/10/2015 3:56:35 PM	19625
3+4-Methylphenol	540	50		µg/L	5	6/10/2015 3:56:35 PM	19625
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
N-Nitrosodimethylamine	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Naphthalene	180	10		µg/L	1	6/10/2015 12:12:33 PM	19625
2-Nitroaniline	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
3-Nitroaniline	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
4-Nitroaniline	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Nitrobenzene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
2-Nitrophenol	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
4-Nitrophenol	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Pentachlorophenol	ND	20		µg/L	1	6/10/2015 12:12:33 PM	19625
Phenanthrene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Phenol	280	50		µg/L	5	6/10/2015 3:56:35 PM	19625
Pyrene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Pyridine	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/10/2015 12:12:33 PM	19625
Surr: 2-Fluorophenol	17.4	14.9-111		%REC	1	6/10/2015 12:12:33 PM	19625
Surr: Phenol-d5	93.8	11.3-108		%REC	1	6/10/2015 12:12:33 PM	19625
Surr: 2,4,6-Tribromophenol	123	15.7-154		%REC	5	6/10/2015 3:56:35 PM	19625
Surr: Nitrobenzene-d5	98.9	47.8-106		%REC	1	6/10/2015 12:12:33 PM	19625
Surr: 2-Fluorobiphenyl	114	21.3-123		%REC	5	6/10/2015 3:56:35 PM	19625
Surr: 4-Terphenyl-d14	96.7	14.3-135		%REC	1	6/10/2015 12:12:33 PM	19625

EPA METHOD 8260B: VOLATILES

Analyst: **cadg**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-10

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 10:35:00 AM

Lab ID: 1506309-003

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	10000	500		µg/L	500	6/13/2015 7:32:59 AM	R26816
Toluene	20000	500		µg/L	500	6/13/2015 7:32:59 AM	R26816
Ethylbenzene	1500	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,2,4-Trimethylbenzene	790	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,3,5-Trimethylbenzene	210	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Naphthalene	190	100		µg/L	50	6/13/2015 8:01:46 AM	R26816
1-Methylnaphthalene	ND	200		µg/L	50	6/13/2015 8:01:46 AM	R26816
2-Methylnaphthalene	ND	200		µg/L	50	6/13/2015 8:01:46 AM	R26816
Acetone	ND	500		µg/L	50	6/13/2015 8:01:46 AM	R26816
Bromobenzene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Bromodichloromethane	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Bromoform	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Bromomethane	ND	150		µg/L	50	6/13/2015 8:01:46 AM	R26816
2-Butanone	1300	500		µg/L	50	6/13/2015 8:01:46 AM	R26816
Carbon disulfide	ND	500		µg/L	50	6/13/2015 8:01:46 AM	R26816
Carbon Tetrachloride	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Chlorobenzene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Chloroethane	ND	100		µg/L	50	6/13/2015 8:01:46 AM	R26816
Chloroform	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Chloromethane	ND	150		µg/L	50	6/13/2015 8:01:46 AM	R26816
2-Chlorotoluene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
4-Chlorotoluene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
cis-1,2-DCE	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
cis-1,3-Dichloropropene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	6/13/2015 8:01:46 AM	R26816
Dibromochloromethane	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Dibromomethane	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,2-Dichlorobenzene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,3-Dichlorobenzene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,4-Dichlorobenzene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Dichlorodifluoromethane	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,1-Dichloroethane	60	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,1-Dichloroethene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,2-Dichloropropane	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,3-Dichloropropane	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
2,2-Dichloropropane	ND	100		µg/L	50	6/13/2015 8:01:46 AM	R26816

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-10

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 10:35:00 AM

Lab ID: 1506309-003

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: cadg			
1,1-Dichloropropene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Hexachlorobutadiene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
2-Hexanone	ND	500		µg/L	50	6/13/2015 8:01:46 AM	R26816
Isopropylbenzene	54	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
4-Isopropyltoluene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
4-Methyl-2-pentanone	ND	500		µg/L	50	6/13/2015 8:01:46 AM	R26816
Methylene Chloride	ND	150		µg/L	50	6/13/2015 8:01:46 AM	R26816
n-Butylbenzene	ND	150		µg/L	50	6/13/2015 8:01:46 AM	R26816
n-Propylbenzene	130	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
sec-Butylbenzene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Styrene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
tert-Butylbenzene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	6/13/2015 8:01:46 AM	R26816
Tetrachloroethene (PCE)	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
trans-1,2-DCE	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
trans-1,3-Dichloropropene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,2,3-Trichlorobenzene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,2,4-Trichlorobenzene	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,1,1-Trichloroethane	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,1,2-Trichloroethane	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Trichloroethene (TCE)	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Trichlorofluoromethane	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
1,2,3-Trichloropropane	ND	100		µg/L	50	6/13/2015 8:01:46 AM	R26816
Vinyl chloride	ND	50		µg/L	50	6/13/2015 8:01:46 AM	R26816
Xylenes, Total	6500	75		µg/L	50	6/13/2015 8:01:46 AM	R26816
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	50	6/13/2015 8:01:46 AM	R26816
Surr: 4-Bromofluorobenzene	96.9	70-130		%REC	50	6/13/2015 8:01:46 AM	R26816
Surr: Dibromofluoromethane	94.1	70-130		%REC	50	6/13/2015 8:01:46 AM	R26816
Surr: Toluene-d8	102	70-130		%REC	50	6/13/2015 8:01:46 AM	R26816

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-11

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 11:10:00 AM

Lab ID: 1506309-004

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/16/2015 8:02:02 PM	R26876
Lead	ND	0.010		mg/L	10	6/16/2015 8:02:02 PM	R26876
Selenium	ND	0.010		mg/L	10	6/16/2015 8:02:02 PM	R26876
Uranium	ND	0.010		mg/L	10	6/16/2015 8:02:02 PM	R26876
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	2.7	0.010	*	mg/L	5	6/15/2015 7:30:32 PM	R26842
Cadmium	ND	0.0020		mg/L	1	6/15/2015 7:28:50 PM	R26842
Chromium	ND	0.0060		mg/L	1	6/15/2015 7:28:50 PM	R26842
Copper	ND	0.0060		mg/L	1	6/15/2015 7:28:50 PM	R26842
Iron	9.9	0.40	*	mg/L	20	6/18/2015 5:34:35 PM	R26942
Manganese	3.0	0.010	*	mg/L	5	6/15/2015 7:30:32 PM	R26842
Silver	ND	0.0050		mg/L	1	6/15/2015 7:28:50 PM	R26842
Zinc	0.018	0.010		mg/L	1	6/15/2015 7:28:50 PM	R26842
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	2.7	0.010	*	mg/L	5	6/11/2015 6:38:45 PM	19666
Cadmium	ND	0.0020		mg/L	1	6/11/2015 6:36:56 PM	19666
Chromium	ND	0.0060		mg/L	1	6/11/2015 6:36:56 PM	19666
Copper	ND	0.0060		mg/L	1	6/15/2015 5:19:03 PM	19666
Iron	13	1.0	*	mg/L	50	6/15/2015 5:20:47 PM	19666
Manganese	3.0	0.010	*	mg/L	5	6/11/2015 6:38:45 PM	19666
Silver	ND	0.0050		mg/L	1	6/15/2015 5:19:03 PM	19666
Zinc	0.013	0.010		mg/L	1	6/11/2015 6:36:56 PM	19666
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.0056	0.0050		mg/L	5	6/16/2015 2:21:23 PM	19666
Lead	0.0027	0.0025		mg/L	5	6/16/2015 2:21:23 PM	19666
Selenium	ND	0.0050		mg/L	5	6/16/2015 2:21:23 PM	19666
Uranium	ND	0.0025		mg/L	5	6/16/2015 2:21:23 PM	19666
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/15/2015 2:27:37 PM	19717
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	2.8	1.0		mg/L	1	6/9/2015 8:22:11 PM	19616
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/9/2015 8:22:11 PM	19616
Surr: DNOP	102	76.5-150		%REC	1	6/9/2015 8:22:11 PM	19616
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	71	1.0		mg/L	20	6/9/2015 1:33:32 AM	R26688
Surr: BFB	107	57.8-137		%REC	20	6/9/2015 1:33:32 AM	R26688

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-11

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 11:10:00 AM

Lab ID: 1506309-004

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Acenaphthylene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Aniline	46	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Anthracene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Azobenzene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Benz(a)anthracene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Benzo(a)pyrene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Benzo(b)fluoranthene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Benzo(k)fluoranthene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Benzoic acid	ND	20		µg/L	1	6/10/2015 12:40:29 PM	19625
Benzyl alcohol	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Butyl benzyl phthalate	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Carbazole	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
4-Chloroaniline	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
2-Chloronaphthalene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
2-Chlorophenol	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Chrysene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Di-n-butyl phthalate	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Di-n-octyl phthalate	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Dibenzofuran	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
1,2-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
1,3-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
1,4-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Diethyl phthalate	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Dimethyl phthalate	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
2,4-Dichlorophenol	ND	20		µg/L	1	6/10/2015 12:40:29 PM	19625
2,4-Dimethylphenol	140	10		µg/L	1	6/10/2015 12:40:29 PM	19625
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/10/2015 12:40:29 PM	19625
2,4-Dinitrophenol	ND	20		µg/L	1	6/10/2015 12:40:29 PM	19625

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-11

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 11:10:00 AM

Lab ID: 1506309-004

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
2,6-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Fluoranthene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Fluorene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Hexachlorobenzene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Hexachlorobutadiene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Hexachloroethane	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Isophorone	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
1-Methylnaphthalene	20	10		µg/L	1	6/10/2015 12:40:29 PM	19625
2-Methylnaphthalene	21	10		µg/L	1	6/10/2015 12:40:29 PM	19625
2-Methylphenol	300	50		µg/L	5	6/10/2015 4:24:40 PM	19625
3+4-Methylphenol	230	50		µg/L	5	6/10/2015 4:24:40 PM	19625
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
N-Nitrosodimethylamine	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Naphthalene	70	10		µg/L	1	6/10/2015 12:40:29 PM	19625
2-Nitroaniline	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
3-Nitroaniline	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
4-Nitroaniline	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Nitrobenzene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
2-Nitrophenol	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
4-Nitrophenol	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Pentachlorophenol	ND	20		µg/L	1	6/10/2015 12:40:29 PM	19625
Phenanthrene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Phenol	53	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Pyrene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Pyridine	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/10/2015 12:40:29 PM	19625
Surr: 2-Fluorophenol	18.8	14.9-111		%REC	1	6/10/2015 12:40:29 PM	19625
Surr: Phenol-d5	44.6	11.3-108		%REC	1	6/10/2015 12:40:29 PM	19625
Surr: 2,4,6-Tribromophenol	66.1	15.7-154		%REC	1	6/10/2015 12:40:29 PM	19625
Surr: Nitrobenzene-d5	67.4	47.8-106		%REC	1	6/10/2015 12:40:29 PM	19625
Surr: 2-Fluorobiphenyl	65.3	21.3-123		%REC	1	6/10/2015 12:40:29 PM	19625
Surr: 4-Terphenyl-d14	61.0	14.3-135		%REC	1	6/10/2015 12:40:29 PM	19625

EPA METHOD 8260B: VOLATILES

Analyst: **cadg**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.
	E Value above quantitation range
	J Analyte detected below quantitation limits
	O RSD is greater than RSDlimit
	R RPD outside accepted recovery limits
	S Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-11

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 11:10:00 AM

Lab ID: 1506309-004

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: cadg	
Benzene	12000	200		µg/L	200	6/13/2015 8:59:26 AM	R26816
Toluene	13000	200		µg/L	200	6/13/2015 8:59:26 AM	R26816
Ethylbenzene	1200	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Methyl tert-butyl ether (MTBE)	41	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,2,4-Trimethylbenzene	570	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,3,5-Trimethylbenzene	140	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,2-Dichloroethane (EDC)	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,2-Dibromoethane (EDB)	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Naphthalene	110	40		µg/L	20	6/13/2015 9:28:18 AM	R26816
1-Methylnaphthalene	ND	80		µg/L	20	6/13/2015 9:28:18 AM	R26816
2-Methylnaphthalene	ND	80		µg/L	20	6/13/2015 9:28:18 AM	R26816
Acetone	ND	200		µg/L	20	6/13/2015 9:28:18 AM	R26816
Bromobenzene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Bromodichloromethane	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Bromoform	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Bromomethane	ND	60		µg/L	20	6/13/2015 9:28:18 AM	R26816
2-Butanone	430	200		µg/L	20	6/13/2015 9:28:18 AM	R26816
Carbon disulfide	ND	200		µg/L	20	6/13/2015 9:28:18 AM	R26816
Carbon Tetrachloride	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Chlorobenzene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Chloroethane	ND	40		µg/L	20	6/13/2015 9:28:18 AM	R26816
Chloroform	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Chloromethane	ND	60		µg/L	20	6/13/2015 9:28:18 AM	R26816
2-Chlorotoluene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
4-Chlorotoluene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
cis-1,2-DCE	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
cis-1,3-Dichloropropene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,2-Dibromo-3-chloropropane	ND	40		µg/L	20	6/13/2015 9:28:18 AM	R26816
Dibromochloromethane	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Dibromomethane	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,2-Dichlorobenzene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,3-Dichlorobenzene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,4-Dichlorobenzene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Dichlorodifluoromethane	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,1-Dichloroethane	31	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,1-Dichloroethene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,2-Dichloropropane	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,3-Dichloropropane	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
2,2-Dichloropropane	ND	40		µg/L	20	6/13/2015 9:28:18 AM	R26816

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-11

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 11:10:00 AM

Lab ID: 1506309-004

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
1,1-Dichloropropene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Hexachlorobutadiene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
2-Hexanone	ND	200		µg/L	20	6/13/2015 9:28:18 AM	R26816
Isopropylbenzene	36	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
4-Isopropyltoluene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
4-Methyl-2-pentanone	ND	200		µg/L	20	6/13/2015 9:28:18 AM	R26816
Methylene Chloride	ND	60		µg/L	20	6/13/2015 9:28:18 AM	R26816
n-Butylbenzene	ND	60		µg/L	20	6/13/2015 9:28:18 AM	R26816
n-Propylbenzene	99	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
sec-Butylbenzene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Styrene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
tert-Butylbenzene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,1,1,2-Tetrachloroethane	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,1,2,2-Tetrachloroethane	ND	40		µg/L	20	6/13/2015 9:28:18 AM	R26816
Tetrachloroethene (PCE)	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
trans-1,2-DCE	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
trans-1,3-Dichloropropene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,2,3-Trichlorobenzene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,2,4-Trichlorobenzene	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,1,1-Trichloroethane	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,1,2-Trichloroethane	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Trichloroethene (TCE)	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Trichlorofluoromethane	ND	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
1,2,3-Trichloropropane	ND	40		µg/L	20	6/13/2015 9:28:18 AM	R26816
Vinyl chloride	34	20		µg/L	20	6/13/2015 9:28:18 AM	R26816
Xylenes, Total	4900	30		µg/L	20	6/13/2015 9:28:18 AM	R26816
Surr: 1,2-Dichloroethane-d4	93.4	70-130		%REC	20	6/13/2015 9:28:18 AM	R26816
Surr: 4-Bromofluorobenzene	92.6	70-130		%REC	20	6/13/2015 9:28:18 AM	R26816
Surr: Dibromofluoromethane	89.9	70-130		%REC	20	6/13/2015 9:28:18 AM	R26816
Surr: Toluene-d8	103	70-130		%REC	20	6/13/2015 9:28:18 AM	R26816

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-4

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 11:48:00 AM

Lab ID: 1506309-005

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/16/2015 8:05:05 PM	R26876
Lead	ND	0.010		mg/L	10	6/16/2015 8:05:05 PM	R26876
Selenium	ND	0.010		mg/L	10	6/16/2015 8:05:05 PM	R26876
Uranium	ND	0.010		mg/L	10	6/16/2015 8:05:05 PM	R26876
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	2.2	0.010	*	mg/L	5	6/15/2015 7:34:04 PM	R26842
Cadmium	ND	0.0020		mg/L	1	6/15/2015 7:32:22 PM	R26842
Chromium	ND	0.0060		mg/L	1	6/15/2015 7:32:22 PM	R26842
Copper	ND	0.0060		mg/L	1	6/15/2015 7:32:22 PM	R26842
Iron	8.6	0.40	*	mg/L	20	6/19/2015 3:15:11 PM	R26969
Manganese	1.6	0.010	*	mg/L	5	6/15/2015 7:34:04 PM	R26842
Silver	ND	0.0050		mg/L	1	6/15/2015 7:32:22 PM	R26842
Zinc	0.023	0.010		mg/L	1	6/15/2015 7:32:22 PM	R26842
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	2.5	0.010	*	mg/L	5	6/11/2015 6:51:08 PM	19666
Cadmium	ND	0.0020		mg/L	1	6/11/2015 6:49:16 PM	19666
Chromium	0.0087	0.0060		mg/L	1	6/11/2015 6:49:16 PM	19666
Copper	ND	0.0060		mg/L	1	6/15/2015 5:22:41 PM	19666
Iron	13	0.40	*	mg/L	20	6/15/2015 5:24:21 PM	19666
Manganese	1.9	0.010	*	mg/L	5	6/11/2015 6:51:08 PM	19666
Silver	ND	0.0050		mg/L	1	6/15/2015 5:22:41 PM	19666
Zinc	0.017	0.010		mg/L	1	6/11/2015 6:49:16 PM	19666
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.0082	0.0050		mg/L	5	6/16/2015 2:24:07 PM	19666
Lead	0.0097	0.0025		mg/L	5	6/16/2015 2:24:07 PM	19666
Selenium	ND	0.010		mg/L	10	6/16/2015 2:48:40 PM	19666
Uranium	0.0053	0.0025		mg/L	5	6/16/2015 2:24:07 PM	19666
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/15/2015 2:29:43 PM	19717
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	2.3	1.0		mg/L	1	6/9/2015 8:43:27 PM	19616
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/9/2015 8:43:27 PM	19616
Surr: DNOP	104	76.5-150		%REC	1	6/9/2015 8:43:27 PM	19616
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	6.2	0.50		mg/L	10	6/9/2015 1:58:41 AM	R26688
Surr: BFB	106	57.8-137		%REC	10	6/9/2015 1:58:41 AM	R26688

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-4

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 11:48:00 AM

Lab ID: 1506309-005

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Acenaphthylene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Aniline	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Anthracene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Azobenzene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Benz(a)anthracene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Benzo(a)pyrene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Benzo(b)fluoranthene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Benzo(k)fluoranthene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Benzoic acid	ND	20		µg/L	1	6/10/2015 1:08:25 PM	19625
Benzyl alcohol	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Butyl benzyl phthalate	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Carbazole	15	10		µg/L	1	6/10/2015 1:08:25 PM	19625
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
4-Chloroaniline	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
2-Chloronaphthalene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
2-Chlorophenol	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Chrysene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Di-n-butyl phthalate	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Di-n-octyl phthalate	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Dibenzofuran	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
1,2-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
1,3-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
1,4-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Diethyl phthalate	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Dimethyl phthalate	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
2,4-Dichlorophenol	ND	20		µg/L	1	6/10/2015 1:08:25 PM	19625
2,4-Dimethylphenol	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/10/2015 1:08:25 PM	19625
2,4-Dinitrophenol	ND	20		µg/L	1	6/10/2015 1:08:25 PM	19625

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-4

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 11:48:00 AM

Lab ID: 1506309-005

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: DAM	
2,4-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
2,6-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Fluoranthene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Fluorene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Hexachlorobenzene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Hexachlorobutadiene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Hexachloroethane	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Isophorone	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
1-Methylnaphthalene	120	10		µg/L	1	6/10/2015 1:08:25 PM	19625
2-Methylnaphthalene	76	10		µg/L	1	6/10/2015 1:08:25 PM	19625
2-Methylphenol	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
3+4-Methylphenol	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
N-Nitrosodimethylamine	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Naphthalene	190	10		µg/L	1	6/10/2015 1:08:25 PM	19625
2-Nitroaniline	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
3-Nitroaniline	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
4-Nitroaniline	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Nitrobenzene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
2-Nitrophenol	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
4-Nitrophenol	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Pentachlorophenol	ND	20		µg/L	1	6/10/2015 1:08:25 PM	19625
Phenanthrene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Phenol	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Pyrene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Pyridine	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/10/2015 1:08:25 PM	19625
Surr: 2-Fluorophenol	48.5	14.9-111		%REC	1	6/10/2015 1:08:25 PM	19625
Surr: Phenol-d5	60.7	11.3-108		%REC	1	6/10/2015 1:08:25 PM	19625
Surr: 2,4,6-Tribromophenol	71.0	15.7-154		%REC	1	6/10/2015 1:08:25 PM	19625
Surr: Nitrobenzene-d5	78.1	47.8-106		%REC	1	6/10/2015 1:08:25 PM	19625
Surr: 2-Fluorobiphenyl	80.1	21.3-123		%REC	1	6/10/2015 1:08:25 PM	19625
Surr: 4-Terphenyl-d14	70.0	14.3-135		%REC	1	6/10/2015 1:08:25 PM	19625

EPA METHOD 8260B: VOLATILES

Analyst: **cadg**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.
	E Value above quantitation range
	J Analyte detected below quantitation limits
	O RSD is greater than RSDlimit
	R RPD outside accepted recovery limits
	S Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-4

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 11:48:00 AM

Lab ID: 1506309-005

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	310	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Toluene	13	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Ethylbenzene	450	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Methyl tert-butyl ether (MTBE)	1300	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,2,4-Trimethylbenzene	270	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,3,5-Trimethylbenzene	23	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Naphthalene	220	20		µg/L	10	6/15/2015 3:50:09 PM	R26844
1-Methylnaphthalene	140	40		µg/L	10	6/15/2015 3:50:09 PM	R26844
2-Methylnaphthalene	86	40		µg/L	10	6/15/2015 3:50:09 PM	R26844
Acetone	ND	100		µg/L	10	6/15/2015 3:50:09 PM	R26844
Bromobenzene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Bromodichloromethane	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Bromoform	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Bromomethane	ND	30		µg/L	10	6/15/2015 3:50:09 PM	R26844
2-Butanone	ND	100		µg/L	10	6/15/2015 3:50:09 PM	R26844
Carbon disulfide	ND	100		µg/L	10	6/15/2015 3:50:09 PM	R26844
Carbon Tetrachloride	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Chlorobenzene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Chloroethane	ND	20		µg/L	10	6/15/2015 3:50:09 PM	R26844
Chloroform	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Chloromethane	ND	30		µg/L	10	6/15/2015 3:50:09 PM	R26844
2-Chlorotoluene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
4-Chlorotoluene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
cis-1,2-DCE	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
cis-1,3-Dichloropropene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	6/15/2015 3:50:09 PM	R26844
Dibromochloromethane	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Dibromomethane	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,2-Dichlorobenzene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,3-Dichlorobenzene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,4-Dichlorobenzene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Dichlorodifluoromethane	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,1-Dichloroethane	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,1-Dichloroethene	22	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,2-Dichloropropane	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,3-Dichloropropane	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
2,2-Dichloropropane	ND	20		µg/L	10	6/15/2015 3:50:09 PM	R26844

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-4

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 11:48:00 AM

Lab ID: 1506309-005

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
1,1-Dichloropropene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Hexachlorobutadiene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
2-Hexanone	ND	100		µg/L	10	6/15/2015 3:50:09 PM	R26844
Isopropylbenzene	21	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
4-Isopropyltoluene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
4-Methyl-2-pentanone	ND	100		µg/L	10	6/15/2015 3:50:09 PM	R26844
Methylene Chloride	ND	30		µg/L	10	6/15/2015 3:50:09 PM	R26844
n-Butylbenzene	ND	30		µg/L	10	6/15/2015 3:50:09 PM	R26844
n-Propylbenzene	37	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
sec-Butylbenzene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Styrene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
tert-Butylbenzene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	6/15/2015 3:50:09 PM	R26844
Tetrachloroethene (PCE)	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
trans-1,2-DCE	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
trans-1,3-Dichloropropene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,2,3-Trichlorobenzene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,2,4-Trichlorobenzene	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,1,1-Trichloroethane	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,1,2-Trichloroethane	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Trichloroethene (TCE)	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Trichlorofluoromethane	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
1,2,3-Trichloropropane	ND	20		µg/L	10	6/15/2015 3:50:09 PM	R26844
Vinyl chloride	ND	10		µg/L	10	6/15/2015 3:50:09 PM	R26844
Xylenes, Total	560	15		µg/L	10	6/15/2015 3:50:09 PM	R26844
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	10	6/15/2015 3:50:09 PM	R26844
Surr: 4-Bromofluorobenzene	87.9	70-130		%REC	10	6/15/2015 3:50:09 PM	R26844
Surr: Dibromofluoromethane	103	70-130		%REC	10	6/15/2015 3:50:09 PM	R26844
Surr: Toluene-d8	104	70-130		%REC	10	6/15/2015 3:50:09 PM	R26844

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-37

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 1:45:00 PM

Lab ID: 1506309-006

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/16/2015 8:08:09 PM	R26876
Lead	ND	0.010		mg/L	10	6/16/2015 8:08:09 PM	R26876
Selenium	ND	0.010		mg/L	10	6/16/2015 8:08:09 PM	R26876
Uranium	0.023	0.010		mg/L	10	6/16/2015 8:08:09 PM	R26876
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.19	0.0020		mg/L	1	6/15/2015 7:35:55 PM	R26842
Cadmium	ND	0.0020		mg/L	1	6/15/2015 7:35:55 PM	R26842
Chromium	ND	0.0060		mg/L	1	6/15/2015 7:35:55 PM	R26842
Copper	ND	0.0060		mg/L	1	6/15/2015 7:35:55 PM	R26842
Iron	1.8	0.10	*	mg/L	5	6/15/2015 7:37:35 PM	R26842
Manganese	2.3	0.010	*	mg/L	5	6/15/2015 7:37:35 PM	R26842
Silver	ND	0.0050		mg/L	1	6/15/2015 7:35:55 PM	R26842
Zinc	0.039	0.010		mg/L	1	6/15/2015 7:35:55 PM	R26842
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.23	0.0020		mg/L	1	6/11/2015 6:52:52 PM	19666
Cadmium	ND	0.0020		mg/L	1	6/11/2015 6:52:52 PM	19666
Chromium	0.0063	0.0060		mg/L	1	6/11/2015 6:52:52 PM	19666
Copper	0.0097	0.0060		mg/L	1	6/15/2015 5:26:20 PM	19666
Iron	4.8	0.10	*	mg/L	5	6/11/2015 6:54:37 PM	19666
Manganese	2.6	0.010	*	mg/L	5	6/11/2015 6:54:37 PM	19666
Silver	ND	0.0050		mg/L	1	6/15/2015 5:26:20 PM	19666
Zinc	0.044	0.010		mg/L	1	6/11/2015 6:52:52 PM	19666
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	6/16/2015 2:26:50 PM	19666
Lead	0.036	0.0025	*	mg/L	5	6/16/2015 2:26:50 PM	19666
Selenium	ND	0.0050		mg/L	5	6/16/2015 2:26:50 PM	19666
Uranium	0.024	0.0025		mg/L	5	6/16/2015 2:26:50 PM	19666
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/15/2015 2:31:41 PM	19717
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	5.7	1.0		mg/L	1	6/9/2015 9:04:45 PM	19616
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/9/2015 9:04:45 PM	19616
Surr: DNOP	95.1	76.5-150		%REC	1	6/9/2015 9:04:45 PM	19616
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	12	0.50		mg/L	10	6/9/2015 2:23:59 AM	R26688
Surr: BFB	167	57.8-137	S	%REC	10	6/9/2015 2:23:59 AM	R26688

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-37

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 1:45:00 PM

Lab ID: 1506309-006

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: DAM	
Acenaphthene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Acenaphthylene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Aniline	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Anthracene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Azobenzene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Benz(a)anthracene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Benzo(a)pyrene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Benzo(b)fluoranthene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Benzo(k)fluoranthene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Benzoic acid	ND	20		µg/L	1	6/10/2015 1:36:23 PM	19625
Benzyl alcohol	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Butyl benzyl phthalate	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Carbazole	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
4-Chloroaniline	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
2-Chloronaphthalene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
2-Chlorophenol	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Chrysene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Di-n-butyl phthalate	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Di-n-octyl phthalate	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Dibenzofuran	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
1,2-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
1,3-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
1,4-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Diethyl phthalate	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Dimethyl phthalate	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
2,4-Dichlorophenol	ND	20		µg/L	1	6/10/2015 1:36:23 PM	19625
2,4-Dimethylphenol	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/10/2015 1:36:23 PM	19625
2,4-Dinitrophenol	ND	20		µg/L	1	6/10/2015 1:36:23 PM	19625

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-37

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 1:45:00 PM

Lab ID: 1506309-006

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: DAM	
2,4-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
2,6-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Fluoranthene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Fluorene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Hexachlorobenzene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Hexachlorobutadiene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Hexachloroethane	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Isophorone	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
1-Methylnaphthalene	74	10		µg/L	1	6/10/2015 1:36:23 PM	19625
2-Methylnaphthalene	110	10		µg/L	1	6/10/2015 1:36:23 PM	19625
2-Methylphenol	28	10		µg/L	1	6/10/2015 1:36:23 PM	19625
3+4-Methylphenol	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
N-Nitrosodimethylamine	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Naphthalene	230	10		µg/L	1	6/10/2015 1:36:23 PM	19625
2-Nitroaniline	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
3-Nitroaniline	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
4-Nitroaniline	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Nitrobenzene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
2-Nitrophenol	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
4-Nitrophenol	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Pentachlorophenol	ND	20		µg/L	1	6/10/2015 1:36:23 PM	19625
Phenanthrene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Phenol	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Pyrene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Pyridine	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/10/2015 1:36:23 PM	19625
Surr: 2-Fluorophenol	71.6	14.9-111		%REC	1	6/10/2015 1:36:23 PM	19625
Surr: Phenol-d5	61.1	11.3-108		%REC	1	6/10/2015 1:36:23 PM	19625
Surr: 2,4,6-Tribromophenol	100	15.7-154		%REC	1	6/10/2015 1:36:23 PM	19625
Surr: Nitrobenzene-d5	83.2	47.8-106		%REC	1	6/10/2015 1:36:23 PM	19625
Surr: 2-Fluorobiphenyl	88.1	21.3-123		%REC	1	6/10/2015 1:36:23 PM	19625
Surr: 4-Terphenyl-d14	85.1	14.3-135		%REC	1	6/10/2015 1:36:23 PM	19625

EPA METHOD 8260B: VOLATILES

Analyst: **cadg**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-37

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 1:45:00 PM

Lab ID: 1506309-006

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	1200	100		µg/L	100	6/16/2015 11:06:03 AM	R26872
Toluene	58	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Ethylbenzene	17	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Methyl tert-butyl ether (MTBE)	54	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,2,4-Trimethylbenzene	950	100		µg/L	100	6/16/2015 11:06:03 AM	R26872
1,3,5-Trimethylbenzene	330	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,2-Dichloroethane (EDC)	11	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Naphthalene	720	20		µg/L	10	6/16/2015 11:34:55 AM	R26872
1-Methylnaphthalene	150	40		µg/L	10	6/16/2015 11:34:55 AM	R26872
2-Methylnaphthalene	270	40		µg/L	10	6/16/2015 11:34:55 AM	R26872
Acetone	ND	100		µg/L	10	6/16/2015 11:34:55 AM	R26872
Bromobenzene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Bromodichloromethane	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Bromoform	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Bromomethane	ND	30		µg/L	10	6/16/2015 11:34:55 AM	R26872
2-Butanone	ND	100		µg/L	10	6/16/2015 11:34:55 AM	R26872
Carbon disulfide	ND	100		µg/L	10	6/16/2015 11:34:55 AM	R26872
Carbon Tetrachloride	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Chlorobenzene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Chloroethane	ND	20		µg/L	10	6/16/2015 11:34:55 AM	R26872
Chloroform	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Chloromethane	ND	30		µg/L	10	6/16/2015 11:34:55 AM	R26872
2-Chlorotoluene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
4-Chlorotoluene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
cis-1,2-DCE	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
cis-1,3-Dichloropropene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	6/16/2015 11:34:55 AM	R26872
Dibromochloromethane	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Dibromomethane	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,2-Dichlorobenzene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,3-Dichlorobenzene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,4-Dichlorobenzene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Dichlorodifluoromethane	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,1-Dichloroethane	15	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,1-Dichloroethene	100	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,2-Dichloropropane	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,3-Dichloropropane	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
2,2-Dichloropropane	ND	20		µg/L	10	6/16/2015 11:34:55 AM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 26 of 63
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-37

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 1:45:00 PM

Lab ID: 1506309-006

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: cadg			
1,1-Dichloropropene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Hexachlorobutadiene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
2-Hexanone	ND	100		µg/L	10	6/16/2015 11:34:55 AM	R26872
Isopropylbenzene	150	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
4-Isopropyltoluene	21	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
4-Methyl-2-pentanone	ND	100		µg/L	10	6/16/2015 11:34:55 AM	R26872
Methylene Chloride	ND	30		µg/L	10	6/16/2015 11:34:55 AM	R26872
n-Butylbenzene	140	30		µg/L	10	6/16/2015 11:34:55 AM	R26872
n-Propylbenzene	190	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
sec-Butylbenzene	45	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Styrene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
tert-Butylbenzene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	6/16/2015 11:34:55 AM	R26872
Tetrachloroethene (PCE)	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
trans-1,2-DCE	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
trans-1,3-Dichloropropene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,2,3-Trichlorobenzene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,2,4-Trichlorobenzene	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,1,1-Trichloroethane	19	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,1,2-Trichloroethane	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Trichloroethene (TCE)	170	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Trichlorofluoromethane	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
1,2,3-Trichloropropane	ND	20		µg/L	10	6/16/2015 11:34:55 AM	R26872
Vinyl chloride	ND	10		µg/L	10	6/16/2015 11:34:55 AM	R26872
Xylenes, Total	930	15		µg/L	10	6/16/2015 11:34:55 AM	R26872
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	10	6/16/2015 11:34:55 AM	R26872
Surr: 4-Bromofluorobenzene	102	70-130		%REC	10	6/16/2015 11:34:55 AM	R26872
Surr: Dibromofluoromethane	99.8	70-130		%REC	10	6/16/2015 11:34:55 AM	R26872
Surr: Toluene-d8	102	70-130		%REC	10	6/16/2015 11:34:55 AM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-36

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 2:10:00 PM

Lab ID: 1506309-007

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	0.016	0.0050	*	mg/L	5	6/17/2015 7:53:29 PM	R26904
Lead	ND	0.0050		mg/L	5	6/17/2015 7:53:29 PM	R26904
Selenium	ND	0.0050		mg/L	5	6/17/2015 7:53:29 PM	R26904
Uranium	ND	0.0050		mg/L	5	6/17/2015 7:53:29 PM	R26904
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	6.6	0.040	*	mg/L	20	6/18/2015 5:46:08 PM	R26942
Cadmium	ND	0.0020		mg/L	1	6/15/2015 7:39:31 PM	R26842
Chromium	ND	0.0060		mg/L	1	6/15/2015 7:39:31 PM	R26842
Copper	ND	0.0060		mg/L	1	6/15/2015 7:39:31 PM	R26842
Iron	18	1.0	*	mg/L	50	6/19/2015 3:17:17 PM	R26969
Manganese	2.4	0.010	*	mg/L	5	6/15/2015 7:41:13 PM	R26842
Silver	ND	0.0050		mg/L	1	6/15/2015 7:39:31 PM	R26842
Zinc	0.012	0.010		mg/L	1	6/15/2015 7:39:31 PM	R26842
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	6.8	0.10	*	mg/L	50	6/15/2015 5:29:44 PM	19666
Cadmium	ND	0.0020		mg/L	1	6/11/2015 6:56:44 PM	19666
Chromium	0.0096	0.0060		mg/L	1	6/11/2015 6:56:44 PM	19666
Copper	0.0078	0.0060		mg/L	1	6/15/2015 5:28:03 PM	19666
Iron	22	1.0	*	mg/L	50	6/15/2015 5:29:44 PM	19666
Manganese	2.8	0.010	*	mg/L	5	6/11/2015 6:58:32 PM	19666
Silver	ND	0.0050		mg/L	1	6/15/2015 5:28:03 PM	19666
Zinc	0.023	0.010		mg/L	1	6/11/2015 6:56:44 PM	19666
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.017	0.0050	*	mg/L	5	6/16/2015 2:29:33 PM	19666
Lead	0.016	0.0025	*	mg/L	5	6/16/2015 2:29:33 PM	19666
Selenium	ND	0.0050		mg/L	5	6/16/2015 2:29:33 PM	19666
Uranium	ND	0.0025		mg/L	5	6/16/2015 2:29:33 PM	19666
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/15/2015 2:33:41 PM	19717
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	13	1.0		mg/L	1	6/9/2015 9:25:58 PM	19616
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/9/2015 9:25:58 PM	19616
Surr: DNOP	102	76.5-150		%REC	1	6/9/2015 9:25:58 PM	19616
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	30	5.0		mg/L	100	6/10/2015 10:07:46 AM	R26753
Surr: BFB	95.5	57.8-137		%REC	100	6/10/2015 10:07:46 AM	R26753

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-36

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 2:10:00 PM

Lab ID: 1506309-007

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Acenaphthylene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Aniline	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Anthracene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Azobenzene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Benz(a)anthracene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Benzo(a)pyrene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Benzo(b)fluoranthene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Benzo(k)fluoranthene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Benzoic acid	ND	20		µg/L	1	6/10/2015 2:04:39 PM	19625
Benzyl alcohol	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Butyl benzyl phthalate	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Carbazole	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
4-Chloroaniline	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
2-Chloronaphthalene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
2-Chlorophenol	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Chrysene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Di-n-butyl phthalate	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Di-n-octyl phthalate	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Dibenzofuran	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
1,2-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
1,3-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
1,4-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Diethyl phthalate	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Dimethyl phthalate	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
2,4-Dichlorophenol	ND	20		µg/L	1	6/10/2015 2:04:39 PM	19625
2,4-Dimethylphenol	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/10/2015 2:04:39 PM	19625
2,4-Dinitrophenol	ND	20		µg/L	1	6/10/2015 2:04:39 PM	19625

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-36

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 2:10:00 PM

Lab ID: 1506309-007

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
2,4-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
2,6-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Fluoranthene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Fluorene	13	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Hexachlorobenzene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Hexachlorobutadiene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Hexachloroethane	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Isophorone	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
1-Methylnaphthalene	330	50		µg/L	5	6/10/2015 4:52:47 PM	19625
2-Methylnaphthalene	510	50		µg/L	5	6/10/2015 4:52:47 PM	19625
2-Methylphenol	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
3+4-Methylphenol	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
N-Nitrosodimethylamine	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Naphthalene	490	50		µg/L	5	6/10/2015 4:52:47 PM	19625
2-Nitroaniline	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
3-Nitroaniline	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
4-Nitroaniline	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Nitrobenzene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
2-Nitrophenol	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
4-Nitrophenol	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Pentachlorophenol	ND	20		µg/L	1	6/10/2015 2:04:39 PM	19625
Phenanthrene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Phenol	56	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Pyrene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Pyridine	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/10/2015 2:04:39 PM	19625
Surr: 2-Fluorophenol	42.7	14.9-111		%REC	1	6/10/2015 2:04:39 PM	19625
Surr: Phenol-d5	60.8	11.3-108		%REC	1	6/10/2015 2:04:39 PM	19625
Surr: 2,4,6-Tribromophenol	63.0	15.7-154		%REC	1	6/10/2015 2:04:39 PM	19625
Surr: Nitrobenzene-d5	89.4	47.8-106		%REC	1	6/10/2015 2:04:39 PM	19625
Surr: 2-Fluorobiphenyl	93.5	21.3-123		%REC	1	6/10/2015 2:04:39 PM	19625
Surr: 4-Terphenyl-d14	79.1	14.3-135		%REC	1	6/10/2015 2:04:39 PM	19625

EPA METHOD 8260B: VOLATILESAnalyst: **cadg**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-36

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 2:10:00 PM

Lab ID: 1506309-007

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	8100	100		µg/L	100	6/15/2015 7:11:37 PM	R26844
Toluene	34	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Ethylbenzene	1600	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Methyl tert-butyl ether (MTBE)	8400	100		µg/L	100	6/15/2015 7:11:37 PM	R26844
1,2,4-Trimethylbenzene	65	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,3,5-Trimethylbenzene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,2-Dichloroethane (EDC)	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,2-Dibromoethane (EDB)	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Naphthalene	580	40		µg/L	20	6/16/2015 12:03:46 PM	R26872
1-Methylnaphthalene	340	80		µg/L	20	6/16/2015 12:03:46 PM	R26872
2-Methylnaphthalene	580	80		µg/L	20	6/16/2015 12:03:46 PM	R26872
Acetone	ND	200		µg/L	20	6/16/2015 12:03:46 PM	R26872
Bromobenzene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Bromodichloromethane	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Bromoform	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Bromomethane	ND	60		µg/L	20	6/16/2015 12:03:46 PM	R26872
2-Butanone	ND	200		µg/L	20	6/16/2015 12:03:46 PM	R26872
Carbon disulfide	ND	200		µg/L	20	6/16/2015 12:03:46 PM	R26872
Carbon Tetrachloride	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Chlorobenzene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Chloroethane	ND	40		µg/L	20	6/16/2015 12:03:46 PM	R26872
Chloroform	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Chloromethane	ND	60		µg/L	20	6/16/2015 12:03:46 PM	R26872
2-Chlorotoluene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
4-Chlorotoluene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
cis-1,2-DCE	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
cis-1,3-Dichloropropene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,2-Dibromo-3-chloropropane	ND	40		µg/L	20	6/16/2015 12:03:46 PM	R26872
Dibromochloromethane	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Dibromomethane	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,2-Dichlorobenzene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,3-Dichlorobenzene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,4-Dichlorobenzene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Dichlorodifluoromethane	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,1-Dichloroethane	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,1-Dichloroethene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,2-Dichloropropane	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,3-Dichloropropane	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
2,2-Dichloropropane	ND	40		µg/L	20	6/16/2015 12:03:46 PM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-36

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 2:10:00 PM

Lab ID: 1506309-007

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: cadg			
1,1-Dichloropropene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Hexachlorobutadiene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
2-Hexanone	ND	200		µg/L	20	6/16/2015 12:03:46 PM	R26872
Isopropylbenzene	44	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
4-Isopropyltoluene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
4-Methyl-2-pentanone	ND	200		µg/L	20	6/16/2015 12:03:46 PM	R26872
Methylene Chloride	ND	60		µg/L	20	6/16/2015 12:03:46 PM	R26872
n-Butylbenzene	ND	60		µg/L	20	6/16/2015 12:03:46 PM	R26872
n-Propylbenzene	91	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
sec-Butylbenzene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Styrene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
tert-Butylbenzene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,1,1,2-Tetrachloroethane	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,1,2,2-Tetrachloroethane	ND	40		µg/L	20	6/16/2015 12:03:46 PM	R26872
Tetrachloroethene (PCE)	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
trans-1,2-DCE	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
trans-1,3-Dichloropropene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,2,3-Trichlorobenzene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,2,4-Trichlorobenzene	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,1,1-Trichloroethane	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,1,2-Trichloroethane	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Trichloroethene (TCE)	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Trichlorofluoromethane	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
1,2,3-Trichloropropane	ND	40		µg/L	20	6/16/2015 12:03:46 PM	R26872
Vinyl chloride	ND	20		µg/L	20	6/16/2015 12:03:46 PM	R26872
Xylenes, Total	140	30		µg/L	20	6/16/2015 12:03:46 PM	R26872
Surr: 1,2-Dichloroethane-d4	99.5	70-130		%REC	20	6/16/2015 12:03:46 PM	R26872
Surr: 4-Bromofluorobenzene	97.7	70-130		%REC	20	6/16/2015 12:03:46 PM	R26872
Surr: Dibromofluoromethane	103	70-130		%REC	20	6/16/2015 12:03:46 PM	R26872
Surr: Toluene-d8	110	70-130		%REC	20	6/16/2015 12:03:46 PM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-35

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 2:30:00 PM

Lab ID: 1506309-008

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	6/17/2015 7:56:32 PM	R26904
Lead	ND	0.0050		mg/L	5	6/17/2015 7:56:32 PM	R26904
Selenium	ND	0.0050		mg/L	5	6/17/2015 7:56:32 PM	R26904
Uranium	ND	0.0050		mg/L	5	6/17/2015 7:56:32 PM	R26904
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.36	0.0020		mg/L	1	6/15/2015 7:50:12 PM	R26842
Cadmium	ND	0.0020		mg/L	1	6/15/2015 7:50:12 PM	R26842
Chromium	ND	0.0060		mg/L	1	6/15/2015 7:50:12 PM	R26842
Copper	ND	0.0060		mg/L	1	6/15/2015 7:50:12 PM	R26842
Iron	2.6	0.10	*	mg/L	5	6/15/2015 7:51:53 PM	R26842
Manganese	3.1	0.010	*	mg/L	5	6/15/2015 7:51:53 PM	R26842
Silver	ND	0.0050		mg/L	1	6/15/2015 7:50:12 PM	R26842
Zinc	0.017	0.010		mg/L	1	6/15/2015 7:50:12 PM	R26842
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	5.0	0.010	*	mg/L	5	6/11/2015 7:02:21 PM	19666
Cadmium	ND	0.0020		mg/L	1	6/11/2015 7:00:27 PM	19666
Chromium	0.018	0.0060		mg/L	1	6/11/2015 7:00:27 PM	19666
Copper	0.013	0.0060		mg/L	1	6/15/2015 5:31:42 PM	19666
Iron	13	1.0	*	mg/L	50	6/15/2015 5:33:28 PM	19666
Manganese	6.4	0.10	*	mg/L	50	6/15/2015 5:33:28 PM	19666
Silver	ND	0.0050		mg/L	1	6/15/2015 5:31:42 PM	19666
Zinc	0.032	0.010		mg/L	1	6/11/2015 7:00:27 PM	19666
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	6/16/2015 2:32:16 PM	19666
Lead	0.023	0.0025	*	mg/L	5	6/16/2015 2:32:16 PM	19666
Selenium	ND	0.0050		mg/L	5	6/16/2015 2:32:16 PM	19666
Uranium	0.0044	0.0025		mg/L	5	6/16/2015 2:32:16 PM	19666
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/15/2015 2:35:41 PM	19717
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	2.3	1.0		mg/L	1	6/9/2015 9:47:17 PM	19616
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/9/2015 9:47:17 PM	19616
Surr: DNOP	105	76.5-150		%REC	1	6/9/2015 9:47:17 PM	19616
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	2.9	0.050		mg/L	1	6/10/2015 11:48:10 AM	R26753
Surr: BFB	152	57.8-137	S	%REC	1	6/10/2015 11:48:10 AM	R26753

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-35

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 2:30:00 PM

Lab ID: 1506309-008

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Acenaphthylene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Aniline	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Anthracene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Azobenzene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Benz(a)anthracene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Benzo(a)pyrene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Benzo(b)fluoranthene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Benzo(k)fluoranthene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Benzoic acid	ND	20		µg/L	1	6/10/2015 2:32:40 PM	19625
Benzyl alcohol	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Butyl benzyl phthalate	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Carbazole	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
4-Chloroaniline	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
2-Chloronaphthalene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
2-Chlorophenol	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Chrysene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Di-n-butyl phthalate	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Di-n-octyl phthalate	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Dibenzofuran	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
1,2-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
1,3-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
1,4-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Diethyl phthalate	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Dimethyl phthalate	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
2,4-Dichlorophenol	ND	20		µg/L	1	6/10/2015 2:32:40 PM	19625
2,4-Dimethylphenol	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/10/2015 2:32:40 PM	19625
2,4-Dinitrophenol	ND	20		µg/L	1	6/10/2015 2:32:40 PM	19625

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-35

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 2:30:00 PM

Lab ID: 1506309-008

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
2,4-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
2,6-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Fluoranthene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Fluorene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Hexachlorobenzene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Hexachlorobutadiene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Hexachloroethane	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Isophorone	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
1-Methylnaphthalene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
2-Methylnaphthalene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
2-Methylphenol	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
3+4-Methylphenol	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
N-Nitrosodimethylamine	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Naphthalene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
2-Nitroaniline	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
3-Nitroaniline	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
4-Nitroaniline	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Nitrobenzene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
2-Nitrophenol	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
4-Nitrophenol	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Pentachlorophenol	ND	20		µg/L	1	6/10/2015 2:32:40 PM	19625
Phenanthrene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Phenol	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Pyrene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Pyridine	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/10/2015 2:32:40 PM	19625
Surr: 2-Fluorophenol	34.1	14.9-111		%REC	1	6/10/2015 2:32:40 PM	19625
Surr: Phenol-d5	56.5	11.3-108		%REC	1	6/10/2015 2:32:40 PM	19625
Surr: 2,4,6-Tribromophenol	55.8	15.7-154		%REC	1	6/10/2015 2:32:40 PM	19625
Surr: Nitrobenzene-d5	85.8	47.8-106		%REC	1	6/10/2015 2:32:40 PM	19625
Surr: 2-Fluorobiphenyl	85.9	21.3-123		%REC	1	6/10/2015 2:32:40 PM	19625
Surr: 4-Terphenyl-d14	74.5	14.3-135		%REC	1	6/10/2015 2:32:40 PM	19625

EPA METHOD 8260B: VOLATILES

Analyst: **cadg**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-35

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 2:30:00 PM

Lab ID: 1506309-008

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: cadg	
Benzene	790	10		µg/L	10	6/15/2015 8:09:21 PM	R26844
Toluene	2.3	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Ethylbenzene	190	10		µg/L	10	6/15/2015 8:09:21 PM	R26844
Methyl tert-butyl ether (MTBE)	27	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,2,4-Trimethylbenzene	9.5	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,3,5-Trimethylbenzene	2.3	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Naphthalene	3.9	2.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1-Methylnaphthalene	4.2	4.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
2-Methylnaphthalene	ND	4.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Acetone	ND	10		µg/L	1	6/15/2015 8:38:13 PM	R26844
Bromobenzene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Bromodichloromethane	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Bromoform	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Bromomethane	ND	3.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
2-Butanone	ND	10		µg/L	1	6/15/2015 8:38:13 PM	R26844
Carbon disulfide	ND	10		µg/L	1	6/15/2015 8:38:13 PM	R26844
Carbon Tetrachloride	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Chlorobenzene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Chloroethane	ND	2.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Chloroform	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Chloromethane	ND	3.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
2-Chlorotoluene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
4-Chlorotoluene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
cis-1,2-DCE	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Dibromochloromethane	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Dibromomethane	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,1-Dichloroethane	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,1-Dichloroethene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,2-Dichloropropane	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,3-Dichloropropane	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
2,2-Dichloropropane	ND	2.0		µg/L	1	6/15/2015 8:38:13 PM	R26844

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-35

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015 2:30:00 PM

Lab ID: 1506309-008

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: cadg			
1,1-Dichloropropene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Hexachlorobutadiene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
2-Hexanone	ND	10		µg/L	1	6/15/2015 8:38:13 PM	R26844
Isopropylbenzene	8.4	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
4-Isopropyltoluene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
4-Methyl-2-pentanone	ND	10		µg/L	1	6/15/2015 8:38:13 PM	R26844
Methylene Chloride	ND	3.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
n-Butylbenzene	ND	3.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
n-Propylbenzene	22	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
sec-Butylbenzene	1.7	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Styrene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
tert-Butylbenzene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
trans-1,2-DCE	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Trichlorofluoromethane	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Vinyl chloride	ND	1.0		µg/L	1	6/15/2015 8:38:13 PM	R26844
Xylenes, Total	2.1	1.5		µg/L	1	6/15/2015 8:38:13 PM	R26844
Surr: 1,2-Dichloroethane-d4	99.8	70-130		%REC	1	6/15/2015 8:38:13 PM	R26844
Surr: 4-Bromofluorobenzene	73.5	70-130		%REC	1	6/15/2015 8:38:13 PM	R26844
Surr: Dibromofluoromethane	94.6	70-130		%REC	1	6/15/2015 8:38:13 PM	R26844
Surr: Toluene-d8	107	70-130		%REC	1	6/15/2015 8:38:13 PM	R26844

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: BLIND DUPLICATE

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015

Lab ID: 1506309-009

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Acenaphthylene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Aniline	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Anthracene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Azobenzene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Benz(a)anthracene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Benzo(a)pyrene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Benzo(b)fluoranthene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Benzo(k)fluoranthene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Benzoic acid	ND	20		µg/L	1	6/10/2015 3:00:34 PM	19625
Benzyl alcohol	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Butyl benzyl phthalate	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Carbazole	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
4-Chloroaniline	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
2-Chloronaphthalene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
2-Chlorophenol	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Chrysene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Di-n-butyl phthalate	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Di-n-octyl phthalate	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Dibenzofuran	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
1,2-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
1,3-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
1,4-Dichlorobenzene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Diethyl phthalate	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Dimethyl phthalate	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
2,4-Dichlorophenol	ND	20		µg/L	1	6/10/2015 3:00:34 PM	19625
2,4-Dimethylphenol	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/10/2015 3:00:34 PM	19625
2,4-Dinitrophenol	ND	20		µg/L	1	6/10/2015 3:00:34 PM	19625

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: BLIND DUPLICATE

Project: 2015 2nd Quarter MKTF WELLS

Collection Date: 6/4/2015

Lab ID: 1506309-009

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
2,4-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
2,6-Dinitrotoluene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Fluoranthene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Fluorene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Hexachlorobenzene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Hexachlorobutadiene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Hexachloroethane	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Isophorone	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
1-Methylnaphthalene	95	10		µg/L	1	6/10/2015 3:00:34 PM	19625
2-Methylnaphthalene	150	10		µg/L	1	6/10/2015 3:00:34 PM	19625
2-Methylphenol	28	10		µg/L	1	6/10/2015 3:00:34 PM	19625
3+4-Methylphenol	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
N-Nitrosodimethylamine	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Naphthalene	260	50		µg/L	5	6/10/2015 5:20:51 PM	19625
2-Nitroaniline	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
3-Nitroaniline	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
4-Nitroaniline	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Nitrobenzene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
2-Nitrophenol	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
4-Nitrophenol	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Pentachlorophenol	ND	20		µg/L	1	6/10/2015 3:00:34 PM	19625
Phenanthrene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Phenol	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Pyrene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Pyridine	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/10/2015 3:00:34 PM	19625
Surr: 2-Fluorophenol	67.4	14.9-111		%REC	1	6/10/2015 3:00:34 PM	19625
Surr: Phenol-d5	52.3	11.3-108		%REC	1	6/10/2015 3:00:34 PM	19625
Surr: 2,4,6-Tribromophenol	88.3	15.7-154		%REC	1	6/10/2015 3:00:34 PM	19625
Surr: Nitrobenzene-d5	72.5	47.8-106		%REC	1	6/10/2015 3:00:34 PM	19625
Surr: 2-Fluorobiphenyl	81.2	21.3-123		%REC	1	6/10/2015 3:00:34 PM	19625
Surr: 4-Terphenyl-d14	59.4	14.3-135		%REC	1	6/10/2015 3:00:34 PM	19625

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Trip Blank

Project: 2015 2nd Quarter MKTF WELLS

Collection Date:

Lab ID: 1506309-010

Matrix: TRIP BLANK

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/10/2015 12:38:31 PM	R26753
Surr: BFB	89.7	57.8-137		%REC	1	6/10/2015 12:38:31 PM	R26753
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Toluene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Ethylbenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Naphthalene	ND	2.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1-Methylnaphthalene	ND	4.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
2-Methylnaphthalene	ND	4.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Acetone	ND	10		µg/L	1	6/15/2015 9:35:42 PM	R26844
Bromobenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Bromodichloromethane	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Bromoform	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Bromomethane	ND	3.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
2-Butanone	ND	10		µg/L	1	6/15/2015 9:35:42 PM	R26844
Carbon disulfide	ND	10		µg/L	1	6/15/2015 9:35:42 PM	R26844
Carbon Tetrachloride	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Chlorobenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Chloroethane	ND	2.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Chloroform	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Chloromethane	ND	3.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
2-Chlorotoluene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
4-Chlorotoluene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
cis-1,2-DCE	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Dibromochloromethane	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Dibromomethane	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,1-Dichloroethane	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,1-Dichloroethene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506309

Date Reported: 6/29/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Trip Blank

Project: 2015 2nd Quarter MKTF WELLS

Collection Date:

Lab ID: 1506309-010

Matrix: TRIP BLANK

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
1,2-Dichloropropane	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,3-Dichloropropane	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
2,2-Dichloropropane	ND	2.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,1-Dichloropropene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Hexachlorobutadiene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
2-Hexanone	ND	10		µg/L	1	6/15/2015 9:35:42 PM	R26844
Isopropylbenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
4-Isopropyltoluene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
4-Methyl-2-pentanone	ND	10		µg/L	1	6/15/2015 9:35:42 PM	R26844
Methylene Chloride	ND	3.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
n-Butylbenzene	ND	3.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
n-Propylbenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
sec-Butylbenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Styrene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
tert-Butylbenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
trans-1,2-DCE	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Trichlorofluoromethane	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Vinyl chloride	ND	1.0		µg/L	1	6/15/2015 9:35:42 PM	R26844
Xylenes, Total	ND	1.5		µg/L	1	6/15/2015 9:35:42 PM	R26844
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	6/15/2015 9:35:42 PM	R26844
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	6/15/2015 9:35:42 PM	R26844
Surr: Dibromofluoromethane	103	70-130		%REC	1	6/15/2015 9:35:42 PM	R26844
Surr: Toluene-d8	104	70-130		%REC	1	6/15/2015 9:35:42 PM	R26844

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506309

29-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter MKTF WELLS

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R26842			RunNo: 26842					
Prep Date:		Analysis Date: 6/15/2015			SeqNo: 800962		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26842		RunNo: 26842					
Prep Date:			Analysis Date: 6/15/2015		SeqNo: 800963		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	95.1	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.9	85	115			
Chromium	0.48	0.0060	0.5000	0	96.8	85	115			
Copper	0.49	0.0060	0.5000	0	97.9	85	115			
Iron	0.48	0.020	0.5000	0	95.8	85	115			
Manganese	0.46	0.0020	0.5000	0	92.8	85	115			
Silver	0.10	0.0050	0.1000	0	99.8	85	115			
Zinc	0.47	0.010	0.5000	0	94.6	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R26842			RunNo: 26842					
Prep Date:		Analysis Date: 6/15/2015			SeqNo: 801190		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506309

29-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter MKTF WELLS

Sample ID	LCS		SampType: LCS			TestCode: EPA Method 200.7: Dissolved Metals				
Client ID:	LCSW		Batch ID: R26842			RunNo: 26842				
Prep Date:	Analysis Date: 6/15/2015			SeqNo: 801191		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.47	0.0020	0.5000	0	94.7	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.0	85	115			
Chromium	0.48	0.0060	0.5000	0	95.8	85	115			
Copper	0.49	0.0060	0.5000	0	97.7	85	115			
Iron	0.49	0.020	0.5000	0	97.1	85	115			
Manganese	0.46	0.0020	0.5000	0	92.4	85	115			
Silver	0.10	0.0050	0.1000	0	99.6	85	115			
Zinc	0.47	0.010	0.5000	0	94.9	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R26895			RunNo: 26895					
Prep Date:		Analysis Date: 6/17/2015			SeqNo: 802954		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	ND	0.0050								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26895		RunNo: 26895					
Prep Date:			Analysis Date: 6/17/2015		SeqNo: 802955		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.098	0.0050	0.1000	0	98.0	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R26942			RunNo: 26942					
Prep Date:		Analysis Date: 6/18/2015			SeqNo: 804362		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26942		RunNo: 26942					
Prep Date:			Analysis Date: 6/18/2015		SeqNo: 804363		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	95.5	85	115			
Iron	0.50	0.020	0.5000	0	99.9	85	115			
Manganese	0.49	0.0020	0.5000	0	97.1	85	115			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506309

29-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter MKTF WELLS

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID:	R26942	RunNo:	26942					
Prep Date:		Analysis Date:	6/18/2015	SeqNo:	804364	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW	Batch ID:	R26942	RunNo:	26942					
Prep Date:		Analysis Date:	6/18/2015	SeqNo:	804365	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	95.2	85	115			
Iron	0.52	0.020	0.5000	0	103	85	115			
Manganese	0.49	0.0020	0.5000	0	97.3	85	115			

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID:	R26969	RunNo:	26969					
Prep Date:		Analysis Date:	6/19/2015	SeqNo:	805268	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW	Batch ID:	R26969	RunNo:	26969					
Prep Date:		Analysis Date:	6/19/2015	SeqNo:	805269	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	96.5	85	115			

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID:	R26969	RunNo:	26969					
Prep Date:		Analysis Date:	6/19/2015	SeqNo:	805397	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW	Batch ID:	R26969	RunNo:	26969					
Prep Date:		Analysis Date:	6/19/2015	SeqNo:	805398	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.49	0.020	0.5000	0	97.4	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506309

29-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter MKTF WELLS

Sample ID	MB-19666		SampType:	MBLK		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	PBW		Batch ID:	19666		RunNo:	26786			
Prep Date:	6/10/2015		Analysis Date:	6/11/2015		SeqNo:	798816		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								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID	LCS-19666		SampType:	LCS		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	LCSW		Batch ID:	19666		RunNo:	26786			
Prep Date:	6/10/2015		Analysis Date:	6/11/2015		SeqNo:	798817		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	97.5	85	115			
Cadmium	0.51	0.0020	0.5000	0	103	85	115			
Chromium	0.48	0.0060	0.5000	0	96.7	85	115			
Iron	0.49	0.020	0.5000	0	98.5	85	115			
Manganese	0.49	0.0020	0.5000	0	97.4	85	115			
Silver	0.096	0.0050	0.1000	0	95.6	85	115			
Zinc	0.48	0.010	0.5000	0	95.7	85	115			

Sample ID	MB-19666		SampType:	MBLK		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	PBW		Batch ID:	19666		RunNo:	26842			
Prep Date:	6/10/2015		Analysis Date:	6/15/2015		SeqNo:	800957		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	ND	0.0060								

Sample ID	LCS-19666		SampType:	LCS		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	LCSW		Batch ID:	19666		RunNo:	26842			
Prep Date:	6/10/2015		Analysis Date:	6/15/2015		SeqNo:	800958		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	0.50	0.0060	0.5000	0	101	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506309

29-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter MKTF WELLS

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26876		RunNo: 26876					
Prep Date:			Analysis Date: 6/16/2015		SeqNo: 802096		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	99.0	85	115			
Lead	0.013	0.00050	0.01250	0	101	85	115			
Selenium	0.025	0.0010	0.02500	0	99.4	85	115			
Uranium	0.013	0.00050	0.01250	0	102	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26876		RunNo: 26876					
Prep Date:			Analysis Date: 6/16/2015		SeqNo: 802099		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	98.9	85	115			
Lead	0.012	0.00050	0.01250	0	96.3	85	115			
Selenium	0.025	0.0010	0.02500	0	100	85	115			
Uranium	0.012	0.00050	0.01250	0	96.9	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R26876			RunNo: 26876					
Prep Date:		Analysis Date: 6/16/2015			SeqNo: 802100		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: R26876			RunNo: 26876					
Prep Date:		Analysis Date: 6/16/2015			SeqNo: 802101		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: R26904			RunNo: 26904				
Prep Date:			Analysis Date: 6/17/2015			SeqNo: 803447		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506309

29-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter MKTF WELLS

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26904		RunNo: 26904					
Prep Date:			Analysis Date: 6/17/2015		SeqNo: 803447		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	97.2	85	115			
Selenium	0.025	0.0010	0.02500	0	98.5	85	115			
Uranium	0.012	0.00050	0.01250	0	97.2	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26904		RunNo: 26904					
Prep Date:			Analysis Date: 6/17/2015		SeqNo: 803448		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	97.2	85	115			
Selenium	0.024	0.0010	0.02500	0	95.9	85	115			
Uranium	0.012	0.00050	0.01250	0	98.2	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R26904			RunNo: 26904					
Prep Date:		Analysis Date: 6/17/2015			SeqNo: 803449		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: R26904			RunNo: 26904					
Prep Date:		Analysis Date: 6/17/2015			SeqNo: 803450		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.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506309

29-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter MKTF WELLS

Sample ID	MB-19717	SampType:	MBLK	TestCode:	EPA Method 245.1: Mercury					
Client ID:	PBW	Batch ID:	19717	RunNo:	26833					
Prep Date:	6/15/2015	Analysis Date:	6/15/2015	SeqNo:	800384	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	LCS-19717	SampType:	LCS	TestCode:	EPA Method 245.1: Mercury					
Client ID:	LCSW	Batch ID:	19717	RunNo:	26833					
Prep Date:	6/15/2015	Analysis Date:	6/15/2015	SeqNo:	800385	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	100	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506309

29-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter MKTF WELLS

Sample ID	MB-19616		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	PBW		Batch ID: 19616		RunNo: 26673					
Prep Date:	6/8/2015		Analysis Date: 6/9/2015		SeqNo: 796030		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	0.94		1.000		94.1	76.5	150			

Sample ID	LCS-19616		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	LCSW		Batch ID: 19616		RunNo: 26673					
Prep Date:	6/8/2015		Analysis Date: 6/9/2015		SeqNo: 796031		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	99.3	60.1	156			
Surr: DNOP	0.45		0.5000		89.8	76.5	150			

Sample ID	1506309-002CMS		SampType: MS		TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	MKTF-9		Batch ID: 19616		RunNo: 26673					
Prep Date:	6/8/2015		Analysis Date: 6/9/2015		SeqNo: 796033		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.8	1.0	5.000	1.843	99.2	75.9	164			
Surr: DNOP	0.46		0.5000		92.3	76.5	150			

Sample ID	1506309-002CMSD		SampType: MSD		TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	MKTF-9		Batch ID: 19616		RunNo: 26673					
Prep Date:	6/8/2015		Analysis Date: 6/9/2015		SeqNo: 796034		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.7	1.0	5.000	1.843	97.8	75.9	164	1.02	22.1	
Surr: DNOP	0.46		0.5000		91.0	76.5	150	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506309

29-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter MKTF WELLS

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID:	R26688	RunNo:	26688					
Prep Date:		Analysis Date:	6/8/2015	SeqNo:	795136	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		88.0	57.8	137			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	R26688	RunNo:	26688					
Prep Date:		Analysis Date:	6/8/2015	SeqNo:	795137	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.49	0.050	0.5000	0	97.0	80	120			
Surr: BFB	20		20.00		100	57.8	137			

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID:	R26753	RunNo:	26753					
Prep Date:		Analysis Date:	6/10/2015	SeqNo:	797263	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		88.9	57.8	137			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	R26753	RunNo:	26753					
Prep Date:		Analysis Date:	6/10/2015	SeqNo:	797264	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.49	0.050	0.5000	0	98.5	80	120			
Surr: BFB	21		20.00		103	57.8	137			

Sample ID	1506309-007BMS	SampType:	MS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	MKTF-36	Batch ID:	R26753	RunNo:	26753					
Prep Date:		Analysis Date:	6/10/2015	SeqNo:	797266	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	75	5.0	50.00	30.40	88.6	51	131			
Surr: BFB	2100		2000		107	57.8	137			

Sample ID	1506309-007BMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	MKTF-36	Batch ID:	R26753	RunNo:	26753					
Prep Date:		Analysis Date:	6/10/2015	SeqNo:	797267	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506309

29-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter MKTF WELLS

Sample ID	1506309-007BMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	MKTF-36	Batch ID:	R26753	RunNo:	26753					
Prep Date:		Analysis Date:	6/10/2015	SeqNo:	797267	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	63	5.0	50.00	30.40	65.8	51	131	16.5	20	
Surr: BFB	2100		2000		105	57.8	137	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506309

29-Jun-15

Client: Western Refining Southwest, Gallup**Project:** 2015 2nd Quarter MKTF WELLS

Sample ID	rb1	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R26816	RunNo:	26816					
Prep Date:		Analysis Date:	6/12/2015	SeqNo:	799731	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506309

29-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter MKTF WELLS

Sample ID	rb1	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R26816	RunNo:	26816					
Prep Date:		Analysis Date:	6/12/2015	SeqNo:	799731	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.9		10.00		99.2	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	10		10.00		99.8	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID:	R26816	RunNo:	26816					
Prep Date:		Analysis Date:	6/12/2015	SeqNo:	799733	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	70	130			
Toluene	21	1.0	20.00	0	105	70	130			
Chlorobenzene	20	1.0	20.00	0	99.9	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506309

29-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter MKTF WELLS

Sample ID	100ng lcs	SampType: LCS		TestCode: EPA Method 8260B: VOLATILES						
Client ID:	LCSW	Batch ID: R26816		RunNo: 26816						
Prep Date:	Analysis Date: 6/12/2015		SeqNo: 799733		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	21	1.0	20.00	0	107	75.6	144			
Trichloroethene (TCE)	18	1.0	20.00	0	91.7	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		105	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID	vsb-deli	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R26844			RunNo: 26844					
Prep Date:		Analysis Date: 6/15/2015			SeqNo: 801208		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506309

29-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter MKTF WELLS

Sample ID	vsb-deli	SampType: MBLK				TestCode: EPA Method 8260B: VOLATILES				
Client ID:	PBW	Batch ID: R26844				RunNo: 26844				
Prep Date:		Analysis Date: 6/15/2015				SeqNo: 801208	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506309

29-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter MKTF WELLS

Sample ID	vsb-deli		SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES				
Client ID:	PBW		Batch ID: R26844			RunNo: 26844				
Prep Date:			Analysis Date: 6/15/2015			SeqNo: 801208		Units: µg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		105	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID	100ng lcs2		SampType: LCS			TestCode: EPA Method 8260B: VOLATILES				
Client ID:	LCSW		Batch ID: R26844			RunNo: 26844				
Prep Date:			Analysis Date: 6/15/2015			SeqNo: 801210		Units: µg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	70	130			
Toluene	21	1.0	20.00	0	104	70	130			
Chlorobenzene	21	1.0	20.00	0	103	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	113	75.6	144			
Trichloroethene (TCE)	19	1.0	20.00	0	94.0	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		99.8	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID	1506309-005a ms		SampType: MS			TestCode: EPA Method 8260B: VOLATILES				
Client ID:	MKTF-4		Batch ID: R26844			RunNo: 26844				
Prep Date:			Analysis Date: 6/15/2015			SeqNo: 801280		Units: µg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	510	10	200.0	310.5	98.8	70	130			
Toluene	210	10	200.0	12.62	99.1	70	130			
Chlorobenzene	200	10	200.0	0	98.6	70	130			
1,1-Dichloroethene	240	10	200.0	21.82	110	70	130			
Trichloroethene (TCE)	180	10	200.0	2.894	88.9	70	130			
Surr: 1,2-Dichloroethane-d4	99		100.0		99.0	70	130			
Surr: 4-Bromofluorobenzene	90		100.0		90.3	70	130			
Surr: Dibromofluoromethane	99		100.0		99.0	70	130			
Surr: Toluene-d8	98		100.0		98.0	70	130			

Sample ID	1506309-005a msd		SampType: MSD			TestCode: EPA Method 8260B: VOLATILES				
Client ID:	MKTF-4		Batch ID: R26844			RunNo: 26844				
Prep Date:			Analysis Date: 6/15/2015			SeqNo: 801281		Units: µg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	480	10	200.0	310.5	84.0	70	130	5.96	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
E Value above quantitation range	H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit	P Sample pH Not In Range
R RPD outside accepted recovery limits	RL Reporting Detection Limit
S Spike Recovery outside accepted recovery limits	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506309

29-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter MKTF WELLS

Sample ID	1506309-005a msd			SampType:	MSD		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	MKTF-4			Batch ID:	R26844		RunNo:	26844			
Prep Date:				Analysis Date:	6/15/2015		SeqNo:	801281		Units:	µg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Toluene	210	10	200.0	12.62	100	70	130	0.879	20		
Chlorobenzene	190	10	200.0	0	96.5	70	130	2.17	20		
1,1-Dichloroethene	230	10	200.0	21.82	106	70	130	3.40	20		
Trichloroethene (TCE)	170	10	200.0	2.894	84.5	70	130	5.01	20		
Surr: 1,2-Dichloroethane-d4	100		100.0		102	70	130	0	0		
Surr: 4-Bromofluorobenzene	88		100.0		88.1	70	130	0	0		
Surr: Dibromofluoromethane	99		100.0		99.2	70	130	0	0		
Surr: Toluene-d8	100		100.0		101	70	130	0	0		

Sample ID	rb1	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R26872			RunNo: 26872					
Prep Date:		Analysis Date: 6/16/2015			SeqNo: 801831		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506309

29-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter MKTF WELLS

Sample ID	rb1	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R26872	RunNo:	26872					
Prep Date:		Analysis Date:	6/16/2015	SeqNo:	801831	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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								
Vinyl chloride	ND	1.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506309

29-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter MKTF WELLS

Sample ID	rb1		SampType:	MBLK		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	PBW		Batch ID:	R26872		RunNo:	26872			
Prep Date:			Analysis Date:	6/16/2015		SeqNo:	801831	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	11		10.00		106	70	130			

Sample ID	100ng lcs		SampType:	LCS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	LCSW		Batch ID:	R26872		RunNo:	26872			
Prep Date:			Analysis Date:	6/16/2015		SeqNo:	801833	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.5	70	130			
Toluene	21	1.0	20.00	0	103	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	105	75.6	144			
Trichloroethene (TCE)	18	1.0	20.00	0	92.1	70	130			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.3	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Qualifiers:

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E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506309

29-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter MKTF WELLS

Sample ID	mb-19625	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	19625	RunNo:	26748					
Prep Date:	6/9/2015	Analysis Date:	6/10/2015	SeqNo:	797128	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								

Qualifiers:

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E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506309

29-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter MKTF WELLS

Sample ID	mb-19625	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	19625	RunNo:	26748					
Prep Date:	6/9/2015	Analysis Date:	6/10/2015	SeqNo:	797128	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	140		200.0		68.9	14.9	111			
Surr: Phenol-d5	150		200.0		75.0	11.3	108			
Surr: 2,4,6-Tribromophenol	160		200.0		78.5	15.7	154			
Surr: Nitrobenzene-d5	73		100.0		73.2	47.8	106			
Surr: 2-Fluorobiphenyl	74		100.0		73.6	21.3	123			
Surr: 4-Terphenyl-d14	69		100.0		69.3	14.3	135			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506309

29-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd Quarter MKTF WELLS

Sample ID	lcs-19625		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 19625		RunNo: 26748					
Prep Date:	6/9/2015		Analysis Date: 6/10/2015		SeqNo: 797129		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	77	10	100.0	0	76.8	47.8	99.7			
4-Chloro-3-methylphenol	150	10	200.0	0	72.6	58.1	103			
2-Chlorophenol	150	10	200.0	0	73.3	49.5	96.8			
1,4-Dichlorobenzene	70	10	100.0	0	70.4	40.4	89.4			
2,4-Dinitrotoluene	54	10	100.0	0	54.4	38.6	91.3			
N-Nitrosodi-n-propylamine	69	10	100.0	0	68.7	53.9	95.6			
4-Nitrophenol	110	10	200.0	0	57.1	26.4	108			
Pentachlorophenol	130	20	200.0	0	62.6	36.5	86.6			
Phenol	140	10	200.0	0	68.9	29.3	108			
Pyrene	65	10	100.0	0	65.0	45.7	100			
1,2,4-Trichlorobenzene	75	10	100.0	0	74.6	39.3	94.5			
Surr: 2-Fluorophenol	140		200.0		68.8	14.9	111			
Surr: Phenol-d5	150		200.0		73.5	11.3	108			
Surr: 2,4,6-Tribromophenol	170		200.0		82.7	15.7	154			
Surr: Nitrobenzene-d5	77		100.0		77.2	47.8	106			
Surr: 2-Fluorobiphenyl	80		100.0		80.0	21.3	123			
Surr: 4-Terphenyl-d14	68		100.0		67.8	14.3	135			

Sample ID	lcsd-19625		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 19625		RunNo: 26748					
Prep Date:	6/9/2015		Analysis Date: 6/10/2015		SeqNo: 797133		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	61	10	100.0	0	61.4	47.8	99.7	22.3	28.2	
4-Chloro-3-methylphenol	140	10	200.0	0	67.7	58.1	103	6.93	24.4	
2-Chlorophenol	130	10	200.0	0	66.6	49.5	96.8	9.63	28.1	
1,4-Dichlorobenzene	65	10	100.0	0	65.0	40.4	89.4	8.03	31.2	
2,4-Dinitrotoluene	50	10	100.0	0	50.2	38.6	91.3	8.07	44.4	
N-Nitrosodi-n-propylamine	64	10	100.0	0	64.2	53.9	95.6	6.68	24.2	
4-Nitrophenol	110	10	200.0	0	53.0	26.4	108	7.34	36.6	
Pentachlorophenol	110	20	200.0	0	55.8	36.5	86.6	11.5	29.5	
Phenol	130	10	200.0	0	64.0	29.3	108	7.44	30	
Pyrene	65	10	100.0	0	65.0	45.7	100	0.0923	31	
1,2,4-Trichlorobenzene	68	10	100.0	0	67.6	39.3	94.5	9.84	24	
Surr: 2-Fluorophenol	120		200.0		60.8	14.9	111	0	0	
Surr: Phenol-d5	130		200.0		66.4	11.3	108	0	0	
Surr: 2,4,6-Tribromophenol	140		200.0		69.1	15.7	154	0	0	
Surr: Nitrobenzene-d5	61		100.0		61.5	47.8	106	0	0	
Surr: 2-Fluorobiphenyl	56		100.0		55.7	21.3	123	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506309

29-Jun-15

Client: Western Refining Southwest, Gallup**Project:** 2015 2nd Quarter MKTF WELLS

Sample ID	lcscd-19625	SampType:	LCSD	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02	Batch ID:	19625	RunNo:	26748					
Prep Date:	6/9/2015	Analysis Date:	6/10/2015	SeqNo:	797133	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	48		100.0		47.7	14.3	135	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

Sample Log-In Check List

Client Name: **Western Refining Gallup**

Work Order Number: **1506309**

RcptNo: 1

Received by/date:

Logged By: **Lindsay Mangin**

06/06/15
6/6/2015 9:00:00 AM

Completed By: **Lindsay Mangin**

6/6/2015 9:44:19 AM

Reviewed By:

AT 06/08/15

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: **14**
(≤ 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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Yes			

Chain-of-Custody Record

Client: Western Refining Company

GALLUP REFINERY

Mailing Address:

92 Giant Crossing Road, Gallup, NM 87301

Phone #: 505-722-3833

email or Fax#: 505-863-0930

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other

☐ EDD (Type)

Sampler:

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.8

C. JOHNSON (cheryl.johnson@wnr.com)

Project Manager:

PO #20825205

Project #:

2015 2nd Quarter MKTF WELLS

Project Name:

X Standard ☐ Rush

Turn-Around Time:

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	8260+MTBE	8015B extended	8270 + Phenols	WQCC Metals - Total	WQCC Metals - Dissolved (Filtered)	Air Bubbles (Y or N)
6/4/2015	700	H2O	FIELD BLANK	3-40ML VOAS	HCL	-001	X	X	X	X		
6/4/2015	1005	H2O	MKTF-9	MISC	MISC	-002	X	X	X	X		
6/4/2015	1035	H2O	MKTF-10	MISC	MISC	-003	X	X	X	X		
6/4/2015	1110	H2O	MKTF-11	MISC	MISC	-004	X	X	X	X		
6/4/2015	1148	H2O	MKTF-4	MISC	MISC	-005	X	X	X	X		
6/4/2015	1345	H2O	MKTF-37	MISC	MISC	-006	X	X	X	X		
6/4/2015	1410	H2O	MKTF-36	MISC	MISC	-007	X	X	X	X		
6/4/2015	1430	H2O	MKTF-35	MISC	MISC	-008	X	X	X	X		
6/4/2015			BLIND DUPLICATE			-009			X			
6/4/2015			TRIP BLANK			-010	X					

Date	Time	Relinquished by:	Received by:	Date	Time	Remarks:
6/5/15	1000			6-5-15	300	
6-6-15	900			6-6-15	0000	

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.

Collect a duplicate of 8270 from either one of these wells.



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 24, 2015

Cheryl Johnson

Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: 2014 2nd Quarter

OrderNo.: 1506311

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/6/2015 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', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506311

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EAST LDU

Project: 2014 2nd Quarter

Collection Date:

Lab ID: 1506311-001

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.010		mg/L	10	6/16/2015 5:56:27 PM	R26876
Lead	ND	0.010		mg/L	10	6/16/2015 5:56:27 PM	R26876
Selenium	0.044	0.010		mg/L	10	6/16/2015 5:56:27 PM	R26876
Uranium	ND	0.010		mg/L	10	6/16/2015 5:56:27 PM	R26876
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.28	0.0020		mg/L	1	6/15/2015 6:48:09 PM	R26842
Cadmium	ND	0.0020		mg/L	1	6/15/2015 6:48:09 PM	R26842
Chromium	0.86	0.0060	*	mg/L	1	6/15/2015 6:48:09 PM	R26842
Copper	ND	0.0060		mg/L	1	6/15/2015 6:48:09 PM	R26842
Iron	0.086	0.020		mg/L	1	6/15/2015 6:48:09 PM	R26842
Manganese	2.6	0.010	*	mg/L	5	6/15/2015 6:50:14 PM	R26842
Silver	ND	0.0050		mg/L	1	6/16/2015 3:43:34 PM	R26882
Zinc	ND	0.010		mg/L	1	6/15/2015 6:48:09 PM	R26842
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.34	0.0020		mg/L	1	6/11/2015 5:14:50 PM	19665
Cadmium	ND	0.0020		mg/L	1	6/11/2015 5:14:50 PM	19665
Chromium	0.94	0.0060	*	mg/L	1	6/11/2015 5:14:50 PM	19665
Copper	ND	0.0060		mg/L	1	6/15/2015 4:07:58 PM	19665
Iron	0.84	0.020	*	mg/L	1	6/11/2015 5:14:50 PM	19665
Manganese	3.0	0.010	*	mg/L	5	6/11/2015 5:16:51 PM	19665
Silver	ND	0.0050		mg/L	1	6/11/2015 5:14:50 PM	19665
Zinc	ND	0.010		mg/L	1	6/11/2015 5:14:50 PM	19665
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.0089	0.0050		mg/L	5	6/12/2015 6:24:02 PM	19665
Lead	ND	0.0025		mg/L	5	6/12/2015 6:24:02 PM	19665
Selenium	ND	0.0050		mg/L	5	6/12/2015 6:24:02 PM	19665
Uranium	ND	0.0025		mg/L	5	6/12/2015 6:24:02 PM	19665
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/15/2015 2:37:43 PM	19717
EPA METHOD 8015D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	17	1.0		mg/L	1	6/9/2015 5:31:53 PM	19569
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/9/2015 5:31:53 PM	19569
Surr: DNOP	99.8	76.5-150		%REC	1	6/9/2015 5:31:53 PM	19569
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.54	0.050		mg/L	1	6/10/2015 11:10:11 PM	R26753
Surr: BFB	115	57.8-137		%REC	1	6/10/2015 11:10:11 PM	R26753

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506311

Date Reported: 6/24/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EAST LDU

Project: 2014 2nd Quarter

Collection Date:

Lab ID: 1506311-001

Matrix: AQUEOUS

Received Date: 6/6/2015 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst: DJF		
Benzene	1200	20		µg/L	20	6/12/2015 1:06:59 PM	R26817
Toluene	1000	20		µg/L	20	6/12/2015 1:06:59 PM	R26817
Ethylbenzene	430	20		µg/L	20	6/12/2015 1:06:59 PM	R26817
Methyl tert-butyl ether (MTBE)	ND	20		µg/L	20	6/12/2015 1:06:59 PM	R26817
1,2,4-Trimethylbenzene	960	20		µg/L	20	6/12/2015 1:06:59 PM	R26817
1,3,5-Trimethylbenzene	300	20		µg/L	20	6/12/2015 1:06:59 PM	R26817
Xylenes, Total	2000	30		µg/L	20	6/12/2015 1:06:59 PM	R26817
Surr: 1,2-Dichloroethane-d4	98.2	70-130		%REC	20	6/12/2015 1:06:59 PM	R26817
Surr: 4-Bromofluorobenzene	93.8	70-130		%REC	20	6/12/2015 1:06:59 PM	R26817
Surr: Dibromofluoromethane	99.0	70-130		%REC	20	6/12/2015 1:06:59 PM	R26817
Surr: Toluene-d8	102	70-130		%REC	20	6/12/2015 1:06:59 PM	R26817

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 2 of 11
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506311

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2014 2nd Quarter

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R26842			RunNo: 26842					
Prep Date:		Analysis Date: 6/15/2015			SeqNo: 800962		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								
Zinc	ND	0.010								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26842		RunNo: 26842					
Prep Date:			Analysis Date: 6/15/2015		SeqNo: 800963		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	95.1	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.9	85	115			
Chromium	0.48	0.0060	0.5000	0	96.8	85	115			
Copper	0.49	0.0060	0.5000	0	97.9	85	115			
Iron	0.48	0.020	0.5000	0	95.8	85	115			
Manganese	0.46	0.0020	0.5000	0	92.8	85	115			
Zinc	0.47	0.010	0.5000	0	94.6	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R26842			RunNo: 26842					
Prep Date:		Analysis Date: 6/15/2015			SeqNo: 801190		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								
Zinc	ND	0.010								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26842		RunNo: 26842					
Prep Date:			Analysis Date: 6/15/2015		SeqNo: 801191		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.47	0.0020	0.5000	0	94.7	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506311

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2014 2nd Quarter

Sample ID	LCS		SampType: LCS			TestCode: EPA Method 200.7: Dissolved Metals				
Client ID:	LCSW		Batch ID: R26842			RunNo: 26842				
Prep Date:	Analysis Date: 6/15/2015			SeqNo: 801191		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.49	0.0020	0.5000	0	98.0	85	115			
Chromium	0.48	0.0060	0.5000	0	95.8	85	115			
Copper	0.49	0.0060	0.5000	0	97.7	85	115			
Iron	0.49	0.020	0.5000	0	97.1	85	115			
Manganese	0.46	0.0020	0.5000	0	92.4	85	115			
Zinc	0.47	0.010	0.5000	0	94.9	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R26882			RunNo: 26882					
Prep Date:		Analysis Date: 6/16/2015			SeqNo: 802272		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	ND	0.0050								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26882		RunNo: 26882					
Prep Date:			Analysis Date: 6/16/2015		SeqNo: 802273		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.10	0.0050	0.1000	0	101	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506311

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2014 2nd Quarter

Sample ID	MB-19665		SampType: MBLK		TestCode: EPA Method 200.7: Total Metals					
Client ID:	PBW		Batch ID: 19665		RunNo: 26773					
Prep Date:	6/10/2015		Analysis Date: 6/11/2015		SeqNo: 798277		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								

Sample ID	LCS-19665		SampType: LCS		TestCode: EPA Method 200.7: Total Metals					
Client ID:	LCSW		Batch ID: 19665		RunNo: 26773					
Prep Date:	6/10/2015		Analysis Date: 6/11/2015		SeqNo: 798278		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.52	0.0020	0.5000	0	104	85	115			
Chromium	0.53	0.0060	0.5000	0	105	85	115			
Copper	0.50	0.0060	0.5000	0	101	85	115			
Iron	0.54	0.020	0.5000	0	107	85	115			
Manganese	0.52	0.0020	0.5000	0	104	85	115			
Silver	0.10	0.0050	0.1000	0	99.6	85	115			

Sample ID	MB-19665		SampType: MBLK		TestCode: EPA Method 200.7: Total Metals					
Client ID:	PBW		Batch ID: 19665		RunNo: 26786					
Prep Date:	6/10/2015		Analysis Date: 6/11/2015		SeqNo: 798814		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	ND	0.0020								
Zinc	ND	0.010								

Sample ID	LCS-19665		SampType: LCS		TestCode: EPA Method 200.7: Total Metals					
Client ID:	LCSW		Batch ID: 19665		RunNo: 26786					
Prep Date:	6/10/2015		Analysis Date: 6/11/2015		SeqNo: 798815		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.52	0.0020	0.5000	0	103	85	115			
Zinc	0.48	0.010	0.5000	0	96.8	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
E Value above quantitation range	H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit	P Sample pH Not In Range
R RPD outside accepted recovery limits	RL Reporting Detection Limit
S Spike Recovery outside accepted recovery limits	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506311

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2014 2nd Quarter

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26876		RunNo: 26876					
Prep Date:			Analysis Date: 6/16/2015		SeqNo: 802096		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	99.0	85	115			
Lead	0.013	0.00050	0.01250	0	101	85	115			
Selenium	0.025	0.0010	0.02500	0	99.4	85	115			
Uranium	0.013	0.00050	0.01250	0	102	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26876		RunNo: 26876					
Prep Date:			Analysis Date: 6/16/2015		SeqNo: 802099		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	98.9	85	115			
Lead	0.012	0.00050	0.01250	0	96.3	85	115			
Selenium	0.025	0.0010	0.02500	0	100	85	115			
Uranium	0.012	0.00050	0.01250	0	96.9	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R26876			RunNo: 26876					
Prep Date:		Analysis Date: 6/16/2015			SeqNo: 802100		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: R26876			RunNo: 26876					
Prep Date:		Analysis Date: 6/16/2015			SeqNo: 802101		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.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506311

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2014 2nd Quarter

Sample ID	LLLCS-19665	SampType: LCSLL			TestCode: 200.8 ICPMS Metals:Total					
Client ID:	BatchQC	Batch ID: 19665			RunNo: 26815					
Prep Date:	6/10/2015	Analysis Date: 6/12/2015			SeqNo: 800061		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	95.6	85	115			
Lead	0.012	0.00050	0.01250	0	100	85	115			
Selenium	0.023	0.0010	0.02500	0	92.2	85	115			
Uranium	0.013	0.00050	0.01250	0	100	85	115			

Sample ID	MB-19665	SampType: MBLK		TestCode: 200.8 ICPMS Metals:Total						
Client ID:	PBW	Batch ID: 19665		RunNo: 26815						
Prep Date:	6/10/2015	Analysis Date: 6/12/2015		SeqNo: 800065			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.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506311

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2014 2nd Quarter

Sample ID	MB-19717		SampType: MBLK		TestCode: EPA Method 245.1: Mercury					
Client ID:	PBW		Batch ID: 19717		RunNo: 26833					
Prep Date:	6/15/2015		Analysis Date: 6/15/2015		SeqNo: 800384		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.00020								

Sample ID	LCS-19717		SampType: LCS		TestCode: EPA Method 245.1: Mercury					
Client ID:	LCSW		Batch ID: 19717		RunNo: 26833					
Prep Date:	6/15/2015		Analysis Date: 6/15/2015		SeqNo: 800385		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	100	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506311

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2014 2nd Quarter

Sample ID	MB-19569	SampType: MBLK			TestCode: EPA Method 8015D: Diesel Range					
Client ID:	PBW	Batch ID: 19569			RunNo: 26673					
Prep Date:	6/4/2015	Analysis Date: 6/8/2015			SeqNo: 795204		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	0.94		1.000		94.1	76.5	150			

Sample ID	LCS-19569		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	LCSW		Batch ID: 19569		RunNo: 26673					
Prep Date:	6/4/2015		Analysis Date: 6/8/2015		SeqNo: 795205		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	3.8	1.0	5.000	0	75.9	60.1	156			
Surr: DNOP	0.33		0.5000		66.9	76.5	150			S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506311

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2014 2nd Quarter

Sample ID	5ML RB		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBW		Batch ID: R26753		RunNo: 26753					
Prep Date:			Analysis Date: 6/10/2015		SeqNo: 797263		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		88.9	57.8	137			

Sample ID	2.5UG GRO LCS		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSW		Batch ID: R26753		RunNo: 26753					
Prep Date:			Analysis Date: 6/10/2015		SeqNo: 797264		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.49	0.050	0.5000	0	98.5	80	120			
Surr: BFB	21		20.00		103	57.8	137			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506311

24-Jun-15

Client: Western Refining Southwest, Gallup

Project: 2014 2nd Quarter

Sample ID	rb1	SampType: MBLK			TestCode: EPA Method 8260: Volatiles Short List					
Client ID:	PBW	Batch ID: R26817			RunNo: 26817					
Prep Date:		Analysis Date: 6/12/2015			SeqNo: 799846		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								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.8		10.00		87.6	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	9.8		10.00		97.7	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID	100nglcs200T2lcs		SampType: LCS		TestCode: EPA Method 8260: Volatiles Short List					
Client ID:	LCSW		Batch ID: R26817		RunNo: 26817					
Prep Date:			Analysis Date: 6/12/2015		SeqNo: 799847		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	70	130			
Toluene	20	1.0	20.00	0	102	70	130			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		90.1	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	9.1		10.00		90.8	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

Sample Log-In Check List

Client Name: **Western Refining Gallup**

Work Order Number: **1506311**

RcptNo: **1**

Received by/date:

[Signature]

06/06/15

Logged By: **Lindsay Mangin**

6/6/2015 9:00:00 AM

[Signature]

Completed By: **Lindsay Mangin**

6/6/2015 10:12:11 AM

[Signature]

Reviewed By:

ATD6/08/15

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? Yes ☒ No ☐
(Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met? Yes ☒ No ☐
(If no, notify customer for authorization.)

of preserved
bottles checked
for pH:

Adjusted?

Checked by:

FOR METALS ANALYSIS: Added 1mL HNO₃ TO COOL FOR ACCEPTABLE pH. FOR DISCUSS METALS ANALYSIS: Add 0.4mL HNO₃ TO COOL FOR ACCEPTABLE pH. HELD IN COOL 24 hours

2 or >12 unless noted

[Signature]

06/06/15

@11

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via:

☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	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 07, 2015

Cheryl Johnson

Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: 2015 2nd QTR (MKTF)

OrderNo.: 1506435

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 9 sample(s) on 6/9/2015 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', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 10:00:00 AM

Lab ID: 1506435-001

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
Toluene	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
Ethylbenzene	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
Naphthalene	ND	2.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
1-Methylnaphthalene	ND	4.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
2-Methylnaphthalene	ND	4.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
Acetone	ND	10		µg/L	1	6/16/2015 3:54:30 PM	R26872
Bromobenzene	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
Bromodichloromethane	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
Bromoform	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
Bromomethane	ND	3.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
2-Butanone	ND	10		µg/L	1	6/16/2015 3:54:30 PM	R26872
Carbon disulfide	ND	10		µg/L	1	6/16/2015 3:54:30 PM	R26872
Carbon Tetrachloride	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
Chlorobenzene	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
Chloroethane	ND	2.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
Chloroform	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
Chloromethane	ND	3.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
2-Chlorotoluene	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
4-Chlorotoluene	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
cis-1,2-DCE	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
Dibromochloromethane	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
Dibromomethane	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
1,1-Dichloroethane	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
1,1-Dichloroethene	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
1,2-Dichloropropane	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
1,3-Dichloropropane	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
2,2-Dichloropropane	ND	2.0		µg/L	1	6/16/2015 3:54:30 PM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 1 of 56
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 10:00:00 AM

Lab ID: 1506435-001

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: cadg			
1,1-Dichloropropene	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
Hexachlorobutadiene	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
2-Hexanone	ND	10		µg/L	1	6/16/2015 3:54:30 PM	R26872
Isopropylbenzene	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
4-Isopropyltoluene	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
4-Methyl-2-pentanone	ND	10		µg/L	1	6/16/2015 3:54:30 PM	R26872
Methylene Chloride	ND	3.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
n-Butylbenzene	ND	3.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
n-Propylbenzene	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
sec-Butylbenzene	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
Styrene	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
tert-Butylbenzene	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
trans-1,2-DCE	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
Trichlorofluoromethane	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
Vinyl chloride	ND	1.0		µg/L	1	6/16/2015 3:54:30 PM	R26872
Xylenes, Total	ND	1.5		µg/L	1	6/16/2015 3:54:30 PM	R26872
Surr: 1,2-Dichloroethane-d4	98.7	70-130		%REC	1	6/16/2015 3:54:30 PM	R26872
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	6/16/2015 3:54:30 PM	R26872
Surr: Dibromofluoromethane	105	70-130		%REC	1	6/16/2015 3:54:30 PM	R26872
Surr: Toluene-d8	102	70-130		%REC	1	6/16/2015 3:54:30 PM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-18

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 11:40:00 AM

Lab ID: 1506435-002

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	6/19/2015 4:41:05 PM	R26957
Lead	ND	0.0020		mg/L	2	6/18/2015 8:49:06 PM	R26941
Selenium	ND	0.0050		mg/L	5	6/19/2015 4:41:05 PM	R26957
Uranium	ND	0.0020		mg/L	2	6/18/2015 8:49:06 PM	R26941
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	2.5	0.010	*	mg/L	5	6/19/2015 5:21:23 PM	R26969
Cadmium	ND	0.0020		mg/L	1	6/19/2015 4:02:29 PM	R26969
Chromium	ND	0.0060		mg/L	1	6/19/2015 4:02:29 PM	R26969
Copper	ND	0.0060		mg/L	1	6/19/2015 4:02:29 PM	R26969
Iron	3.9	0.10	*	mg/L	5	6/19/2015 5:21:23 PM	R26969
Manganese	1.8	0.010	*	mg/L	5	6/19/2015 5:21:23 PM	R26969
Silver	ND	0.0050		mg/L	1	6/19/2015 4:02:29 PM	R26969
Zinc	ND	0.010		mg/L	1	6/19/2015 4:02:29 PM	R26969
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	2.5	0.010	*	mg/L	5	6/16/2015 5:36:29 PM	19718
Cadmium	ND	0.0020		mg/L	1	6/16/2015 5:30:56 PM	19718
Chromium	ND	0.0060		mg/L	1	6/16/2015 5:30:56 PM	19718
Copper	ND	0.0060		mg/L	1	6/16/2015 5:30:56 PM	19718
Iron	5.0	0.10	*	mg/L	5	6/16/2015 5:36:29 PM	19718
Manganese	1.8	0.010	*	mg/L	5	6/16/2015 5:36:29 PM	19718
Silver	ND	0.0050		mg/L	1	6/19/2015 1:38:42 PM	19718
Zinc	ND	0.010		mg/L	1	6/16/2015 5:30:56 PM	19718
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	6/17/2015 3:08:40 PM	19718
Lead	ND	0.0025		mg/L	5	6/17/2015 3:08:40 PM	19718
Selenium	ND	0.0050		mg/L	5	6/17/2015 3:08:40 PM	19718
Uranium	ND	0.0025		mg/L	5	6/17/2015 3:08:40 PM	19718
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/17/2015 9:51:27 AM	19744
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	3.3	1.0		mg/L	1	6/11/2015 3:34:51 AM	19656
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/11/2015 3:34:51 AM	19656
Surr: DNOP	138	76.5-150		%REC	1	6/11/2015 3:34:51 AM	19656
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	1.4	0.25		mg/L	5	6/12/2015 5:41:21 PM	R26810
Surr: BFB	105	57.8-137		%REC	5	6/12/2015 5:41:21 PM	R26810

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-18

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 11:40:00 AM

Lab ID: 1506435-002

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Acenaphthylene	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Aniline	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Anthracene	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Azobenzene	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Benz(a)anthracene	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Benzo(a)pyrene	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Benzo(b)fluoranthene	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Benzo(k)fluoranthene	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Benzoic acid	ND	20		µg/L	1	6/15/2015 10:29:01 AM	19699
Benzyl alcohol	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Butyl benzyl phthalate	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Carbazole	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
4-Chloroaniline	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
2-Chloronaphthalene	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
2-Chlorophenol	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Chrysene	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Di-n-butyl phthalate	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Di-n-octyl phthalate	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Dibenzofuran	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
1,2-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
1,3-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
1,4-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Diethyl phthalate	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Dimethyl phthalate	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
2,4-Dichlorophenol	ND	20		µg/L	1	6/15/2015 10:29:01 AM	19699
2,4-Dimethylphenol	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/15/2015 10:29:01 AM	19699
2,4-Dinitrophenol	ND	20		µg/L	1	6/15/2015 10:29:01 AM	19699

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 4 of 56
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-18

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 11:40:00 AM

Lab ID: 1506435-002

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
2,6-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Fluoranthene	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Fluorene	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Hexachlorobenzene	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Hexachlorobutadiene	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Hexachloroethane	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Isophorone	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
1-Methylnaphthalene	77	10		µg/L	1	6/15/2015 10:29:01 AM	19699
2-Methylnaphthalene	13	10		µg/L	1	6/15/2015 10:29:01 AM	19699
2-Methylphenol	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
3+4-Methylphenol	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
N-Nitrosodimethylamine	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Naphthalene	29	10		µg/L	1	6/15/2015 10:29:01 AM	19699
2-Nitroaniline	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
3-Nitroaniline	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
4-Nitroaniline	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Nitrobenzene	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
2-Nitrophenol	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
4-Nitrophenol	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Pentachlorophenol	ND	20		µg/L	1	6/15/2015 10:29:01 AM	19699
Phenanthrene	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Phenol	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Pyrene	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Pyridine	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/15/2015 10:29:01 AM	19699
Surr: 2-Fluorophenol	45.6	14.9-111		%REC	1	6/15/2015 10:29:01 AM	19699
Surr: Phenol-d5	49.3	11.3-108		%REC	1	6/15/2015 10:29:01 AM	19699
Surr: 2,4,6-Tribromophenol	90.9	15.7-154		%REC	1	6/15/2015 10:29:01 AM	19699
Surr: Nitrobenzene-d5	60.0	47.8-106		%REC	1	6/15/2015 10:29:01 AM	19699
Surr: 2-Fluorobiphenyl	69.6	21.3-123		%REC	1	6/15/2015 10:29:01 AM	19699
Surr: 4-Terphenyl-d14	92.9	14.3-135		%REC	1	6/15/2015 10:29:01 AM	19699

EPA METHOD 8260B: VOLATILES

Analyst: **cadg**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 5 of 56
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-18

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 11:40:00 AM

Lab ID: 1506435-002

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	50	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
Toluene	3.3	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
Ethylbenzene	49	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
Methyl tert-butyl ether (MTBE)	82	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
1,2,4-Trimethylbenzene	51	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
1,3,5-Trimethylbenzene	12	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
Naphthalene	43	2.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
1-Methylnaphthalene	99	4.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
2-Methylnaphthalene	26	4.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
Acetone	ND	10		µg/L	1	6/17/2015 7:36:06 PM	R26906
Bromobenzene	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
Bromodichloromethane	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
Bromoform	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
Bromomethane	ND	3.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
2-Butanone	ND	10		µg/L	1	6/17/2015 7:36:06 PM	R26906
Carbon disulfide	ND	10		µg/L	1	6/17/2015 7:36:06 PM	R26906
Carbon Tetrachloride	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
Chlorobenzene	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
Chloroethane	ND	2.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
Chloroform	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
Chloromethane	ND	3.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
2-Chlorotoluene	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
4-Chlorotoluene	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
cis-1,2-DCE	4.5	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
Dibromochloromethane	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
Dibromomethane	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
1,1-Dichloroethane	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
1,1-Dichloroethene	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
1,2-Dichloropropane	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
1,3-Dichloropropane	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
2,2-Dichloropropane	ND	2.0		µg/L	1	6/17/2015 7:36:06 PM	R26906

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 6 of 56
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-18

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 11:40:00 AM

Lab ID: 1506435-002

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
1,1-Dichloropropene	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
Hexachlorobutadiene	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
2-Hexanone	ND	10		µg/L	1	6/17/2015 7:36:06 PM	R26906
Isopropylbenzene	6.0	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
4-Isopropyltoluene	2.0	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
4-Methyl-2-pentanone	ND	10		µg/L	1	6/17/2015 7:36:06 PM	R26906
Methylene Chloride	ND	3.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
n-Butylbenzene	ND	3.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
n-Propylbenzene	7.1	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
sec-Butylbenzene	1.9	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
Styrene	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
tert-Butylbenzene	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
trans-1,2-DCE	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
Trichlorofluoromethane	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
Vinyl chloride	ND	1.0		µg/L	1	6/17/2015 7:36:06 PM	R26906
Xylenes, Total	31	1.5		µg/L	1	6/17/2015 7:36:06 PM	R26906
Surr: 1,2-Dichloroethane-d4	92.2	70-130		%REC	1	6/17/2015 7:36:06 PM	R26906
Surr: 4-Bromofluorobenzene	81.1	70-130		%REC	1	6/17/2015 7:36:06 PM	R26906
Surr: Dibromofluoromethane	93.8	70-130		%REC	1	6/17/2015 7:36:06 PM	R26906
Surr: Toluene-d8	102	70-130		%REC	1	6/17/2015 7:36:06 PM	R26906

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-16

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 12:20:00 PM

Lab ID: 1506435-003

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	0.0087	0.0050		mg/L	5	6/23/2015 12:12:49 PM	R27034
Lead	ND	0.0050		mg/L	5	6/23/2015 12:12:49 PM	R27034
Selenium	0.0081	0.0050		mg/L	5	6/23/2015 12:12:49 PM	R27034
Uranium	ND	0.0050		mg/L	5	6/23/2015 12:12:49 PM	R27034
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	2.3	0.010	*	mg/L	5	6/19/2015 5:23:23 PM	R26969
Cadmium	ND	0.0020		mg/L	1	6/19/2015 4:04:22 PM	R26969
Chromium	ND	0.0060		mg/L	1	6/19/2015 4:04:22 PM	R26969
Copper	ND	0.0060		mg/L	1	6/19/2015 4:04:22 PM	R26969
Iron	11	0.40	*	mg/L	20	6/19/2015 5:25:21 PM	R26969
Manganese	3.6	0.010	*	mg/L	5	6/19/2015 5:23:23 PM	R26969
Silver	ND	0.0050		mg/L	1	6/19/2015 4:04:22 PM	R26969
Zinc	0.017	0.010		mg/L	1	6/19/2015 4:04:22 PM	R26969
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	2.2	0.010	*	mg/L	5	6/16/2015 5:46:09 PM	19718
Cadmium	ND	0.0020		mg/L	1	6/16/2015 5:42:15 PM	19718
Chromium	ND	0.0060		mg/L	1	6/16/2015 5:42:15 PM	19718
Copper	0.0091	0.0060		mg/L	1	6/16/2015 5:42:15 PM	19718
Iron	12	0.40	*	mg/L	20	6/19/2015 1:53:25 PM	19718
Manganese	3.3	0.010	*	mg/L	5	6/16/2015 5:46:09 PM	19718
Silver	ND	0.025		mg/L	5	6/16/2015 5:46:09 PM	19718
Zinc	0.023	0.010		mg/L	1	6/16/2015 5:42:15 PM	19718
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.0097	0.0050		mg/L	5	6/17/2015 3:11:23 PM	19718
Lead	ND	0.0025		mg/L	5	6/17/2015 3:11:23 PM	19718
Selenium	0.0072	0.0050		mg/L	5	6/17/2015 3:11:23 PM	19718
Uranium	ND	0.0025		mg/L	5	6/17/2015 3:11:23 PM	19718
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/17/2015 9:53:32 AM	19744
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	4.3	1.0		mg/L	1	6/11/2015 4:55:48 AM	19656
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/11/2015 4:55:48 AM	19656
Surr: DNOP	119	76.5-150		%REC	1	6/11/2015 4:55:48 AM	19656
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	69	2.5		mg/L	50	6/12/2015 6:06:30 PM	R26810
Surr: BFB	101	57.8-137		%REC	50	6/12/2015 6:06:30 PM	R26810

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-16

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 12:20:00 PM

Lab ID: 1506435-003

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Acenaphthylene	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Aniline	21	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Anthracene	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Azobenzene	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Benz(a)anthracene	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Benzo(a)pyrene	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Benzo(b)fluoranthene	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Benzo(k)fluoranthene	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Benzoic acid	ND	20		µg/L	1	6/15/2015 10:56:52 AM	19699
Benzyl alcohol	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Butyl benzyl phthalate	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Carbazole	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
4-Chloroaniline	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
2-Chloronaphthalene	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
2-Chlorophenol	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Chrysene	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Di-n-butyl phthalate	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Di-n-octyl phthalate	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Dibenzofuran	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
1,2-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
1,3-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
1,4-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Diethyl phthalate	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Dimethyl phthalate	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
2,4-Dichlorophenol	ND	20		µg/L	1	6/15/2015 10:56:52 AM	19699
2,4-Dimethylphenol	180	10		µg/L	1	6/15/2015 10:56:52 AM	19699
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/15/2015 10:56:52 AM	19699
2,4-Dinitrophenol	ND	20		µg/L	1	6/15/2015 10:56:52 AM	19699

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 9 of 56
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-16

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 12:20:00 PM

Lab ID: 1506435-003

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
2,4-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
2,6-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Fluoranthene	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Fluorene	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Hexachlorobenzene	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Hexachlorobutadiene	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Hexachloroethane	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Isophorone	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
1-Methylnaphthalene	42	10		µg/L	1	6/15/2015 10:56:52 AM	19699
2-Methylnaphthalene	46	10		µg/L	1	6/15/2015 10:56:52 AM	19699
2-Methylphenol	120	10		µg/L	1	6/15/2015 10:56:52 AM	19699
3+4-Methylphenol	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
N-Nitrosodimethylamine	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Naphthalene	140	10		µg/L	1	6/15/2015 10:56:52 AM	19699
2-Nitroaniline	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
3-Nitroaniline	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
4-Nitroaniline	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Nitrobenzene	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
2-Nitrophenol	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
4-Nitrophenol	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Pentachlorophenol	ND	20		µg/L	1	6/15/2015 10:56:52 AM	19699
Phenanthrene	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Phenol	48	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Pyrene	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Pyridine	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/15/2015 10:56:52 AM	19699
Surr: 2-Fluorophenol	21.5	14.9-111		%REC	1	6/15/2015 10:56:52 AM	19699
Surr: Phenol-d5	60.7	11.3-108		%REC	1	6/15/2015 10:56:52 AM	19699
Surr: 2,4,6-Tribromophenol	77.2	15.7-154		%REC	1	6/15/2015 10:56:52 AM	19699
Surr: Nitrobenzene-d5	94.9	47.8-106		%REC	1	6/15/2015 10:56:52 AM	19699
Surr: 2-Fluorobiphenyl	95.5	21.3-123		%REC	1	6/15/2015 10:56:52 AM	19699
Surr: 4-Terphenyl-d14	73.8	14.3-135		%REC	1	6/15/2015 10:56:52 AM	19699

EPA METHOD 8260B: VOLATILESAnalyst: **cadg**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-16

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 12:20:00 PM

Lab ID: 1506435-003

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	23000	500		µg/L	500	6/16/2015 4:52:08 PM	R26872
Toluene	1300	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
Ethylbenzene	1400	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
Methyl tert-butyl ether (MTBE)	2000	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
1,2,4-Trimethylbenzene	770	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
1,3,5-Trimethylbenzene	270	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
Naphthalene	170	100		µg/L	50	6/16/2015 5:20:58 PM	R26872
1-Methylnaphthalene	ND	200		µg/L	50	6/16/2015 5:20:58 PM	R26872
2-Methylnaphthalene	ND	200		µg/L	50	6/16/2015 5:20:58 PM	R26872
Acetone	ND	500		µg/L	50	6/16/2015 5:20:58 PM	R26872
Bromobenzene	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
Bromodichloromethane	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
Bromoform	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
Bromomethane	ND	150		µg/L	50	6/16/2015 5:20:58 PM	R26872
2-Butanone	ND	500		µg/L	50	6/16/2015 5:20:58 PM	R26872
Carbon disulfide	ND	500		µg/L	50	6/16/2015 5:20:58 PM	R26872
Carbon Tetrachloride	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
Chlorobenzene	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
Chloroethane	ND	100		µg/L	50	6/16/2015 5:20:58 PM	R26872
Chloroform	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
Chloromethane	ND	150		µg/L	50	6/16/2015 5:20:58 PM	R26872
2-Chlorotoluene	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
4-Chlorotoluene	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
cis-1,2-DCE	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
cis-1,3-Dichloropropene	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	6/16/2015 5:20:58 PM	R26872
Dibromochloromethane	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
Dibromomethane	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
1,2-Dichlorobenzene	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
1,3-Dichlorobenzene	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
1,4-Dichlorobenzene	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
Dichlorodifluoromethane	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
1,1-Dichloroethane	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
1,1-Dichloroethene	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
1,2-Dichloropropane	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
1,3-Dichloropropane	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
2,2-Dichloropropane	ND	100		µg/L	50	6/16/2015 5:20:58 PM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-16

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 12:20:00 PM

Lab ID: 1506435-003

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: cadg			
1,1-Dichloropropene	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
Hexachlorobutadiene	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
2-Hexanone	ND	500		µg/L	50	6/16/2015 5:20:58 PM	R26872
Isopropylbenzene	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
4-Isopropyltoluene	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
4-Methyl-2-pentanone	ND	500		µg/L	50	6/16/2015 5:20:58 PM	R26872
Methylene Chloride	ND	150		µg/L	50	6/16/2015 5:20:58 PM	R26872
n-Butylbenzene	ND	150		µg/L	50	6/16/2015 5:20:58 PM	R26872
n-Propylbenzene	84	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
sec-Butylbenzene	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
Styrene	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
tert-Butylbenzene	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	6/16/2015 5:20:58 PM	R26872
Tetrachloroethene (PCE)	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
trans-1,2-DCE	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
trans-1,3-Dichloropropene	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
1,2,3-Trichlorobenzene	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
1,2,4-Trichlorobenzene	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
1,1,1-Trichloroethane	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
1,1,2-Trichloroethane	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
Trichloroethene (TCE)	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
Trichlorofluoromethane	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
1,2,3-Trichloropropane	ND	100		µg/L	50	6/16/2015 5:20:58 PM	R26872
Vinyl chloride	ND	50		µg/L	50	6/16/2015 5:20:58 PM	R26872
Xylenes, Total	5300	75		µg/L	50	6/16/2015 5:20:58 PM	R26872
Surr: 1,2-Dichloroethane-d4	99.7	70-130		%REC	50	6/16/2015 5:20:58 PM	R26872
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	50	6/16/2015 5:20:58 PM	R26872
Surr: Dibromofluoromethane	103	70-130		%REC	50	6/16/2015 5:20:58 PM	R26872
Surr: Toluene-d8	105	70-130		%REC	50	6/16/2015 5:20:58 PM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-20

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 12:55:00 PM

Lab ID: 1506435-004

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	0.012	0.0050	*	mg/L	5	6/23/2015 12:15:52 PM	R27034
Lead	ND	0.0050		mg/L	5	6/23/2015 12:15:52 PM	R27034
Selenium	ND	0.0050		mg/L	5	6/23/2015 12:15:52 PM	R27034
Uranium	ND	0.0050		mg/L	5	6/23/2015 12:15:52 PM	R27034
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	1.5	0.010		mg/L	5	6/19/2015 5:27:32 PM	R26969
Cadmium	ND	0.0020		mg/L	1	6/19/2015 4:06:15 PM	R26969
Chromium	ND	0.0060		mg/L	1	6/19/2015 4:06:15 PM	R26969
Copper	ND	0.0060		mg/L	1	6/19/2015 4:06:15 PM	R26969
Iron	3.6	0.10	*	mg/L	5	6/19/2015 5:27:32 PM	R26969
Manganese	2.0	0.010	*	mg/L	5	6/19/2015 5:27:32 PM	R26969
Silver	ND	0.0050		mg/L	1	6/19/2015 4:06:15 PM	R26969
Zinc	0.045	0.010		mg/L	1	6/19/2015 4:06:15 PM	R26969
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	2.1	0.010	*	mg/L	5	6/16/2015 5:57:21 PM	19718
Cadmium	ND	0.0020		mg/L	1	6/19/2015 1:55:27 PM	19718
Chromium	0.017	0.0060		mg/L	1	6/16/2015 5:55:23 PM	19718
Copper	0.078	0.0060		mg/L	1	6/16/2015 5:55:23 PM	19718
Iron	22	1.0	*	mg/L	50	6/19/2015 1:57:24 PM	19718
Manganese	2.7	0.010	*	mg/L	5	6/16/2015 5:57:21 PM	19718
Silver	ND	0.0050		mg/L	1	6/16/2015 5:55:23 PM	19718
Zinc	0.26	0.010		mg/L	1	6/16/2015 5:55:23 PM	19718
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.018	0.0050	*	mg/L	5	6/17/2015 3:19:38 PM	19718
Lead	0.018	0.0025	*	mg/L	5	6/17/2015 3:19:38 PM	19718
Selenium	ND	0.0050		mg/L	5	6/17/2015 3:19:38 PM	19718
Uranium	0.0078	0.0025		mg/L	5	6/17/2015 3:19:38 PM	19718
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/17/2015 9:55:38 AM	19744
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	9.9	1.0		mg/L	1	6/11/2015 5:22:54 AM	19656
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/11/2015 5:22:54 AM	19656
Surr: DNOP	109	76.5-150		%REC	1	6/11/2015 5:22:54 AM	19656
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	30	2.5		mg/L	50	6/12/2015 8:12:32 PM	R26810
Surr: BFB	100	57.8-137		%REC	50	6/12/2015 8:12:32 PM	R26810

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-20

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 12:55:00 PM

Lab ID: 1506435-004

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Acenaphthylene	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Aniline	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Anthracene	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Azobenzene	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Benz(a)anthracene	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Benzo(a)pyrene	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Benzo(b)fluoranthene	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Benzo(k)fluoranthene	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Benzoic acid	ND	20		µg/L	1	6/15/2015 11:24:44 AM	19699
Benzyl alcohol	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Butyl benzyl phthalate	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Carbazole	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
4-Chloroaniline	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
2-Chloronaphthalene	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
2-Chlorophenol	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Chrysene	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Di-n-butyl phthalate	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Di-n-octyl phthalate	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Dibenzofuran	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
1,2-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
1,3-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
1,4-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Diethyl phthalate	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Dimethyl phthalate	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
2,4-Dichlorophenol	ND	20		µg/L	1	6/15/2015 11:24:44 AM	19699
2,4-Dimethylphenol	230	10		µg/L	1	6/15/2015 11:24:44 AM	19699
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/15/2015 11:24:44 AM	19699
2,4-Dinitrophenol	ND	20		µg/L	1	6/15/2015 11:24:44 AM	19699

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-20

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 12:55:00 PM

Lab ID: 1506435-004

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: DAM	
2,4-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
2,6-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Fluoranthene	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Fluorene	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Hexachlorobenzene	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Hexachlorobutadiene	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Hexachloroethane	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Isophorone	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
1-Methylnaphthalene	37	10		µg/L	1	6/15/2015 11:24:44 AM	19699
2-Methylnaphthalene	36	10		µg/L	1	6/15/2015 11:24:44 AM	19699
2-Methylphenol	49	10		µg/L	1	6/15/2015 11:24:44 AM	19699
3+4-Methylphenol	130	10		µg/L	1	6/15/2015 11:24:44 AM	19699
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
N-Nitrosodimethylamine	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Naphthalene	56	10		µg/L	1	6/15/2015 11:24:44 AM	19699
2-Nitroaniline	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
3-Nitroaniline	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
4-Nitroaniline	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Nitrobenzene	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
2-Nitrophenol	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
4-Nitrophenol	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Pentachlorophenol	ND	20		µg/L	1	6/15/2015 11:24:44 AM	19699
Phenanthrene	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Phenol	50	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Pyrene	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Pyridine	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/15/2015 11:24:44 AM	19699
Surr: 2-Fluorophenol	14.8	14.9-111	S	%REC	1	6/15/2015 11:24:44 AM	19699
Surr: Phenol-d5	45.0	11.3-108		%REC	1	6/15/2015 11:24:44 AM	19699
Surr: 2,4,6-Tribromophenol	67.7	15.7-154		%REC	1	6/15/2015 11:24:44 AM	19699
Surr: Nitrobenzene-d5	65.7	47.8-106		%REC	1	6/15/2015 11:24:44 AM	19699
Surr: 2-Fluorobiphenyl	64.6	21.3-123		%REC	1	6/15/2015 11:24:44 AM	19699
Surr: 4-Terphenyl-d14	42.3	14.3-135		%REC	1	6/15/2015 11:24:44 AM	19699

EPA METHOD 8260B: VOLATILES

Analyst: **cadg**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-20

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 12:55:00 PM

Lab ID: 1506435-004

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	5900	500		µg/L	500	6/16/2015 6:18:33 PM	R26872
Toluene	620	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
Ethylbenzene	140	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
Methyl tert-butyl ether (MTBE)	65	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
1,2,4-Trimethylbenzene	940	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
1,3,5-Trimethylbenzene	340	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
Naphthalene	100	100		µg/L	50	6/16/2015 6:47:20 PM	R26872
1-Methylnaphthalene	ND	200		µg/L	50	6/16/2015 6:47:20 PM	R26872
2-Methylnaphthalene	ND	200		µg/L	50	6/16/2015 6:47:20 PM	R26872
Acetone	ND	500		µg/L	50	6/16/2015 6:47:20 PM	R26872
Bromobenzene	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
Bromodichloromethane	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
Bromoform	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
Bromomethane	ND	150		µg/L	50	6/16/2015 6:47:20 PM	R26872
2-Butanone	ND	500		µg/L	50	6/16/2015 6:47:20 PM	R26872
Carbon disulfide	ND	500		µg/L	50	6/16/2015 6:47:20 PM	R26872
Carbon Tetrachloride	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
Chlorobenzene	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
Chloroethane	ND	100		µg/L	50	6/16/2015 6:47:20 PM	R26872
Chloroform	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
Chloromethane	ND	150		µg/L	50	6/16/2015 6:47:20 PM	R26872
2-Chlorotoluene	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
4-Chlorotoluene	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
cis-1,2-DCE	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
cis-1,3-Dichloropropene	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	6/16/2015 6:47:20 PM	R26872
Dibromochloromethane	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
Dibromomethane	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
1,2-Dichlorobenzene	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
1,3-Dichlorobenzene	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
1,4-Dichlorobenzene	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
Dichlorodifluoromethane	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
1,1-Dichloroethane	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
1,1-Dichloroethene	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
1,2-Dichloropropane	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
1,3-Dichloropropane	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
2,2-Dichloropropane	ND	100		µg/L	50	6/16/2015 6:47:20 PM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-20

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 12:55:00 PM

Lab ID: 1506435-004

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst: cadg		
1,1-Dichloropropene	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
Hexachlorobutadiene	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
2-Hexanone	ND	500		µg/L	50	6/16/2015 6:47:20 PM	R26872
Isopropylbenzene	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
4-Isopropyltoluene	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
4-Methyl-2-pentanone	ND	500		µg/L	50	6/16/2015 6:47:20 PM	R26872
Methylene Chloride	ND	150		µg/L	50	6/16/2015 6:47:20 PM	R26872
n-Butylbenzene	ND	150		µg/L	50	6/16/2015 6:47:20 PM	R26872
n-Propylbenzene	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
sec-Butylbenzene	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
Styrene	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
tert-Butylbenzene	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	6/16/2015 6:47:20 PM	R26872
Tetrachloroethene (PCE)	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
trans-1,2-DCE	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
trans-1,3-Dichloropropene	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
1,2,3-Trichlorobenzene	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
1,2,4-Trichlorobenzene	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
1,1,1-Trichloroethane	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
1,1,2-Trichloroethane	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
Trichloroethene (TCE)	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
Trichlorofluoromethane	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
1,2,3-Trichloropropane	ND	100		µg/L	50	6/16/2015 6:47:20 PM	R26872
Vinyl chloride	ND	50		µg/L	50	6/16/2015 6:47:20 PM	R26872
Xylenes, Total	7300	75		µg/L	50	6/16/2015 6:47:20 PM	R26872
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	50	6/16/2015 6:47:20 PM	R26872
Surr: 4-Bromofluorobenzene	92.9	70-130		%REC	50	6/16/2015 6:47:20 PM	R26872
Surr: Dibromofluoromethane	98.5	70-130		%REC	50	6/16/2015 6:47:20 PM	R26872
Surr: Toluene-d8	105	70-130		%REC	50	6/16/2015 6:47:20 PM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-19

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 2:42:00 PM

Lab ID: 1506435-005

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	0.019	0.0050	*	mg/L	5	6/23/2015 12:21:59 PM	R27034
Lead	ND	0.0020		mg/L	2	6/18/2015 9:07:28 PM	R26941
Selenium	ND	0.010		mg/L	10	6/23/2015 2:55:05 PM	R27034
Uranium	ND	0.0020		mg/L	2	6/18/2015 9:07:28 PM	R26941
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	1.7	0.010		mg/L	5	6/19/2015 5:29:38 PM	R26969
Cadmium	ND	0.0020		mg/L	1	6/19/2015 4:07:58 PM	R26969
Chromium	ND	0.0060		mg/L	1	6/19/2015 4:07:58 PM	R26969
Copper	ND	0.0060		mg/L	1	6/19/2015 4:07:58 PM	R26969
Iron	12	0.40	*	mg/L	20	6/19/2015 5:31:28 PM	R26969
Manganese	3.3	0.010	*	mg/L	5	6/19/2015 5:29:38 PM	R26969
Silver	ND	0.0050		mg/L	1	6/19/2015 4:07:58 PM	R26969
Zinc	ND	0.010		mg/L	1	6/19/2015 4:07:58 PM	R26969
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	2.5	0.010	*	mg/L	5	6/16/2015 6:01:14 PM	19718
Cadmium	ND	0.0020		mg/L	1	6/19/2015 1:59:15 PM	19718
Chromium	0.024	0.0060		mg/L	1	6/16/2015 5:59:16 PM	19718
Copper	0.017	0.0060		mg/L	1	6/16/2015 5:59:16 PM	19718
Iron	28	1.0	*	mg/L	50	6/19/2015 2:01:04 PM	19718
Manganese	4.2	0.010	*	mg/L	5	6/16/2015 6:01:14 PM	19718
Silver	ND	0.0050		mg/L	1	6/16/2015 5:59:16 PM	19718
Zinc	0.082	0.010		mg/L	1	6/16/2015 5:59:16 PM	19718
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.019	0.0050	*	mg/L	5	6/17/2015 3:22:21 PM	19718
Lead	0.035	0.0025	*	mg/L	5	6/17/2015 3:22:21 PM	19718
Selenium	ND	0.0050		mg/L	5	6/17/2015 3:22:21 PM	19718
Uranium	0.0048	0.0025		mg/L	5	6/17/2015 3:22:21 PM	19718
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/17/2015 9:57:43 AM	19744
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	9.9	1.0		mg/L	1	6/11/2015 5:49:27 AM	19656
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/11/2015 5:49:27 AM	19656
Surr: DNOP	123	76.5-150		%REC	1	6/11/2015 5:49:27 AM	19656
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	19	0.50		mg/L	10	6/12/2015 9:02:38 PM	R26810
Surr: BFB	117	57.8-137		%REC	10	6/12/2015 9:02:38 PM	R26810

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-19

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 2:42:00 PM

Lab ID: 1506435-005

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Acenaphthylene	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Aniline	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Anthracene	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Azobenzene	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Benz(a)anthracene	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Benzo(a)pyrene	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Benzo(b)fluoranthene	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Benzo(k)fluoranthene	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Benzoic acid	ND	20		µg/L	1	6/15/2015 11:52:32 AM	19699
Benzyl alcohol	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Butyl benzyl phthalate	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Carbazole	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
4-Chloroaniline	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
2-Chloronaphthalene	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
2-Chlorophenol	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Chrysene	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Di-n-butyl phthalate	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Di-n-octyl phthalate	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Dibenzofuran	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
1,2-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
1,3-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
1,4-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Diethyl phthalate	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Dimethyl phthalate	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
2,4-Dichlorophenol	ND	20		µg/L	1	6/15/2015 11:52:32 AM	19699
2,4-Dimethylphenol	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/15/2015 11:52:32 AM	19699
2,4-Dinitrophenol	ND	20		µg/L	1	6/15/2015 11:52:32 AM	19699

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-19

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 2:42:00 PM

Lab ID: 1506435-005

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
2,6-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Fluoranthene	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Fluorene	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Hexachlorobenzene	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Hexachlorobutadiene	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Hexachloroethane	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Isophorone	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
1-Methylnaphthalene	140	10		µg/L	1	6/15/2015 11:52:32 AM	19699
2-Methylnaphthalene	210	10		µg/L	1	6/15/2015 11:52:32 AM	19699
2-Methylphenol	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
3+4-Methylphenol	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
N-Nitrosodimethylamine	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Naphthalene	310	50		µg/L	5	6/15/2015 4:03:35 PM	19699
2-Nitroaniline	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
3-Nitroaniline	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
4-Nitroaniline	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Nitrobenzene	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
2-Nitrophenol	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
4-Nitrophenol	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Pentachlorophenol	ND	20		µg/L	1	6/15/2015 11:52:32 AM	19699
Phenanthrene	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Phenol	13	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Pyrene	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Pyridine	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/15/2015 11:52:32 AM	19699
Surr: 2-Fluorophenol	53.9	14.9-111		%REC	1	6/15/2015 11:52:32 AM	19699
Surr: Phenol-d5	55.5	11.3-108		%REC	1	6/15/2015 11:52:32 AM	19699
Surr: 2,4,6-Tribromophenol	90.9	15.7-154		%REC	1	6/15/2015 11:52:32 AM	19699
Surr: Nitrobenzene-d5	77.3	47.8-106		%REC	1	6/15/2015 11:52:32 AM	19699
Surr: 2-Fluorobiphenyl	74.8	21.3-123		%REC	1	6/15/2015 11:52:32 AM	19699
Surr: 4-Terphenyl-d14	61.6	14.3-135		%REC	1	6/15/2015 11:52:32 AM	19699

EPA METHOD 8260B: VOLATILES

Analyst: **cadg**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.
	E Value above quantitation range
	J Analyte detected below quantitation limits
	O RSD is greater than RSDlimit
	R RPD outside accepted recovery limits
	S Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-19

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 2:42:00 PM

Lab ID: 1506435-005

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst: cadg		
Benzene	1800	100		µg/L	100	6/16/2015 7:44:54 PM	R26872
Toluene	13	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
Ethylbenzene	590	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
Methyl tert-butyl ether (MTBE)	9100	100		µg/L	100	6/16/2015 7:44:54 PM	R26872
1,2,4-Trimethylbenzene	420	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
1,3,5-Trimethylbenzene	55	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
Naphthalene	340	20		µg/L	10	6/16/2015 8:13:38 PM	R26872
1-Methylnaphthalene	150	40		µg/L	10	6/16/2015 8:13:38 PM	R26872
2-Methylnaphthalene	230	40		µg/L	10	6/16/2015 8:13:38 PM	R26872
Acetone	ND	100		µg/L	10	6/16/2015 8:13:38 PM	R26872
Bromobenzene	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
Bromodichloromethane	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
Bromoform	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
Bromomethane	ND	30		µg/L	10	6/16/2015 8:13:38 PM	R26872
2-Butanone	ND	100		µg/L	10	6/16/2015 8:13:38 PM	R26872
Carbon disulfide	ND	100		µg/L	10	6/16/2015 8:13:38 PM	R26872
Carbon Tetrachloride	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
Chlorobenzene	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
Chloroethane	ND	20		µg/L	10	6/16/2015 8:13:38 PM	R26872
Chloroform	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
Chloromethane	ND	30		µg/L	10	6/16/2015 8:13:38 PM	R26872
2-Chlorotoluene	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
4-Chlorotoluene	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
cis-1,2-DCE	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
cis-1,3-Dichloropropene	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	6/16/2015 8:13:38 PM	R26872
Dibromochloromethane	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
Dibromomethane	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
1,2-Dichlorobenzene	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
1,3-Dichlorobenzene	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
1,4-Dichlorobenzene	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
Dichlorodifluoromethane	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
1,1-Dichloroethane	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
1,1-Dichloroethene	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
1,2-Dichloropropane	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
1,3-Dichloropropane	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
2,2-Dichloropropane	ND	20		µg/L	10	6/16/2015 8:13:38 PM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-19

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 2:42:00 PM

Lab ID: 1506435-005

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: cadg			
1,1-Dichloropropene	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
Hexachlorobutadiene	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
2-Hexanone	ND	100		µg/L	10	6/16/2015 8:13:38 PM	R26872
Isopropylbenzene	29	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
4-Isopropyltoluene	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
4-Methyl-2-pentanone	ND	100		µg/L	10	6/16/2015 8:13:38 PM	R26872
Methylene Chloride	ND	30		µg/L	10	6/16/2015 8:13:38 PM	R26872
n-Butylbenzene	ND	30		µg/L	10	6/16/2015 8:13:38 PM	R26872
n-Propylbenzene	62	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
sec-Butylbenzene	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
Styrene	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
tert-Butylbenzene	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	6/16/2015 8:13:38 PM	R26872
Tetrachloroethene (PCE)	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
trans-1,2-DCE	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
trans-1,3-Dichloropropene	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
1,2,3-Trichlorobenzene	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
1,2,4-Trichlorobenzene	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
1,1,1-Trichloroethane	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
1,1,2-Trichloroethane	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
Trichloroethene (TCE)	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
Trichlorofluoromethane	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
1,2,3-Trichloropropane	ND	20		µg/L	10	6/16/2015 8:13:38 PM	R26872
Vinyl chloride	ND	10		µg/L	10	6/16/2015 8:13:38 PM	R26872
Xylenes, Total	310	15		µg/L	10	6/16/2015 8:13:38 PM	R26872
Surr: 1,2-Dichloroethane-d4	92.4	70-130		%REC	10	6/16/2015 8:13:38 PM	R26872
Surr: 4-Bromofluorobenzene	81.0	70-130		%REC	10	6/16/2015 8:13:38 PM	R26872
Surr: Dibromofluoromethane	95.9	70-130		%REC	10	6/16/2015 8:13:38 PM	R26872
Surr: Toluene-d8	106	70-130		%REC	10	6/16/2015 8:13:38 PM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-17

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 3:20:00 PM

Lab ID: 1506435-006

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	6/23/2015 12:25:02 PM	R27034
Lead	ND	0.0020		mg/L	2	6/18/2015 9:10:32 PM	R26941
Selenium	ND	0.0050		mg/L	5	6/23/2015 12:25:02 PM	R27034
Uranium	0.021	0.0020		mg/L	2	6/18/2015 9:10:32 PM	R26941
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.11	0.0020		mg/L	1	6/19/2015 4:09:40 PM	R26969
Cadmium	ND	0.0020		mg/L	1	6/19/2015 4:09:40 PM	R26969
Chromium	ND	0.0060		mg/L	1	6/19/2015 4:09:40 PM	R26969
Copper	ND	0.0060		mg/L	1	6/19/2015 4:09:40 PM	R26969
Iron	0.14	0.020		mg/L	1	6/19/2015 4:09:40 PM	R26969
Manganese	3.1	0.010	*	mg/L	5	6/19/2015 5:33:34 PM	R26969
Silver	ND	0.0050		mg/L	1	6/19/2015 4:09:40 PM	R26969
Zinc	ND	0.010		mg/L	1	6/19/2015 4:09:40 PM	R26969
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.24	0.0020		mg/L	1	6/16/2015 6:03:00 PM	19718
Cadmium	ND	0.0020		mg/L	1	6/19/2015 2:03:04 PM	19718
Chromium	ND	0.0060		mg/L	1	6/16/2015 6:03:00 PM	19718
Copper	ND	0.0060		mg/L	1	6/16/2015 6:03:00 PM	19718
Iron	2.6	0.10	*	mg/L	5	6/16/2015 6:04:47 PM	19718
Manganese	3.3	0.010	*	mg/L	5	6/16/2015 6:04:47 PM	19718
Silver	ND	0.0050		mg/L	1	6/16/2015 6:03:00 PM	19718
Zinc	0.015	0.010		mg/L	1	6/16/2015 6:03:00 PM	19718
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	6/17/2015 3:25:05 PM	19718
Lead	0.0032	0.0025		mg/L	5	6/17/2015 3:25:05 PM	19718
Selenium	ND	0.0050		mg/L	5	6/17/2015 3:25:05 PM	19718
Uranium	0.020	0.0025		mg/L	5	6/17/2015 3:25:05 PM	19718
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/17/2015 9:59:42 AM	19744
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	1.3	1.0		mg/L	1	6/11/2015 6:16:04 AM	19656
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/11/2015 6:16:04 AM	19656
Surr: DNOP	122	76.5-150		%REC	1	6/11/2015 6:16:04 AM	19656
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.77	0.050		mg/L	1	6/12/2015 9:52:47 PM	R26810
Surr: BFB	102	57.8-137		%REC	1	6/12/2015 9:52:47 PM	R26810

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-17

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 3:20:00 PM

Lab ID: 1506435-006

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Acenaphthylene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Aniline	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Anthracene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Azobenzene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Benz(a)anthracene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Benzo(a)pyrene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Benzo(b)fluoranthene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Benzo(k)fluoranthene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Benzoic acid	ND	20		µg/L	1	6/15/2015 12:20:14 PM	19699
Benzyl alcohol	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Butyl benzyl phthalate	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Carbazole	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
4-Chloroaniline	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
2-Chloronaphthalene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
2-Chlorophenol	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Chrysene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Di-n-butyl phthalate	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Di-n-octyl phthalate	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Dibenzofuran	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
1,2-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
1,3-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
1,4-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Diethyl phthalate	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Dimethyl phthalate	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
2,4-Dichlorophenol	ND	20		µg/L	1	6/15/2015 12:20:14 PM	19699
2,4-Dimethylphenol	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/15/2015 12:20:14 PM	19699
2,4-Dinitrophenol	ND	20		µg/L	1	6/15/2015 12:20:14 PM	19699

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-17

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 3:20:00 PM

Lab ID: 1506435-006

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
2,4-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
2,6-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Fluoranthene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Fluorene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Hexachlorobenzene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Hexachlorobutadiene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Hexachloroethane	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Isophorone	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
1-Methylnaphthalene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
2-Methylnaphthalene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
2-Methylphenol	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
3+4-Methylphenol	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
N-Nitrosodimethylamine	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Naphthalene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
2-Nitroaniline	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
3-Nitroaniline	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
4-Nitroaniline	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Nitrobenzene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
2-Nitrophenol	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
4-Nitrophenol	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Pentachlorophenol	ND	20		µg/L	1	6/15/2015 12:20:14 PM	19699
Phenanthrene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Phenol	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Pyrene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Pyridine	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/15/2015 12:20:14 PM	19699
Surr: 2-Fluorophenol	82.8	14.9-111		%REC	1	6/15/2015 12:20:14 PM	19699
Surr: Phenol-d5	74.6	11.3-108		%REC	1	6/15/2015 12:20:14 PM	19699
Surr: 2,4,6-Tribromophenol	136	15.7-154		%REC	1	6/15/2015 12:20:14 PM	19699
Surr: Nitrobenzene-d5	101	47.8-106		%REC	1	6/15/2015 12:20:14 PM	19699
Surr: 2-Fluorobiphenyl	93.9	21.3-123		%REC	1	6/15/2015 12:20:14 PM	19699
Surr: 4-Terphenyl-d14	78.2	14.3-135		%REC	1	6/15/2015 12:20:14 PM	19699

EPA METHOD 8260B: VOLATILES

Analyst: **cadg**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.
	E Value above quantitation range
	J Analyte detected below quantitation limits
	O RSD is greater than RSDlimit
	R RPD outside accepted recovery limits
	S Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-17

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 3:20:00 PM

Lab ID: 1506435-006

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	11	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
Toluene	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
Ethylbenzene	18	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
Methyl tert-butyl ether (MTBE)	500	10		µg/L	10	6/18/2015 12:20:37 PM	R26939
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
Naphthalene	ND	2.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
1-Methylnaphthalene	ND	4.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
2-Methylnaphthalene	ND	4.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
Acetone	ND	10		µg/L	1	6/16/2015 9:11:13 PM	R26872
Bromobenzene	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
Bromodichloromethane	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
Bromoform	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
Bromomethane	ND	3.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
2-Butanone	ND	10		µg/L	1	6/16/2015 9:11:13 PM	R26872
Carbon disulfide	ND	10		µg/L	1	6/16/2015 9:11:13 PM	R26872
Carbon Tetrachloride	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
Chlorobenzene	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
Chloroethane	ND	2.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
Chloroform	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
Chloromethane	ND	3.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
2-Chlorotoluene	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
4-Chlorotoluene	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
cis-1,2-DCE	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
Dibromochloromethane	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
Dibromomethane	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
1,1-Dichloroethane	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
1,1-Dichloroethene	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
1,2-Dichloropropane	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
1,3-Dichloropropane	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
2,2-Dichloropropane	ND	2.0		µg/L	1	6/16/2015 9:11:13 PM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-17

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 3:20:00 PM

Lab ID: 1506435-006

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
1,1-Dichloropropene	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
Hexachlorobutadiene	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
2-Hexanone	ND	10		µg/L	1	6/16/2015 9:11:13 PM	R26872
Isopropylbenzene	1.1	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
4-Isopropyltoluene	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
4-Methyl-2-pentanone	ND	10		µg/L	1	6/16/2015 9:11:13 PM	R26872
Methylene Chloride	ND	3.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
n-Butylbenzene	ND	3.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
n-Propylbenzene	1.4	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
sec-Butylbenzene	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
Styrene	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
tert-Butylbenzene	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
trans-1,2-DCE	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
Trichlorofluoromethane	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
Vinyl chloride	ND	1.0		µg/L	1	6/16/2015 9:11:13 PM	R26872
Xylenes, Total	ND	1.5		µg/L	1	6/16/2015 9:11:13 PM	R26872
Surr: 1,2-Dichloroethane-d4	94.3	70-130		%REC	1	6/16/2015 9:11:13 PM	R26872
Surr: 4-Bromofluorobenzene	93.0	70-130		%REC	1	6/16/2015 9:11:13 PM	R26872
Surr: Dibromofluoromethane	99.0	70-130		%REC	1	6/16/2015 9:11:13 PM	R26872
Surr: Toluene-d8	102	70-130		%REC	1	6/16/2015 9:11:13 PM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-34

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 3:50:00 PM

Lab ID: 1506435-007

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	6/23/2015 12:34:16 PM	R27034
Lead	ND	0.0020		mg/L	2	6/18/2015 9:13:35 PM	R26941
Selenium	ND	0.010		mg/L	10	6/23/2015 2:58:08 PM	R27034
Uranium	0.029	0.0020		mg/L	2	6/18/2015 9:13:35 PM	R26941
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.14	0.0020		mg/L	1	6/19/2015 4:11:42 PM	R26969
Cadmium	ND	0.0020		mg/L	1	6/19/2015 4:11:42 PM	R26969
Chromium	ND	0.0060		mg/L	1	6/19/2015 4:11:42 PM	R26969
Copper	ND	0.0060		mg/L	1	6/19/2015 4:11:42 PM	R26969
Iron	0.11	0.020		mg/L	1	6/19/2015 4:11:42 PM	R26969
Manganese	0.0059	0.0020		mg/L	1	6/19/2015 4:11:42 PM	R26969
Silver	ND	0.0050		mg/L	1	6/19/2015 4:11:42 PM	R26969
Zinc	0.018	0.010		mg/L	1	6/19/2015 4:11:42 PM	R26969
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.20	0.0020		mg/L	1	6/16/2015 6:06:39 PM	19718
Cadmium	ND	0.0020		mg/L	1	6/19/2015 2:04:56 PM	19718
Chromium	ND	0.0060		mg/L	1	6/16/2015 6:06:39 PM	19718
Copper	ND	0.0060		mg/L	1	6/16/2015 6:06:39 PM	19718
Iron	2.3	0.10	*	mg/L	5	6/16/2015 6:08:25 PM	19718
Manganese	0.066	0.0020	*	mg/L	1	6/16/2015 6:06:39 PM	19718
Silver	ND	0.0050		mg/L	1	6/16/2015 6:06:39 PM	19718
Zinc	0.024	0.010		mg/L	1	6/16/2015 6:06:39 PM	19718
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	6/17/2015 3:27:48 PM	19718
Lead	ND	0.0025		mg/L	5	6/17/2015 3:27:48 PM	19718
Selenium	ND	0.010		mg/L	10	6/17/2015 4:05:59 PM	19718
Uranium	0.028	0.0025		mg/L	5	6/17/2015 3:27:48 PM	19718
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/17/2015 10:01:41 AM	19744
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/11/2015 6:42:46 AM	19656
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/11/2015 6:42:46 AM	19656
Surr: DNOP	128	76.5-150		%REC	1	6/11/2015 6:42:46 AM	19656
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/12/2015 10:17:53 PM	R26810
Surr: BFB	90.0	57.8-137		%REC	1	6/12/2015 10:17:53 PM	R26810

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-34

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 3:50:00 PM

Lab ID: 1506435-007

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM
Acenaphthene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Acenaphthylene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Aniline	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Anthracene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Azobenzene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Benz(a)anthracene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Benzo(a)pyrene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Benzo(b)fluoranthene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Benzo(k)fluoranthene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Benzoic acid	ND	20		µg/L	1	6/15/2015 12:48:04 PM	19699
Benzyl alcohol	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Butyl benzyl phthalate	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Carbazole	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
4-Chloroaniline	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
2-Chloronaphthalene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
2-Chlorophenol	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Chrysene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Di-n-butyl phthalate	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Di-n-octyl phthalate	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Dibenzofuran	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
1,2-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
1,3-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
1,4-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Diethyl phthalate	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Dimethyl phthalate	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
2,4-Dichlorophenol	ND	20		µg/L	1	6/15/2015 12:48:04 PM	19699
2,4-Dimethylphenol	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/15/2015 12:48:04 PM	19699
2,4-Dinitrophenol	ND	20		µg/L	1	6/15/2015 12:48:04 PM	19699

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-34

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 3:50:00 PM

Lab ID: 1506435-007

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: DAM	
2,4-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
2,6-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Fluoranthene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Fluorene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Hexachlorobenzene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Hexachlorobutadiene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Hexachloroethane	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Isophorone	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
1-Methylnaphthalene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
2-Methylnaphthalene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
2-Methylphenol	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
3+4-Methylphenol	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
N-Nitrosodimethylamine	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Naphthalene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
2-Nitroaniline	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
3-Nitroaniline	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
4-Nitroaniline	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Nitrobenzene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
2-Nitrophenol	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
4-Nitrophenol	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Pentachlorophenol	ND	20		µg/L	1	6/15/2015 12:48:04 PM	19699
Phenanthrene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Phenol	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Pyrene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Pyridine	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/15/2015 12:48:04 PM	19699
Surr: 2-Fluorophenol	67.8	14.9-111		%REC	1	6/15/2015 12:48:04 PM	19699
Surr: Phenol-d5	63.5	11.3-108		%REC	1	6/15/2015 12:48:04 PM	19699
Surr: 2,4,6-Tribromophenol	96.7	15.7-154		%REC	1	6/15/2015 12:48:04 PM	19699
Surr: Nitrobenzene-d5	85.9	47.8-106		%REC	1	6/15/2015 12:48:04 PM	19699
Surr: 2-Fluorobiphenyl	91.9	21.3-123		%REC	1	6/15/2015 12:48:04 PM	19699
Surr: 4-Terphenyl-d14	70.1	14.3-135		%REC	1	6/15/2015 12:48:04 PM	19699

EPA METHOD 8260B: VOLATILES

Analyst: **cadg**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-34

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 3:50:00 PM

Lab ID: 1506435-007

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
Toluene	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
Ethylbenzene	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
Naphthalene	ND	2.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
1-Methylnaphthalene	ND	4.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
2-Methylnaphthalene	ND	4.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
Acetone	ND	10		µg/L	1	6/16/2015 11:35:01 PM	R26872
Bromobenzene	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
Bromodichloromethane	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
Bromoform	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
Bromomethane	ND	3.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
2-Butanone	ND	10		µg/L	1	6/16/2015 11:35:01 PM	R26872
Carbon disulfide	ND	10		µg/L	1	6/16/2015 11:35:01 PM	R26872
Carbon Tetrachloride	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
Chlorobenzene	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
Chloroethane	ND	2.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
Chloroform	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
Chloromethane	ND	3.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
2-Chlorotoluene	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
4-Chlorotoluene	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
cis-1,2-DCE	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
Dibromochloromethane	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
Dibromomethane	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
1,1-Dichloroethane	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
1,1-Dichloroethene	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
1,2-Dichloropropane	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
1,3-Dichloropropane	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
2,2-Dichloropropane	ND	2.0		µg/L	1	6/16/2015 11:35:01 PM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-34

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015 3:50:00 PM

Lab ID: 1506435-007

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
1,1-Dichloropropene	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
Hexachlorobutadiene	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
2-Hexanone	ND	10		µg/L	1	6/16/2015 11:35:01 PM	R26872
Isopropylbenzene	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
4-Isopropyltoluene	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
4-Methyl-2-pentanone	ND	10		µg/L	1	6/16/2015 11:35:01 PM	R26872
Methylene Chloride	ND	3.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
n-Butylbenzene	ND	3.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
n-Propylbenzene	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
sec-Butylbenzene	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
Styrene	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
tert-Butylbenzene	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
trans-1,2-DCE	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
Trichloroethene (TCE)	1.7	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
Trichlorofluoromethane	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
Vinyl chloride	ND	1.0		µg/L	1	6/16/2015 11:35:01 PM	R26872
Xylenes, Total	ND	1.5		µg/L	1	6/16/2015 11:35:01 PM	R26872
Surr: 1,2-Dichloroethane-d4	99.6	70-130		%REC	1	6/16/2015 11:35:01 PM	R26872
Surr: 4-Bromofluorobenzene	107	70-130		%REC	1	6/16/2015 11:35:01 PM	R26872
Surr: Dibromofluoromethane	101	70-130		%REC	1	6/16/2015 11:35:01 PM	R26872
Surr: Toluene-d8	105	70-130		%REC	1	6/16/2015 11:35:01 PM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Blind Duplicate

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015

Lab ID: 1506435-008

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Acenaphthylene	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Aniline	22	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Anthracene	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Azobenzene	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Benz(a)anthracene	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Benzo(a)pyrene	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Benzo(b)fluoranthene	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Benzo(k)fluoranthene	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Benzoic acid	ND	20		µg/L	1	6/15/2015 1:15:47 PM	19699
Benzyl alcohol	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Butyl benzyl phthalate	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Carbazole	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
4-Chloroaniline	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
2-Chloronaphthalene	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
2-Chlorophenol	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Chrysene	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Di-n-butyl phthalate	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Di-n-octyl phthalate	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Dibenzofuran	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
1,2-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
1,3-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
1,4-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Diethyl phthalate	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Dimethyl phthalate	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
2,4-Dichlorophenol	ND	20		µg/L	1	6/15/2015 1:15:47 PM	19699
2,4-Dimethylphenol	180	10		µg/L	1	6/15/2015 1:15:47 PM	19699
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/15/2015 1:15:47 PM	19699
2,4-Dinitrophenol	ND	20		µg/L	1	6/15/2015 1:15:47 PM	19699

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Blind Duplicate

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/8/2015

Lab ID: 1506435-008

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
2,4-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
2,6-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Fluoranthene	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Fluorene	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Hexachlorobenzene	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Hexachlorobutadiene	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Hexachloroethane	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Isophorone	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
1-Methylnaphthalene	44	10		µg/L	1	6/15/2015 1:15:47 PM	19699
2-Methylnaphthalene	48	10		µg/L	1	6/15/2015 1:15:47 PM	19699
2-Methylphenol	120	10		µg/L	1	6/15/2015 1:15:47 PM	19699
3+4-Methylphenol	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
N-Nitrosodimethylamine	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Naphthalene	140	10		µg/L	1	6/15/2015 1:15:47 PM	19699
2-Nitroaniline	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
3-Nitroaniline	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
4-Nitroaniline	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Nitrobenzene	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
2-Nitrophenol	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
4-Nitrophenol	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Pentachlorophenol	ND	20		µg/L	1	6/15/2015 1:15:47 PM	19699
Phenanthrene	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Phenol	63	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Pyrene	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Pyridine	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/15/2015 1:15:47 PM	19699
Surr: 2-Fluorophenol	22.9	14.9-111		%REC	1	6/15/2015 1:15:47 PM	19699
Surr: Phenol-d5	58.8	11.3-108		%REC	1	6/15/2015 1:15:47 PM	19699
Surr: 2,4,6-Tribromophenol	92.2	15.7-154		%REC	1	6/15/2015 1:15:47 PM	19699
Surr: Nitrobenzene-d5	90.4	47.8-106		%REC	1	6/15/2015 1:15:47 PM	19699
Surr: 2-Fluorobiphenyl	89.2	21.3-123		%REC	1	6/15/2015 1:15:47 PM	19699
Surr: 4-Terphenyl-d14	71.1	14.3-135		%REC	1	6/15/2015 1:15:47 PM	19699

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: 2015 2nd QTR (MKTF)

Collection Date:

Lab ID: 1506435-009

Matrix: TRIP BLANK

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/12/2015 10:43:10 PM	R26810
Surr: BFB	90.4	57.8-137		%REC	1	6/12/2015 10:43:10 PM	R26810
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
Toluene	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
Ethylbenzene	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
Naphthalene	ND	2.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
1-Methylnaphthalene	ND	4.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
2-Methylnaphthalene	ND	4.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
Acetone	ND	10		µg/L	1	6/17/2015 12:03:46 AM	R26872
Bromobenzene	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
Bromodichloromethane	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
Bromoform	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
Bromomethane	ND	3.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
2-Butanone	ND	10		µg/L	1	6/17/2015 12:03:46 AM	R26872
Carbon disulfide	ND	10		µg/L	1	6/17/2015 12:03:46 AM	R26872
Carbon Tetrachloride	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
Chlorobenzene	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
Chloroethane	ND	2.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
Chloroform	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
Chloromethane	ND	3.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
2-Chlorotoluene	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
4-Chlorotoluene	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
cis-1,2-DCE	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
Dibromochloromethane	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
Dibromomethane	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
1,1-Dichloroethane	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
1,1-Dichloroethene	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506435

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: 2015 2nd QTR (MKTf)

Collection Date:

Lab ID: 1506435-009

Matrix: TRIP BLANK

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
1,2-Dichloropropane	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
1,3-Dichloropropane	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
2,2-Dichloropropane	ND	2.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
1,1-Dichloropropene	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
Hexachlorobutadiene	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
2-Hexanone	ND	10		µg/L	1	6/17/2015 12:03:46 AM	R26872
Isopropylbenzene	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
4-Isopropyltoluene	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
4-Methyl-2-pentanone	ND	10		µg/L	1	6/17/2015 12:03:46 AM	R26872
Methylene Chloride	ND	3.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
n-Butylbenzene	ND	3.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
n-Propylbenzene	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
sec-Butylbenzene	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
Styrene	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
tert-Butylbenzene	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
trans-1,2-DCE	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
Trichlorofluoromethane	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
Vinyl chloride	ND	1.0		µg/L	1	6/17/2015 12:03:46 AM	R26872
Xylenes, Total	ND	1.5		µg/L	1	6/17/2015 12:03:46 AM	R26872
Surr: 1,2-Dichloroethane-d4	95.4	70-130		%REC	1	6/17/2015 12:03:46 AM	R26872
Surr: 4-Bromofluorobenzene	108	70-130		%REC	1	6/17/2015 12:03:46 AM	R26872
Surr: Dibromofluoromethane	102	70-130		%REC	1	6/17/2015 12:03:46 AM	R26872
Surr: Toluene-d8	101	70-130		%REC	1	6/17/2015 12:03:46 AM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506435

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID:	R26969	RunNo:	26969					
Prep Date:		Analysis Date:	6/19/2015	SeqNo:	805268	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW	Batch ID:	R26969	RunNo:	26969					
Prep Date:		Analysis Date:	6/19/2015	SeqNo:	805269	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	98.5	85	115			
Cadmium	0.51	0.0020	0.5000	0	101	85	115			
Chromium	0.50	0.0060	0.5000	0	100	85	115			
Copper	0.51	0.0060	0.5000	0	101	85	115			
Iron	0.48	0.020	0.5000	0	96.5	85	115			
Manganese	0.48	0.0020	0.5000	0	96.9	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.50	0.010	0.5000	0	100	85	115			

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID:	R26969	RunNo:	26969					
Prep Date:		Analysis Date:	6/19/2015	SeqNo:	805397	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506435

07-Jul-15

Client: Western Refining Southwest, Gallup**Project:** 2015 2nd QTR (MKTF)

Sample ID	LCS		SampType: LCS			TestCode: EPA Method 200.7: Dissolved Metals				
Client ID:	LCSW		Batch ID: R26969			RunNo: 26969				
Prep Date:	Analysis Date: 6/19/2015			SeqNo: 805398		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	100	85	115			
Cadmium	0.51	0.0020	0.5000	0	102	85	115			
Chromium	0.51	0.0060	0.5000	0	101	85	115			
Copper	0.51	0.0060	0.5000	0	102	85	115			
Iron	0.49	0.020	0.5000	0	97.4	85	115			
Manganese	0.49	0.0020	0.5000	0	98.0	85	115			
Silver	0.10	0.0050	0.1000	0	105	85	115			
Zinc	0.51	0.010	0.5000	0	102	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506435

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	1506435-002FMS		SampType:	MS		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	MKTF-18		Batch ID:	19718		RunNo:	26882			
Prep Date:	6/15/2015		Analysis Date:	6/16/2015		SeqNo:	802386		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.52	0.0020	0.5000	0	104	70	130			
Chromium	0.50	0.0060	0.5000	0	99.9	70	130			
Copper	0.50	0.0060	0.5000	0	99.3	70	130			
Zinc	0.49	0.010	0.5000	0.006040	97.6	70	130			

Sample ID	1506435-002FMSD		SampType:	MSD		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	MKTF-18		Batch ID:	19718		RunNo:	26882			
Prep Date:	6/15/2015		Analysis Date:	6/16/2015		SeqNo:	802387		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.52	0.0020	0.5000	0	104	70	130	0.160	20	
Chromium	0.49	0.0060	0.5000	0	98.5	70	130	1.47	20	
Copper	0.49	0.0060	0.5000	0	98.8	70	130	0.575	20	
Zinc	0.49	0.010	0.5000	0.006040	97.5	70	130	0.170	20	

Sample ID	1506435-002FMS		SampType:	MS		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	MKTF-18		Batch ID:	19718		RunNo:	26882			
Prep Date:	6/15/2015		Analysis Date:	6/16/2015		SeqNo:	802389		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	2.9	0.010	0.5000	2.476	84.1	70	130			
Manganese	2.2	0.010	0.5000	1.789	86.6	70	130			

Sample ID	1506435-002FMSD		SampType:	MSD		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	MKTF-18		Batch ID:	19718		RunNo:	26882			
Prep Date:	6/15/2015		Analysis Date:	6/16/2015		SeqNo:	802390		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	2.9	0.010	0.5000	2.476	84.3	70	130	0.0242	20	
Manganese	2.2	0.010	0.5000	1.789	86.1	70	130	0.104	20	

Sample ID	MB-19718		SampType:	MBLK		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	PBW		Batch ID:	19718		RunNo:	26882			
Prep Date:	6/15/2015		Analysis Date:	6/16/2015		SeqNo:	802438		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								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506435

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	MB-19718		SampType:	MBLK		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	PBW		Batch ID:	19718		RunNo:	26882			
Prep Date:	6/15/2015		Analysis Date:	6/16/2015		SeqNo:	802438		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID	LCS-19718		SampType:	LCS		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	LCSW		Batch ID:	19718		RunNo:	26882			
Prep Date:	6/15/2015		Analysis Date:	6/16/2015		SeqNo:	802439		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	0.52	0.0020	0.5000	0	104	85	115			
Chromium	0.49	0.0060	0.5000	0	98.8	85	115			
Copper	0.48	0.0060	0.5000	0	95.9	85	115			
Iron	0.50	0.020	0.5000	0	99.2	85	115			
Manganese	0.47	0.0020	0.5000	0	94.6	85	115			
Silver	0.10	0.0050	0.1000	0	101	85	115			
Zinc	0.49	0.010	0.5000	0	98.2	85	115			

Sample ID	1506435-002FMS		SampType:	MS		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	MKTF-18		Batch ID:	19718		RunNo:	26969			
Prep Date:	6/15/2015		Analysis Date:	6/19/2015		SeqNo:	805274		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.11	0.0050	0.1000	0	107	70	130			

Sample ID	1506435-002FMSD		SampType:	MSD		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	MKTF-18		Batch ID:	19718		RunNo:	26969			
Prep Date:	6/15/2015		Analysis Date:	6/19/2015		SeqNo:	805275		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.11	0.0050	0.1000	0	111	70	130	3.06	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506435

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26941		RunNo: 26941					
Prep Date:			Analysis Date: 6/18/2015		SeqNo: 804321		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.012	0.00050	0.01250	0	96.0	85	115			
Uranium	0.013	0.00050	0.01250	0	101	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26941		RunNo: 26941					
Prep Date:			Analysis Date: 6/18/2015		SeqNo: 804322		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.012	0.00050	0.01250	0	95.4	85	115			
Uranium	0.013	0.00050	0.01250	0	101	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R26941			RunNo: 26941					
Prep Date:		Analysis Date: 6/18/2015			SeqNo: 804324		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.00050								
Uranium	ND	0.00050								

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R26941			RunNo: 26941					
Prep Date:		Analysis Date: 6/18/2015			SeqNo: 804325		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.00050								
Uranium	ND	0.00050								

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26957		RunNo: 26957					
Prep Date:			Analysis Date: 6/19/2015		SeqNo: 806747		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	99.8	85	115			
Selenium	0.026	0.0010	0.02500	0	103	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26957		RunNo: 26957					
Prep Date:			Analysis Date: 6/19/2015		SeqNo: 806748		Units: mg/L			
Analyte	Result	POL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506435

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26957		RunNo: 26957					
Prep Date:			Analysis Date: 6/19/2015		SeqNo: 806748		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	101	85	115			
Selenium	0.025	0.0010	0.02500	0	101	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R26957			RunNo: 26957					
Prep Date:		Analysis Date: 6/19/2015			SeqNo: 806749		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R26957			RunNo: 26957					
Prep Date:		Analysis Date: 6/19/2015			SeqNo: 806750		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								

Sample ID	1506435-004EMS		SampType: MS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	MKTF-20		Batch ID: R27034		RunNo: 27034					
Prep Date:			Analysis Date: 6/23/2015		SeqNo: 807875		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.13	0.0050	0.1250	0.01165	98.1	70	130			
Lead	0.064	0.0025	0.06250	0.0009866	102	70	130			
Selenium	0.12	0.0050	0.1250	0.002086	95.0	70	130			
Uranium	0.067	0.0025	0.06250	0.001569	105	70	130			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R27034		RunNo: 27034					
Prep Date:			Analysis Date: 6/23/2015		SeqNo: 807912		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	97.6	85	115			
Lead	0.013	0.00050	0.01250	0	101	85	115			
Selenium	0.024	0.0010	0.02500	0	96.9	85	115			
Uranium	0.013	0.00050	0.01250	0	101	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506435

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R27034		RunNo: 27034					
Prep Date:			Analysis Date: 6/23/2015		SeqNo: 807913		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	96.5	85	115			
Lead	0.013	0.00050	0.01250	0	101	85	115			
Selenium	0.024	0.0010	0.02500	0	94.7	85	115			
Uranium	0.012	0.00050	0.01250	0	100	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R27034		RunNo: 27034					
Prep Date:			Analysis Date: 6/23/2015		SeqNo: 807914		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	104	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R27034			RunNo: 27034					
Prep Date:		Analysis Date: 6/23/2015			SeqNo: 807916		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: R27034			RunNo: 27034					
Prep Date:		Analysis Date: 6/23/2015			SeqNo: 807917		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: R27034			RunNo: 27034					
Prep Date:		Analysis Date: 6/23/2015			SeqNo: 807918		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.00050								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506435

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	LLLCS-19718		SampType: LCSLL		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	BatchQC		Batch ID: 19718		RunNo: 26875					
Prep Date:	6/15/2015		Analysis Date: 6/16/2015		SeqNo: 801988		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	97.3	85	115			
Lead	0.012	0.00050	0.01250	0	99.3	85	115			
Selenium	0.025	0.0010	0.02500	0	98.1	85	115			
Uranium	0.013	0.00050	0.01250	0	103	85	115			

Sample ID	MB-19718	SampType: MBLK		TestCode: 200.8 ICPMS Metals:Total						
Client ID:	PBW	Batch ID: 19718		RunNo: 26875						
Prep Date:	6/15/2015	Analysis Date: 6/16/2015		SeqNo: 801989		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.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506435

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	MB-19744	SampType:	MBLK	TestCode:	EPA Method 245.1: Mercury					
Client ID:	PBW	Batch ID:	19744	RunNo:	26888					
Prep Date:	6/16/2015	Analysis Date:	6/17/2015	SeqNo:	802664	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	LCS-19744	SampType:	LCS	TestCode:	EPA Method 245.1: Mercury					
Client ID:	LCSW	Batch ID:	19744	RunNo:	26888					
Prep Date:	6/16/2015	Analysis Date:	6/17/2015	SeqNo:	802665	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0052	0.00020	0.005000	0	104	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506435

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	LCS-19656		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	LCSW		Batch ID: 19656		RunNo: 26742					
Prep Date:	6/10/2015		Analysis Date: 6/11/2015		SeqNo: 797509		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	60.1	156			
Surr: DNOP	0.52		0.5000		105	76.5	150			

Sample ID	1506435-002CMS		SampType: MS		TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	MKTF-18		Batch ID: 19656		RunNo: 26742					
Prep Date:	6/10/2015		Analysis Date: 6/11/2015		SeqNo: 797518		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	9.3	1.0	5.000	3.338	119	75.9	164			
Surr: DNOP	0.66		0.5000		132	76.5	150			

Sample ID	1506435-002CMSD		SampType: MSD		TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	MKTF-18		Batch ID: 19656		RunNo: 26742					
Prep Date:	6/10/2015		Analysis Date: 6/11/2015		SeqNo: 797519		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	8.8	1.0	5.000	3.338	108	75.9	164	5.95	22.1	
Surr: DNOP	0.62		0.5000		124	76.5	150	0	0	

Sample ID	MB-19656		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	PBW		Batch ID: 19656		RunNo: 26743					
Prep Date:	6/10/2015		Analysis Date: 6/11/2015		SeqNo: 798441		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	0.79		1.000		79.0	76.5	150			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506435

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	5ML RB	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID: R26810			RunNo: 26810					
Prep Date:		Analysis Date: 6/12/2015			SeqNo: 799637		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		89.6	57.8	137			

Sample ID	2.5UG GRO LCS		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSW		Batch ID: R26810		RunNo: 26810					
Prep Date:			Analysis Date: 6/12/2015		SeqNo: 799638		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.50	0.050	0.5000	0	99.2	80	120			
Surr: BFB	21		20.00		105	57.8	137			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506435

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	rb1	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R26872	RunNo:	26872					
Prep Date:		Analysis Date:	6/16/2015	SeqNo:	801831	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506435

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	rb1	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R26872	RunNo:	26872					
Prep Date:		Analysis Date:	6/16/2015	SeqNo:	801831	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	11		10.00		106	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID:	R26872	RunNo:	26872					
Prep Date:		Analysis Date:	6/16/2015	SeqNo:	801833	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.5	70	130			
Toluene	21	1.0	20.00	0	103	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506435

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R26872			RunNo: 26872					
Prep Date:	Analysis Date: 6/16/2015			SeqNo: 801833		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	21	1.0	20.00	0	105	75.6	144			
Trichloroethene (TCE)	18	1.0	20.00	0	92.1	70	130			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.3	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID	rb1	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R26906			RunNo: 26906					
Prep Date:		Analysis Date: 6/17/2015			SeqNo: 803329		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506435

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	rb1	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R26906	RunNo:	26906					
Prep Date:		Analysis Date:	6/17/2015	SeqNo:	803329	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.9	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506435

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID rb1	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R26906			RunNo: 26906						
Prep Date:	Analysis Date: 6/17/2015			SeqNo: 803329		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	11		10.00		108	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID 100ng lcs1	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSW	Batch ID: R26906			RunNo: 26906						
Prep Date:	Analysis Date: 6/17/2015			SeqNo: 803331		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	70	130			
Toluene	22	1.0	20.00	0	108	70	130			
Chlorobenzene	20	1.0	20.00	0	99.7	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	110	75.6	144			
Trichloroethene (TCE)	19	1.0	20.00	0	95.4	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		104	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130			
Surr: Dibromofluoromethane	11		10.00		111	70	130			
Surr: Toluene-d8	11		10.00		105	70	130			

Sample ID rb1	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R26939			RunNo: 26939						
Prep Date:	Analysis Date: 6/18/2015			SeqNo: 804179		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	1.0								
Surr: 1,2-Dichloroethane-d4	9.9		10.00		99.2	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		109	70	130			
Surr: Dibromofluoromethane	9.9		10.00		98.6	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID 100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSW	Batch ID: R26939			RunNo: 26939						
Prep Date:	Analysis Date: 6/18/2015			SeqNo: 804186		Units: %REC				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506435

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	mb-19699	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	19699	RunNo:	26827					
Prep Date:	6/12/2015	Analysis Date:	6/15/2015	SeqNo:	800922	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506435

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	mb-19699		SampType: MBLK			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	PBW		Batch ID: 19699			RunNo: 26827				
Prep Date:	6/12/2015		Analysis Date: 6/15/2015			SeqNo: 800922	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	140		200.0		70.4	14.9	111			
Surr: Phenol-d5	150		200.0		76.3	11.3	108			
Surr: 2,4,6-Tribromophenol	190		200.0		96.4	15.7	154			
Surr: Nitrobenzene-d5	82		100.0		81.7	47.8	106			
Surr: 2-Fluorobiphenyl	76		100.0		76.2	21.3	123			
Surr: 4-Terphenyl-d14	66		100.0		66.5	14.3	135			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506435

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	lcs-19699		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 19699		RunNo: 26827					
Prep Date:	6/12/2015		Analysis Date: 6/15/2015		SeqNo: 800927		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	71	10	100.0	0	70.6	47.8	99.7			
4-Chloro-3-methylphenol	160	10	200.0	0	80.3	58.1	103			
2-Chlorophenol	150	10	200.0	0	76.0	49.5	96.8			
1,4-Dichlorobenzene	79	10	100.0	0	78.9	40.4	89.4			
2,4-Dinitrotoluene	52	10	100.0	0	52.5	38.6	91.3			
N-Nitrosodi-n-propylamine	78	10	100.0	0	78.3	53.9	95.6			
4-Nitrophenol	120	10	200.0	0	60.6	26.4	108			
Pentachlorophenol	130	20	200.0	0	64.6	36.5	86.6			
Phenol	150	10	200.0	0	75.2	29.3	108			
Pyrene	66	10	100.0	0	65.6	45.7	100			
1,2,4-Trichlorobenzene	85	10	100.0	0	84.8	39.3	94.5			
Surr: 2-Fluorophenol	160		200.0		79.0	14.9	111			
Surr: Phenol-d5	170		200.0		82.6	11.3	108			
Surr: 2,4,6-Tribromophenol	170		200.0		85.5	15.7	154			
Surr: Nitrobenzene-d5	75		100.0		75.4	47.8	106			
Surr: 2-Fluorobiphenyl	73		100.0		73.3	21.3	123			
Surr: 4-Terphenyl-d14	54		100.0		54.3	14.3	135			

Sample ID	lcsd-19699		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 19699		RunNo: 26827					
Prep Date:	6/12/2015		Analysis Date: 6/15/2015		SeqNo: 800932		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	69	10	100.0	0	69.0	47.8	99.7	2.26	28.2	
4-Chloro-3-methylphenol	160	10	200.0	0	79.4	58.1	103	1.09	24.4	
2-Chlorophenol	140	10	200.0	0	68.3	49.5	96.8	10.6	28.1	
1,4-Dichlorobenzene	68	10	100.0	0	67.6	40.4	89.4	15.3	31.2	
2,4-Dinitrotoluene	65	10	100.0	0	65.1	38.6	91.3	21.4	44.4	
N-Nitrosodi-n-propylamine	77	10	100.0	0	76.5	53.9	95.6	2.27	24.2	
4-Nitrophenol	140	10	200.0	0	69.1	26.4	108	13.2	36.6	
Pentachlorophenol	130	20	200.0	0	63.2	36.5	86.6	2.18	29.5	
Phenol	140	10	200.0	0	67.6	29.3	108	10.8	30	
Pyrene	73	10	100.0	0	72.8	45.7	100	10.5	31	
1,2,4-Trichlorobenzene	79	10	100.0	0	79.4	39.3	94.5	6.63	24	
Surr: 2-Fluorophenol	130		200.0		66.4	14.9	111	0	0	
Surr: Phenol-d5	150		200.0		73.0	11.3	108	0	0	
Surr: 2,4,6-Tribromophenol	160		200.0		81.4	15.7	154	0	0	
Surr: Nitrobenzene-d5	73		100.0		72.8	47.8	106	0	0	
Surr: 2-Fluorobiphenyl	68		100.0		68.1	21.3	123	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506435

07-Jul-15

Client: Western Refining Southwest, Gallup**Project:** 2015 2nd QTR (MKTF)

Sample ID	lcsd-19699		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 19699		RunNo: 26827					
Prep Date:	6/12/2015		Analysis Date: 6/15/2015		SeqNo: 800932		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	58		100.0		57.8	14.3	135	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit



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: **1506435**

RcptNo: 1

Received by/date:

CS 06/09/15

Logged By: **Ashley Gallegos**

6/9/2015 4:12:00 PM

Completed By: **Ashley Gallegos**

6/9/2015 4:53:57 PM

Reviewed By:

AS 06/10/15

Chain of Custody

1. Custody seals intact on sample bottles?

Yes ☐

No ☐

Not Present ☒

2. Is Chain of Custody complete?

Yes ☒

No ☐

Not Present ☐

3. How was the sample delivered?

Courier

Log In

4. Was an attempt made to cool the samples?

Yes ☒

No ☐

NA ☐

5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C

Yes ☒

No ☐

NA ☐

6. Sample(s) in proper container(s)?

Yes ☒

No ☐

7. Sufficient sample volume for indicated test(s)?

Yes ☒

No ☐

8. Are samples (except VOA and ONG) properly preserved?

Yes ☒

No ☐

9. Was preservative added to bottles?

Yes ☐

No ☒

NA ☐

For Diss Metals analysis: Added 0.4 mL HNO_3 + 0.002E + 0.003E Apr acceptable

10. VOA vials have zero headspace?

Yes ☒

No ☐

No VOA Vials ☐

11. Were any sample containers received broken?

Yes ☐

No ☒

of preserved bottles checked for pH:

12. Does paperwork match bottle labels?

Yes ☒

No ☐

(Note discrepancies on chain of custody)

13. Are matrices correctly identified on Chain of Custody?

Yes ☒

No ☐

Adjusted?

14. Is it clear what analyses were requested?

Yes ☒

No ☐

15. Were all holding times able to be met?

Yes ☒

No ☐

(If no, notify customer for authorization.)

Checked by:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order?

Yes ☐

No ☐

NA ☒

Person Notified:

Date

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.3	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 07, 2015

Cheryl Johnson

Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: 2015 2nd QTR (MKTF)

OrderNo.: 1506436

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 9 sample(s) on 6/9/2015 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', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 7:00:00 AM

Lab ID: 1506436-001

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
Toluene	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
Ethylbenzene	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
Naphthalene	ND	2.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
1-Methylnaphthalene	ND	4.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
2-Methylnaphthalene	ND	4.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
Acetone	ND	10		µg/L	1	6/17/2015 12:32:36 AM	R26872
Bromobenzene	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
Bromodichloromethane	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
Bromoform	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
Bromomethane	ND	3.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
2-Butanone	ND	10		µg/L	1	6/17/2015 12:32:36 AM	R26872
Carbon disulfide	ND	10		µg/L	1	6/17/2015 12:32:36 AM	R26872
Carbon Tetrachloride	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
Chlorobenzene	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
Chloroethane	ND	2.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
Chloroform	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
Chloromethane	ND	3.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
2-Chlorotoluene	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
4-Chlorotoluene	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
cis-1,2-DCE	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
Dibromochloromethane	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
Dibromomethane	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
1,1-Dichloroethane	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
1,1-Dichloroethene	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
1,2-Dichloropropane	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
1,3-Dichloropropane	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
2,2-Dichloropropane	ND	2.0		µg/L	1	6/17/2015 12:32:36 AM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 1 of 52
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 7:00:00 AM

Lab ID: 1506436-001

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: cadg			
1,1-Dichloropropene	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
Hexachlorobutadiene	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
2-Hexanone	ND	10		µg/L	1	6/17/2015 12:32:36 AM	R26872
Isopropylbenzene	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
4-Isopropyltoluene	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
4-Methyl-2-pentanone	ND	10		µg/L	1	6/17/2015 12:32:36 AM	R26872
Methylene Chloride	ND	3.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
n-Butylbenzene	ND	3.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
n-Propylbenzene	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
sec-Butylbenzene	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
Styrene	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
tert-Butylbenzene	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
trans-1,2-DCE	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
Trichlorofluoromethane	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
Vinyl chloride	ND	1.0		µg/L	1	6/17/2015 12:32:36 AM	R26872
Xylenes, Total	ND	1.5		µg/L	1	6/17/2015 12:32:36 AM	R26872
Surr: 1,2-Dichloroethane-d4	94.7	70-130		%REC	1	6/17/2015 12:32:36 AM	R26872
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	6/17/2015 12:32:36 AM	R26872
Surr: Dibromofluoromethane	101	70-130		%REC	1	6/17/2015 12:32:36 AM	R26872
Surr: Toluene-d8	104	70-130		%REC	1	6/17/2015 12:32:36 AM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-33

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 8:20:00 AM

Lab ID: 1506436-002

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	6/23/2015 12:37:19 PM	R27034
Lead	ND	0.0020		mg/L	2	6/18/2015 9:16:38 PM	R26941
Selenium	ND	0.0050		mg/L	5	6/23/2015 12:37:19 PM	R27034
Uranium	0.044	0.0020	*	mg/L	2	6/18/2015 9:16:38 PM	R26941
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.055	0.0020		mg/L	1	6/19/2015 4:13:38 PM	R26969
Cadmium	ND	0.0020		mg/L	1	6/19/2015 4:13:38 PM	R26969
Chromium	ND	0.0060		mg/L	1	6/19/2015 4:13:38 PM	R26969
Copper	ND	0.0060		mg/L	1	6/19/2015 4:13:38 PM	R26969
Iron	ND	0.020		mg/L	1	6/19/2015 4:13:38 PM	R26969
Manganese	0.14	0.0020	*	mg/L	1	6/19/2015 4:13:38 PM	R26969
Silver	ND	0.0050		mg/L	1	6/19/2015 4:13:38 PM	R26969
Zinc	0.028	0.010		mg/L	1	6/19/2015 4:13:38 PM	R26969
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.26	0.0020		mg/L	1	6/16/2015 6:10:16 PM	19718
Cadmium	ND	0.0020		mg/L	1	6/19/2015 2:06:39 PM	19718
Chromium	ND	0.0060		mg/L	1	6/19/2015 2:06:39 PM	19718
Copper	ND	0.0060		mg/L	1	6/16/2015 6:10:16 PM	19718
Iron	4.1	0.10	*	mg/L	5	6/16/2015 6:12:10 PM	19718
Manganese	0.70	0.0020	*	mg/L	1	6/16/2015 6:10:16 PM	19718
Silver	ND	0.0050		mg/L	1	6/16/2015 6:10:16 PM	19718
Zinc	0.020	0.010		mg/L	1	6/16/2015 6:10:16 PM	19718
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	6/17/2015 3:30:31 PM	19718
Lead	0.0058	0.0025		mg/L	5	6/17/2015 3:30:31 PM	19718
Selenium	ND	0.0050		mg/L	5	6/17/2015 3:30:31 PM	19718
Uranium	0.044	0.0025	*	mg/L	5	6/17/2015 3:30:31 PM	19718
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/17/2015 10:46:16 AM	19745
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/11/2015 7:36:02 AM	19656
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/11/2015 7:36:02 AM	19656
Surr: DNOP	132	76.5-150		%REC	1	6/11/2015 7:36:02 AM	19656
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.42	0.050		mg/L	1	6/12/2015 11:08:32 PM	R26810
Surr: BFB	92.0	57.8-137		%REC	1	6/12/2015 11:08:32 PM	R26810

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	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-33

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 8:20:00 AM

Lab ID: 1506436-002

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Acenaphthylene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Aniline	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Anthracene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Azobenzene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Benz(a)anthracene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Benzo(a)pyrene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Benzo(b)fluoranthene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Benzo(k)fluoranthene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Benzoic acid	ND	20		µg/L	1	6/15/2015 4:31:45 PM	19699
Benzyl alcohol	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Butyl benzyl phthalate	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Carbazole	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
4-Chloroaniline	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
2-Chloronaphthalene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
2-Chlorophenol	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Chrysene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Di-n-butyl phthalate	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Di-n-octyl phthalate	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Dibenzofuran	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
1,2-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
1,3-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
1,4-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Diethyl phthalate	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Dimethyl phthalate	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
2,4-Dichlorophenol	ND	20		µg/L	1	6/15/2015 4:31:45 PM	19699
2,4-Dimethylphenol	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/15/2015 4:31:45 PM	19699
2,4-Dinitrophenol	ND	20		µg/L	1	6/15/2015 4:31:45 PM	19699

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Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 4 of 52
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-33

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 8:20:00 AM

Lab ID: 1506436-002

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: DAM	
2,4-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
2,6-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Fluoranthene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Fluorene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Hexachlorobenzene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Hexachlorobutadiene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Hexachloroethane	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Isophorone	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
1-Methylnaphthalene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
2-Methylnaphthalene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
2-Methylphenol	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
3+4-Methylphenol	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
N-Nitrosodimethylamine	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Naphthalene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
2-Nitroaniline	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
3-Nitroaniline	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
4-Nitroaniline	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Nitrobenzene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
2-Nitrophenol	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
4-Nitrophenol	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Pentachlorophenol	ND	20		µg/L	1	6/15/2015 4:31:45 PM	19699
Phenanthrene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Phenol	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Pyrene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Pyridine	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/15/2015 4:31:45 PM	19699
Surr: 2-Fluorophenol	46.5	14.9-111		%REC	1	6/15/2015 4:31:45 PM	19699
Surr: Phenol-d5	59.0	11.3-108		%REC	1	6/15/2015 4:31:45 PM	19699
Surr: 2,4,6-Tribromophenol	88.8	15.7-154		%REC	1	6/15/2015 4:31:45 PM	19699
Surr: Nitrobenzene-d5	74.9	47.8-106		%REC	1	6/15/2015 4:31:45 PM	19699
Surr: 2-Fluorobiphenyl	82.1	21.3-123		%REC	1	6/15/2015 4:31:45 PM	19699
Surr: 4-Terphenyl-d14	191	14.3-135	S	%REC	1	6/15/2015 4:31:45 PM	19699

EPA METHOD 8260B: VOLATILES

Analyst: **cadg**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 5 of 52
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-33

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 8:20:00 AM

Lab ID: 1506436-002

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
Toluene	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
Ethylbenzene	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
Methyl tert-butyl ether (MTBE)	490	20		µg/L	20	6/17/2015 1:01:20 AM	R26872
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
Naphthalene	ND	2.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
1-Methylnaphthalene	ND	4.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
2-Methylnaphthalene	ND	4.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
Acetone	ND	10		µg/L	1	6/17/2015 1:30:03 AM	R26872
Bromobenzene	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
Bromodichloromethane	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
Bromoform	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
Bromomethane	ND	3.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
2-Butanone	ND	10		µg/L	1	6/17/2015 1:30:03 AM	R26872
Carbon disulfide	ND	10		µg/L	1	6/17/2015 1:30:03 AM	R26872
Carbon Tetrachloride	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
Chlorobenzene	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
Chloroethane	ND	2.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
Chloroform	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
Chloromethane	ND	3.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
2-Chlorotoluene	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
4-Chlorotoluene	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
cis-1,2-DCE	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
Dibromochloromethane	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
Dibromomethane	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
1,1-Dichloroethane	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
1,1-Dichloroethene	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
1,2-Dichloropropane	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
1,3-Dichloropropane	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
2,2-Dichloropropane	ND	2.0		µg/L	1	6/17/2015 1:30:03 AM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 6 of 52
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-33

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 8:20:00 AM

Lab ID: 1506436-002

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
1,1-Dichloropropene	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
Hexachlorobutadiene	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
2-Hexanone	ND	10		µg/L	1	6/17/2015 1:30:03 AM	R26872
Isopropylbenzene	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
4-Isopropyltoluene	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
4-Methyl-2-pentanone	ND	10		µg/L	1	6/17/2015 1:30:03 AM	R26872
Methylene Chloride	ND	3.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
n-Butylbenzene	ND	3.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
n-Propylbenzene	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
sec-Butylbenzene	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
Styrene	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
tert-Butylbenzene	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
trans-1,2-DCE	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
Trichlorofluoromethane	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
Vinyl chloride	ND	1.0		µg/L	1	6/17/2015 1:30:03 AM	R26872
Xylenes, Total	ND	1.5		µg/L	1	6/17/2015 1:30:03 AM	R26872
Surr: 1,2-Dichloroethane-d4	95.9	70-130		%REC	1	6/17/2015 1:30:03 AM	R26872
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	6/17/2015 1:30:03 AM	R26872
Surr: Dibromofluoromethane	97.4	70-130		%REC	1	6/17/2015 1:30:03 AM	R26872
Surr: Toluene-d8	105	70-130		%REC	1	6/17/2015 1:30:03 AM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-22

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 9:00:00 AM

Lab ID: 1506436-003

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	6/23/2015 12:40:22 PM	R27034
Lead	ND	0.0020		mg/L	2	6/18/2015 9:19:41 PM	R26941
Selenium	ND	0.0050		mg/L	5	6/23/2015 12:40:22 PM	R27034
Uranium	0.0038	0.0020		mg/L	2	6/18/2015 9:19:41 PM	R26941
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	1.1	0.010		mg/L	5	6/19/2015 5:35:35 PM	R26969
Cadmium	ND	0.0020		mg/L	1	6/19/2015 4:15:34 PM	R26969
Chromium	ND	0.0060		mg/L	1	6/19/2015 4:15:34 PM	R26969
Copper	ND	0.0060		mg/L	1	6/19/2015 4:15:34 PM	R26969
Iron	6.8	0.20	*	mg/L	10	6/19/2015 5:37:51 PM	R26969
Manganese	2.3	0.010	*	mg/L	5	6/19/2015 5:35:35 PM	R26969
Silver	ND	0.0050		mg/L	1	6/19/2015 4:15:34 PM	R26969
Zinc	0.029	0.010		mg/L	1	6/19/2015 4:15:34 PM	R26969
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	2.2	0.010	*	mg/L	5	6/16/2015 6:24:47 PM	19718
Cadmium	ND	0.0020		mg/L	1	6/19/2015 2:09:00 PM	19718
Chromium	0.018	0.0060		mg/L	1	6/19/2015 2:09:00 PM	19718
Copper	0.026	0.0060		mg/L	1	6/16/2015 6:22:58 PM	19718
Iron	27	1.0	*	mg/L	50	6/19/2015 2:10:45 PM	19718
Manganese	3.6	0.010	*	mg/L	5	6/16/2015 6:24:47 PM	19718
Silver	ND	0.0050		mg/L	1	6/16/2015 6:22:58 PM	19718
Zinc	0.057	0.010		mg/L	1	6/16/2015 6:22:58 PM	19718
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	6/17/2015 3:33:15 PM	19718
Lead	0.048	0.0025	*	mg/L	5	6/17/2015 3:33:15 PM	19718
Selenium	ND	0.0050		mg/L	5	6/17/2015 3:33:15 PM	19718
Uranium	0.0053	0.0025		mg/L	5	6/17/2015 3:33:15 PM	19718
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/17/2015 10:48:16 AM	19745
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	2.5	1.0		mg/L	1	6/11/2015 8:02:36 AM	19656
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/11/2015 8:02:36 AM	19656
Surr: DNOP	106	76.5-150		%REC	1	6/11/2015 8:02:36 AM	19656
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	15	1.0		mg/L	20	6/12/2015 11:34:05 PM	R26810
Surr: BFB	100	57.8-137		%REC	20	6/12/2015 11:34:05 PM	R26810

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Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-22

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 9:00:00 AM

Lab ID: 1506436-003

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Acenaphthylene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Aniline	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Anthracene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Azobenzene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Benz(a)anthracene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Benzo(a)pyrene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Benzo(b)fluoranthene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Benzo(k)fluoranthene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Benzoic acid	ND	20		µg/L	1	6/15/2015 1:43:32 PM	19699
Benzyl alcohol	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Butyl benzyl phthalate	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Carbazole	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
4-Chloroaniline	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
2-Chloronaphthalene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
2-Chlorophenol	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Chrysene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Di-n-butyl phthalate	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Di-n-octyl phthalate	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Dibenzofuran	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
1,2-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
1,3-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
1,4-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Diethyl phthalate	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Dimethyl phthalate	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
2,4-Dichlorophenol	ND	20		µg/L	1	6/15/2015 1:43:32 PM	19699
2,4-Dimethylphenol	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/15/2015 1:43:32 PM	19699
2,4-Dinitrophenol	ND	20		µg/L	1	6/15/2015 1:43:32 PM	19699

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 9 of 52
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-22

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 9:00:00 AM

Lab ID: 1506436-003

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
2,4-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
2,6-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Fluoranthene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Fluorene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Hexachlorobenzene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Hexachlorobutadiene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Hexachloroethane	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Isophorone	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
1-Methylnaphthalene	62	10		µg/L	1	6/15/2015 1:43:32 PM	19699
2-Methylnaphthalene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
2-Methylphenol	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
3+4-Methylphenol	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
N-Nitrosodimethylamine	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Naphthalene	13	10		µg/L	1	6/15/2015 1:43:32 PM	19699
2-Nitroaniline	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
3-Nitroaniline	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
4-Nitroaniline	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Nitrobenzene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
2-Nitrophenol	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
4-Nitrophenol	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Pentachlorophenol	ND	20		µg/L	1	6/15/2015 1:43:32 PM	19699
Phenanthrene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Phenol	18	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Pyrene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Pyridine	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/15/2015 1:43:32 PM	19699
Surr: 2-Fluorophenol	66.2	14.9-111		%REC	1	6/15/2015 1:43:32 PM	19699
Surr: Phenol-d5	70.6	11.3-108		%REC	1	6/15/2015 1:43:32 PM	19699
Surr: 2,4,6-Tribromophenol	96.2	15.7-154		%REC	1	6/15/2015 1:43:32 PM	19699
Surr: Nitrobenzene-d5	100	47.8-106		%REC	1	6/15/2015 1:43:32 PM	19699
Surr: 2-Fluorobiphenyl	95.0	21.3-123		%REC	1	6/15/2015 1:43:32 PM	19699
Surr: 4-Terphenyl-d14	71.0	14.3-135		%REC	1	6/15/2015 1:43:32 PM	19699

EPA METHOD 8260B: VOLATILES

Analyst: **cadg**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits
	S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-22

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 9:00:00 AM

Lab ID: 1506436-003

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	2900	200		µg/L	200	6/17/2015 1:58:52 AM	R26872
Toluene	22	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
Ethylbenzene	320	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
Methyl tert-butyl ether (MTBE)	5700	200		µg/L	200	6/17/2015 1:58:52 AM	R26872
1,2,4-Trimethylbenzene	53	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
1,3,5-Trimethylbenzene	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
1,2-Dichloroethane (EDC)	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
1,2-Dibromoethane (EDB)	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
Naphthalene	ND	40		µg/L	20	6/17/2015 2:27:34 AM	R26872
1-Methylnaphthalene	80	80		µg/L	20	6/17/2015 2:27:34 AM	R26872
2-Methylnaphthalene	ND	80		µg/L	20	6/17/2015 2:27:34 AM	R26872
Acetone	ND	200		µg/L	20	6/17/2015 2:27:34 AM	R26872
Bromobenzene	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
Bromodichloromethane	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
Bromoform	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
Bromomethane	ND	60		µg/L	20	6/17/2015 2:27:34 AM	R26872
2-Butanone	ND	200		µg/L	20	6/17/2015 2:27:34 AM	R26872
Carbon disulfide	ND	200		µg/L	20	6/17/2015 2:27:34 AM	R26872
Carbon Tetrachloride	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
Chlorobenzene	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
Chloroethane	ND	40		µg/L	20	6/17/2015 2:27:34 AM	R26872
Chloroform	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
Chloromethane	ND	60		µg/L	20	6/17/2015 2:27:34 AM	R26872
2-Chlorotoluene	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
4-Chlorotoluene	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
cis-1,2-DCE	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
cis-1,3-Dichloropropene	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
1,2-Dibromo-3-chloropropane	ND	40		µg/L	20	6/17/2015 2:27:34 AM	R26872
Dibromochloromethane	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
Dibromomethane	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
1,2-Dichlorobenzene	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
1,3-Dichlorobenzene	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
1,4-Dichlorobenzene	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
Dichlorodifluoromethane	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
1,1-Dichloroethane	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
1,1-Dichloroethene	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
1,2-Dichloropropane	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
1,3-Dichloropropane	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
2,2-Dichloropropane	ND	40		µg/L	20	6/17/2015 2:27:34 AM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-22

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 9:00:00 AM

Lab ID: 1506436-003

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: cadg			
1,1-Dichloropropene	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
Hexachlorobutadiene	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
2-Hexanone	ND	200		µg/L	20	6/17/2015 2:27:34 AM	R26872
Isopropylbenzene	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
4-Isopropyltoluene	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
4-Methyl-2-pentanone	ND	200		µg/L	20	6/17/2015 2:27:34 AM	R26872
Methylene Chloride	ND	60		µg/L	20	6/17/2015 2:27:34 AM	R26872
n-Butylbenzene	ND	60		µg/L	20	6/17/2015 2:27:34 AM	R26872
n-Propylbenzene	33	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
sec-Butylbenzene	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
Styrene	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
tert-Butylbenzene	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
1,1,1,2-Tetrachloroethane	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
1,1,2,2-Tetrachloroethane	ND	40		µg/L	20	6/17/2015 2:27:34 AM	R26872
Tetrachloroethene (PCE)	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
trans-1,2-DCE	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
trans-1,3-Dichloropropene	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
1,2,3-Trichlorobenzene	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
1,2,4-Trichlorobenzene	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
1,1,1-Trichloroethane	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
1,1,2-Trichloroethane	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
Trichloroethene (TCE)	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
Trichlorofluoromethane	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
1,2,3-Trichloropropane	ND	40		µg/L	20	6/17/2015 2:27:34 AM	R26872
Vinyl chloride	ND	20		µg/L	20	6/17/2015 2:27:34 AM	R26872
Xylenes, Total	47	30		µg/L	20	6/17/2015 2:27:34 AM	R26872
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	20	6/17/2015 2:27:34 AM	R26872
Surr: 4-Bromofluorobenzene	94.8	70-130		%REC	20	6/17/2015 2:27:34 AM	R26872
Surr: Dibromofluoromethane	104	70-130		%REC	20	6/17/2015 2:27:34 AM	R26872
Surr: Toluene-d8	105	70-130		%REC	20	6/17/2015 2:27:34 AM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-23

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 10:05:00 AM

Lab ID: 1506436-004

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	0.010	0.0050	*	mg/L	5	6/23/2015 12:43:25 PM	R27034
Lead	ND	0.0020		mg/L	2	6/18/2015 9:22:45 PM	R26941
Selenium	ND	0.0050		mg/L	5	6/23/2015 12:43:25 PM	R27034
Uranium	0.0072	0.0020		mg/L	2	6/18/2015 9:22:45 PM	R26941
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.75	0.0020		mg/L	1	6/19/2015 4:17:19 PM	R26969
Cadmium	ND	0.0020		mg/L	1	6/19/2015 4:17:19 PM	R26969
Chromium	ND	0.0060		mg/L	1	6/19/2015 4:17:19 PM	R26969
Copper	ND	0.0060		mg/L	1	6/19/2015 4:17:19 PM	R26969
Iron	2.4	0.10	*	mg/L	5	6/19/2015 5:39:53 PM	R26969
Manganese	1.5	0.010	*	mg/L	5	6/19/2015 5:39:53 PM	R26969
Silver	ND	0.0050		mg/L	1	6/19/2015 4:17:19 PM	R26969
Zinc	ND	0.010		mg/L	1	6/19/2015 4:17:19 PM	R26969
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.83	0.0020		mg/L	1	6/16/2015 6:26:39 PM	19718
Cadmium	ND	0.0020		mg/L	1	6/19/2015 2:18:45 PM	19718
Chromium	ND	0.0060		mg/L	1	6/19/2015 2:18:45 PM	19718
Copper	0.012	0.0060		mg/L	1	6/16/2015 6:26:39 PM	19718
Iron	5.4	0.20	*	mg/L	10	6/19/2015 2:20:37 PM	19718
Manganese	1.6	0.010	*	mg/L	5	6/16/2015 6:28:33 PM	19718
Silver	ND	0.0050		mg/L	1	6/16/2015 6:26:39 PM	19718
Zinc	0.027	0.010		mg/L	1	6/16/2015 6:26:39 PM	19718
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	0.011	0.0050	*	mg/L	5	6/17/2015 3:35:58 PM	19718
Lead	0.0093	0.0025		mg/L	5	6/17/2015 3:35:58 PM	19718
Selenium	ND	0.0050		mg/L	5	6/17/2015 3:35:58 PM	19718
Uranium	0.011	0.0025		mg/L	5	6/17/2015 3:35:58 PM	19718
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/17/2015 10:50:17 AM	19745
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	23	1.0		mg/L	1	6/11/2015 8:29:24 AM	19656
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/11/2015 8:29:24 AM	19656
Surr: DNOP	120	76.5-150		%REC	1	6/11/2015 8:29:24 AM	19656
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	32	0.50		mg/L	10	6/13/2015 12:24:48 AM	R26810
Surr: BFB	127	57.8-137		%REC	10	6/13/2015 12:24:48 AM	R26810

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	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-23

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 10:05:00 AM

Lab ID: 1506436-004

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Acenaphthylene	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Aniline	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Anthracene	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Azobenzene	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Benz(a)anthracene	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Benzo(a)pyrene	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Benzo(b)fluoranthene	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Benzo(k)fluoranthene	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Benzoic acid	ND	20		µg/L	1	6/15/2015 2:11:24 PM	19699
Benzyl alcohol	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Butyl benzyl phthalate	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Carbazole	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
4-Chloroaniline	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
2-Chloronaphthalene	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
2-Chlorophenol	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Chrysene	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Di-n-butyl phthalate	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Di-n-octyl phthalate	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Dibenzofuran	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
1,2-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
1,3-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
1,4-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Diethyl phthalate	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Dimethyl phthalate	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
2,4-Dichlorophenol	ND	20		µg/L	1	6/15/2015 2:11:24 PM	19699
2,4-Dimethylphenol	120	10		µg/L	1	6/15/2015 2:11:24 PM	19699
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/15/2015 2:11:24 PM	19699
2,4-Dinitrophenol	ND	20		µg/L	1	6/15/2015 2:11:24 PM	19699

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	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-23

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 10:05:00 AM

Lab ID: 1506436-004

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
2,4-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
2,6-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Fluoranthene	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Fluorene	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Hexachlorobenzene	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Hexachlorobutadiene	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Hexachloroethane	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Isophorone	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
1-Methylnaphthalene	110	10		µg/L	1	6/15/2015 2:11:24 PM	19699
2-Methylnaphthalene	140	10		µg/L	1	6/15/2015 2:11:24 PM	19699
2-Methylphenol	71	10		µg/L	1	6/15/2015 2:11:24 PM	19699
3+4-Methylphenol	64	10		µg/L	1	6/15/2015 2:11:24 PM	19699
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
N-Nitrosodimethylamine	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Naphthalene	200	10		µg/L	1	6/15/2015 2:11:24 PM	19699
2-Nitroaniline	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
3-Nitroaniline	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
4-Nitroaniline	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Nitrobenzene	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
2-Nitrophenol	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
4-Nitrophenol	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Pentachlorophenol	ND	20		µg/L	1	6/15/2015 2:11:24 PM	19699
Phenanthrene	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Phenol	34	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Pyrene	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Pyridine	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/15/2015 2:11:24 PM	19699
Surr: 2-Fluorophenol	27.3	14.9-111		%REC	1	6/15/2015 2:11:24 PM	19699
Surr: Phenol-d5	51.3	11.3-108		%REC	1	6/15/2015 2:11:24 PM	19699
Surr: 2,4,6-Tribromophenol	88.9	15.7-154		%REC	1	6/15/2015 2:11:24 PM	19699
Surr: Nitrobenzene-d5	85.0	47.8-106		%REC	1	6/15/2015 2:11:24 PM	19699
Surr: 2-Fluorobiphenyl	87.8	21.3-123		%REC	1	6/15/2015 2:11:24 PM	19699
Surr: 4-Terphenyl-d14	69.5	14.3-135		%REC	1	6/15/2015 2:11:24 PM	19699

EPA METHOD 8260B: VOLATILES

Analyst: **cadg**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-23

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 10:05:00 AM

Lab ID: 1506436-004

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	2900	100		µg/L	100	6/17/2015 3:25:12 AM	R26872
Toluene	3000	100		µg/L	100	6/17/2015 3:25:12 AM	R26872
Ethylbenzene	510	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
Methyl tert-butyl ether (MTBE)	1100	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
1,2,4-Trimethylbenzene	1100	100		µg/L	100	6/17/2015 3:25:12 AM	R26872
1,3,5-Trimethylbenzene	280	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
Naphthalene	220	20		µg/L	10	6/17/2015 3:53:54 AM	R26872
1-Methylnaphthalene	79	40		µg/L	10	6/17/2015 3:53:54 AM	R26872
2-Methylnaphthalene	120	40		µg/L	10	6/17/2015 3:53:54 AM	R26872
Acetone	ND	100		µg/L	10	6/17/2015 3:53:54 AM	R26872
Bromobenzene	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
Bromodichloromethane	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
Bromoform	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
Bromomethane	ND	30		µg/L	10	6/17/2015 3:53:54 AM	R26872
2-Butanone	ND	100		µg/L	10	6/17/2015 3:53:54 AM	R26872
Carbon disulfide	ND	100		µg/L	10	6/17/2015 3:53:54 AM	R26872
Carbon Tetrachloride	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
Chlorobenzene	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
Chloroethane	ND	20		µg/L	10	6/17/2015 3:53:54 AM	R26872
Chloroform	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
Chloromethane	ND	30		µg/L	10	6/17/2015 3:53:54 AM	R26872
2-Chlorotoluene	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
4-Chlorotoluene	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
cis-1,2-DCE	42	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
cis-1,3-Dichloropropene	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	6/17/2015 3:53:54 AM	R26872
Dibromochloromethane	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
Dibromomethane	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
1,2-Dichlorobenzene	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
1,3-Dichlorobenzene	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
1,4-Dichlorobenzene	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
Dichlorodifluoromethane	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
1,1-Dichloroethane	130	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
1,1-Dichloroethene	62	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
1,2-Dichloropropane	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
1,3-Dichloropropane	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
2,2-Dichloropropane	ND	20		µg/L	10	6/17/2015 3:53:54 AM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-23

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 10:05:00 AM

Lab ID: 1506436-004

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst: cadg		
1,1-Dichloropropene	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
Hexachlorobutadiene	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
2-Hexanone	ND	100		µg/L	10	6/17/2015 3:53:54 AM	R26872
Isopropylbenzene	41	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
4-Isopropyltoluene	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
4-Methyl-2-pentanone	ND	100		µg/L	10	6/17/2015 3:53:54 AM	R26872
Methylene Chloride	ND	30		µg/L	10	6/17/2015 3:53:54 AM	R26872
n-Butylbenzene	ND	30		µg/L	10	6/17/2015 3:53:54 AM	R26872
n-Propylbenzene	73	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
sec-Butylbenzene	10	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
Styrene	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
tert-Butylbenzene	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	6/17/2015 3:53:54 AM	R26872
Tetrachloroethene (PCE)	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
trans-1,2-DCE	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
trans-1,3-Dichloropropene	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
1,2,3-Trichlorobenzene	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
1,2,4-Trichlorobenzene	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
1,1,1-Trichloroethane	34	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
1,1,2-Trichloroethane	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
Trichloroethene (TCE)	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
Trichlorofluoromethane	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
1,2,3-Trichloropropane	ND	20		µg/L	10	6/17/2015 3:53:54 AM	R26872
Vinyl chloride	ND	10		µg/L	10	6/17/2015 3:53:54 AM	R26872
Xylenes, Total	6500	150		µg/L	100	6/17/2015 3:25:12 AM	R26872
Surr: 1,2-Dichloroethane-d4	94.4	70-130		%REC	10	6/17/2015 3:53:54 AM	R26872
Surr: 4-Bromofluorobenzene	93.8	70-130		%REC	10	6/17/2015 3:53:54 AM	R26872
Surr: Dibromofluoromethane	98.1	70-130		%REC	10	6/17/2015 3:53:54 AM	R26872
Surr: Toluene-d8	104	70-130		%REC	10	6/17/2015 3:53:54 AM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-32

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 10:43:00 AM

Lab ID: 1506436-005

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	6/23/2015 12:46:28 PM	R27034
Lead	ND	0.0050		mg/L	5	6/23/2015 12:46:28 PM	R27034
Selenium	ND	0.0050		mg/L	5	6/23/2015 12:46:28 PM	R27034
Uranium	0.066	0.0050	*	mg/L	5	6/23/2015 12:46:28 PM	R27034
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.057	0.0020		mg/L	1	6/19/2015 4:19:11 PM	R26969
Cadmium	ND	0.0020		mg/L	1	6/19/2015 4:19:11 PM	R26969
Chromium	ND	0.0060		mg/L	1	6/19/2015 4:19:11 PM	R26969
Copper	ND	0.0060		mg/L	1	6/19/2015 4:19:11 PM	R26969
Iron	0.058	0.020		mg/L	1	6/19/2015 4:19:11 PM	R26969
Manganese	0.082	0.0020	*	mg/L	1	6/19/2015 4:19:11 PM	R26969
Silver	ND	0.0050		mg/L	1	6/19/2015 4:19:11 PM	R26969
Zinc	0.016	0.010		mg/L	1	6/19/2015 4:19:11 PM	R26969
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.24	0.0020		mg/L	1	6/16/2015 6:30:30 PM	19718
Cadmium	ND	0.0020		mg/L	1	6/19/2015 2:22:39 PM	19718
Chromium	ND	0.0060		mg/L	1	6/19/2015 2:22:39 PM	19718
Copper	0.018	0.0060		mg/L	1	6/16/2015 6:30:30 PM	19718
Iron	5.7	0.20	*	mg/L	10	6/19/2015 2:24:26 PM	19718
Manganese	0.31	0.0020	*	mg/L	1	6/16/2015 6:30:30 PM	19718
Silver	ND	0.0050		mg/L	1	6/16/2015 6:30:30 PM	19718
Zinc	0.034	0.010		mg/L	1	6/16/2015 6:30:30 PM	19718
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	6/17/2015 3:38:41 PM	19718
Lead	0.0063	0.0025		mg/L	5	6/17/2015 3:38:41 PM	19718
Selenium	ND	0.0050		mg/L	5	6/17/2015 3:38:41 PM	19718
Uranium	0.066	0.0025	*	mg/L	5	6/17/2015 3:38:41 PM	19718
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/17/2015 10:52:18 AM	19745
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/11/2015 8:56:18 AM	19656
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/11/2015 8:56:18 AM	19656
Surr: DNOP	118	76.5-150		%REC	1	6/11/2015 8:56:18 AM	19656
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.58	0.050		mg/L	1	6/13/2015 1:15:05 AM	R26810
Surr: BFB	93.5	57.8-137		%REC	1	6/13/2015 1:15:05 AM	R26810

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Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-32

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 10:43:00 AM

Lab ID: 1506436-005

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: DAM	
Acenaphthene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Acenaphthylene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Aniline	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Anthracene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Azobenzene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Benz(a)anthracene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Benzo(a)pyrene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Benzo(b)fluoranthene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Benzo(k)fluoranthene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Benzoic acid	ND	20		µg/L	1	6/15/2015 4:59:56 PM	19699
Benzyl alcohol	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Butyl benzyl phthalate	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Carbazole	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
4-Chloroaniline	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
2-Chloronaphthalene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
2-Chlorophenol	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Chrysene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Di-n-butyl phthalate	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Di-n-octyl phthalate	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Dibenzofuran	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
1,2-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
1,3-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
1,4-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Diethyl phthalate	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Dimethyl phthalate	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
2,4-Dichlorophenol	ND	20		µg/L	1	6/15/2015 4:59:56 PM	19699
2,4-Dimethylphenol	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/15/2015 4:59:56 PM	19699
2,4-Dinitrophenol	ND	20		µg/L	1	6/15/2015 4:59:56 PM	19699

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	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-32

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 10:43:00 AM

Lab ID: 1506436-005

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: DAM	
2,4-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
2,6-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Fluoranthene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Fluorene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Hexachlorobenzene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Hexachlorobutadiene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Hexachloroethane	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Isophorone	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
1-Methylnaphthalene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
2-Methylnaphthalene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
2-Methylphenol	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
3+4-Methylphenol	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
N-Nitrosodimethylamine	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Naphthalene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
2-Nitroaniline	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
3-Nitroaniline	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
4-Nitroaniline	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Nitrobenzene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
2-Nitrophenol	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
4-Nitrophenol	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Pentachlorophenol	ND	20		µg/L	1	6/15/2015 4:59:56 PM	19699
Phenanthrene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Phenol	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Pyrene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Pyridine	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/15/2015 4:59:56 PM	19699
Surr: 2-Fluorophenol	65.4	14.9-111		%REC	1	6/15/2015 4:59:56 PM	19699
Surr: Phenol-d5	59.3	11.3-108		%REC	1	6/15/2015 4:59:56 PM	19699
Surr: 2,4,6-Tribromophenol	111	15.7-154		%REC	1	6/15/2015 4:59:56 PM	19699
Surr: Nitrobenzene-d5	82.8	47.8-106		%REC	1	6/15/2015 4:59:56 PM	19699
Surr: 2-Fluorobiphenyl	84.6	21.3-123		%REC	1	6/15/2015 4:59:56 PM	19699
Surr: 4-Terphenyl-d14	110	14.3-135		%REC	1	6/15/2015 4:59:56 PM	19699

EPA METHOD 8260B: VOLATILES

Analyst: **cadg**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-32

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 10:43:00 AM

Lab ID: 1506436-005

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
Toluene	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
Ethylbenzene	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
Methyl tert-butyl ether (MTBE)	590	20		µg/L	20	6/17/2015 4:51:33 AM	R26872
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
1,2-Dichloroethane (EDC)	22	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
Naphthalene	ND	2.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
1-Methylnaphthalene	ND	4.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
2-Methylnaphthalene	ND	4.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
Acetone	ND	10		µg/L	1	6/17/2015 5:20:16 AM	R26872
Bromobenzene	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
Bromodichloromethane	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
Bromoform	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
Bromomethane	ND	3.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
2-Butanone	ND	10		µg/L	1	6/17/2015 5:20:16 AM	R26872
Carbon disulfide	ND	10		µg/L	1	6/17/2015 5:20:16 AM	R26872
Carbon Tetrachloride	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
Chlorobenzene	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
Chloroethane	ND	2.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
Chloroform	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
Chloromethane	ND	3.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
2-Chlorotoluene	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
4-Chlorotoluene	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
cis-1,2-DCE	1.5	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
Dibromochloromethane	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
Dibromomethane	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
1,1-Dichloroethane	18	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
1,1-Dichloroethene	36	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
1,2-Dichloropropane	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
1,3-Dichloropropane	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
2,2-Dichloropropane	ND	2.0		µg/L	1	6/17/2015 5:20:16 AM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-32

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 10:43:00 AM

Lab ID: 1506436-005

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst: cadg			
1,1-Dichloropropene	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
Hexachlorobutadiene	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
2-Hexanone	ND	10		µg/L	1	6/17/2015 5:20:16 AM	R26872
Isopropylbenzene	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
4-Isopropyltoluene	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
4-Methyl-2-pentanone	ND	10		µg/L	1	6/17/2015 5:20:16 AM	R26872
Methylene Chloride	ND	3.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
n-Butylbenzene	ND	3.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
n-Propylbenzene	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
sec-Butylbenzene	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
Styrene	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
tert-Butylbenzene	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
trans-1,2-DCE	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
1,1,2-Trichloroethane	2.1	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
Trichlorofluoromethane	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
Vinyl chloride	ND	1.0		µg/L	1	6/17/2015 5:20:16 AM	R26872
Xylenes, Total	ND	1.5		µg/L	1	6/17/2015 5:20:16 AM	R26872
Surr: 1,2-Dichloroethane-d4	98.0	70-130		%REC	1	6/17/2015 5:20:16 AM	R26872
Surr: 4-Bromofluorobenzene	108	70-130		%REC	1	6/17/2015 5:20:16 AM	R26872
Surr: Dibromofluoromethane	107	70-130		%REC	1	6/17/2015 5:20:16 AM	R26872
Surr: Toluene-d8	110	70-130		%REC	1	6/17/2015 5:20:16 AM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-41

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 11:53:00 AM

Lab ID: 1506436-006

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	6/23/2015 12:49:31 PM	R27034
Lead	ND	0.0050		mg/L	5	6/23/2015 12:49:31 PM	R27034
Selenium	0.045	0.0050		mg/L	5	6/23/2015 12:49:31 PM	R27034
Uranium	0.030	0.0050		mg/L	5	6/23/2015 12:49:31 PM	R27034
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.073	0.0020		mg/L	1	6/19/2015 4:31:24 PM	R26969
Cadmium	ND	0.0020		mg/L	1	6/19/2015 4:31:24 PM	R26969
Chromium	ND	0.0060		mg/L	1	6/19/2015 4:31:24 PM	R26969
Copper	ND	0.0060		mg/L	1	6/19/2015 4:31:24 PM	R26969
Iron	0.18	0.020		mg/L	1	6/19/2015 4:31:24 PM	R26969
Manganese	0.011	0.0020		mg/L	1	6/19/2015 4:31:24 PM	R26969
Silver	ND	0.0050		mg/L	1	6/19/2015 4:31:24 PM	R26969
Zinc	0.018	0.010		mg/L	1	6/19/2015 4:31:24 PM	R26969
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.16	0.0020		mg/L	1	6/16/2015 6:34:25 PM	19718
Cadmium	ND	0.0020		mg/L	1	6/19/2015 2:26:27 PM	19718
Chromium	ND	0.0060		mg/L	1	6/19/2015 2:26:27 PM	19718
Copper	ND	0.0060		mg/L	1	6/16/2015 6:34:25 PM	19718
Iron	4.1	0.10	*	mg/L	5	6/16/2015 6:36:17 PM	19718
Manganese	0.15	0.0020	*	mg/L	1	6/16/2015 6:34:25 PM	19718
Silver	ND	0.0050		mg/L	1	6/16/2015 6:34:25 PM	19718
Zinc	0.016	0.010		mg/L	1	6/16/2015 6:34:25 PM	19718
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	6/17/2015 3:41:25 PM	19718
Lead	0.0060	0.0025		mg/L	5	6/17/2015 3:41:25 PM	19718
Selenium	0.047	0.0050		mg/L	5	6/17/2015 3:41:25 PM	19718
Uranium	0.031	0.0025	*	mg/L	5	6/17/2015 3:41:25 PM	19718
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/17/2015 10:54:20 AM	19745
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/11/2015 9:23:09 AM	19656
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/11/2015 9:23:09 AM	19656
Surr: DNOP	122	76.5-150		%REC	1	6/11/2015 9:23:09 AM	19656
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/13/2015 1:40:12 AM	R26810
Surr: BFB	90.0	57.8-137		%REC	1	6/13/2015 1:40:12 AM	R26810

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Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-41

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 11:53:00 AM

Lab ID: 1506436-006

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Acenaphthylene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Aniline	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Anthracene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Azobenzene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Benz(a)anthracene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Benzo(a)pyrene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Benzo(b)fluoranthene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Benzo(k)fluoranthene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Benzoic acid	ND	20		µg/L	1	6/15/2015 2:39:15 PM	19699
Benzyl alcohol	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Butyl benzyl phthalate	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Carbazole	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
4-Chloroaniline	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
2-Chloronaphthalene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
2-Chlorophenol	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Chrysene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Di-n-butyl phthalate	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Di-n-octyl phthalate	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Dibenzofuran	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
1,2-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
1,3-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
1,4-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Diethyl phthalate	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Dimethyl phthalate	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
2,4-Dichlorophenol	ND	20		µg/L	1	6/15/2015 2:39:15 PM	19699
2,4-Dimethylphenol	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/15/2015 2:39:15 PM	19699
2,4-Dinitrophenol	ND	20		µg/L	1	6/15/2015 2:39:15 PM	19699

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Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-41

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 11:53:00 AM

Lab ID: 1506436-006

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
2,4-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
2,6-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Fluoranthene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Fluorene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Hexachlorobenzene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Hexachlorobutadiene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Hexachloroethane	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Isophorone	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
1-Methylnaphthalene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
2-Methylnaphthalene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
2-Methylphenol	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
3+4-Methylphenol	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
N-Nitrosodimethylamine	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Naphthalene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
2-Nitroaniline	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
3-Nitroaniline	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
4-Nitroaniline	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Nitrobenzene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
2-Nitrophenol	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
4-Nitrophenol	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Pentachlorophenol	ND	20		µg/L	1	6/15/2015 2:39:15 PM	19699
Phenanthrene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Phenol	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Pyrene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Pyridine	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/15/2015 2:39:15 PM	19699
Surr: 2-Fluorophenol	85.0	14.9-111		%REC	1	6/15/2015 2:39:15 PM	19699
Surr: Phenol-d5	73.5	11.3-108		%REC	1	6/15/2015 2:39:15 PM	19699
Surr: 2,4,6-Tribromophenol	114	15.7-154		%REC	1	6/15/2015 2:39:15 PM	19699
Surr: Nitrobenzene-d5	86.1	47.8-106		%REC	1	6/15/2015 2:39:15 PM	19699
Surr: 2-Fluorobiphenyl	92.4	21.3-123		%REC	1	6/15/2015 2:39:15 PM	19699
Surr: 4-Terphenyl-d14	76.9	14.3-135		%REC	1	6/15/2015 2:39:15 PM	19699

EPA METHOD 8260B: VOLATILES

Analyst: **cadg**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.
	E Value above quantitation range
	J Analyte detected below quantitation limits
	O RSD is greater than RSDlimit
	R RPD outside accepted recovery limits
	S Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-41

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 11:53:00 AM

Lab ID: 1506436-006

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
Toluene	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
Ethylbenzene	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
1,2-Dichloroethane (EDC)	1.3	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
Naphthalene	ND	2.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
1-Methylnaphthalene	ND	4.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
2-Methylnaphthalene	ND	4.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
Acetone	ND	10		µg/L	1	6/17/2015 5:48:57 AM	R26872
Bromobenzene	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
Bromodichloromethane	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
Bromoform	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
Bromomethane	ND	3.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
2-Butanone	ND	10		µg/L	1	6/17/2015 5:48:57 AM	R26872
Carbon disulfide	ND	10		µg/L	1	6/17/2015 5:48:57 AM	R26872
Carbon Tetrachloride	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
Chlorobenzene	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
Chloroethane	ND	2.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
Chloroform	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
Chloromethane	ND	3.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
2-Chlorotoluene	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
4-Chlorotoluene	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
cis-1,2-DCE	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
Dibromochloromethane	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
Dibromomethane	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
1,1-Dichloroethane	1.7	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
1,1-Dichloroethene	1.9	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
1,2-Dichloropropane	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
1,3-Dichloropropane	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
2,2-Dichloropropane	ND	2.0		µg/L	1	6/17/2015 5:48:57 AM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-41

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 11:53:00 AM

Lab ID: 1506436-006

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
1,1-Dichloropropene	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
Hexachlorobutadiene	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
2-Hexanone	ND	10		µg/L	1	6/17/2015 5:48:57 AM	R26872
Isopropylbenzene	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
4-Isopropyltoluene	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
4-Methyl-2-pentanone	ND	10		µg/L	1	6/17/2015 5:48:57 AM	R26872
Methylene Chloride	ND	3.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
n-Butylbenzene	ND	3.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
n-Propylbenzene	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
sec-Butylbenzene	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
Styrene	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
tert-Butylbenzene	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
trans-1,2-DCE	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
Trichlorofluoromethane	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
Vinyl chloride	ND	1.0		µg/L	1	6/17/2015 5:48:57 AM	R26872
Xylenes, Total	ND	1.5		µg/L	1	6/17/2015 5:48:57 AM	R26872
Surr: 1,2-Dichloroethane-d4	96.8	70-130		%REC	1	6/17/2015 5:48:57 AM	R26872
Surr: 4-Bromofluorobenzene	109	70-130		%REC	1	6/17/2015 5:48:57 AM	R26872
Surr: Dibromofluoromethane	99.2	70-130		%REC	1	6/17/2015 5:48:57 AM	R26872
Surr: Toluene-d8	103	70-130		%REC	1	6/17/2015 5:48:57 AM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-42

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 12:35:00 PM

Lab ID: 1506436-007

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	6/23/2015 12:52:35 PM	R27034
Lead	ND	0.0050		mg/L	5	6/23/2015 12:52:35 PM	R27034
Selenium	0.0072	0.0050		mg/L	5	6/23/2015 12:52:35 PM	R27034
Uranium	0.035	0.0050	*	mg/L	5	6/23/2015 12:52:35 PM	R27034
EPA METHOD 200.7: DISSOLVED METALS							Analyst: JLF
Barium	0.082	0.0020		mg/L	1	6/19/2015 4:33:30 PM	R26969
Cadmium	ND	0.0020		mg/L	1	6/19/2015 4:33:30 PM	R26969
Chromium	ND	0.0060		mg/L	1	6/19/2015 4:33:30 PM	R26969
Copper	ND	0.0060		mg/L	1	6/19/2015 4:33:30 PM	R26969
Iron	0.031	0.020		mg/L	1	6/19/2015 4:33:30 PM	R26969
Manganese	0.55	0.0020	*	mg/L	1	6/19/2015 4:33:30 PM	R26969
Silver	ND	0.0050		mg/L	1	6/19/2015 4:33:30 PM	R26969
Zinc	ND	0.010		mg/L	1	6/19/2015 4:33:30 PM	R26969
EPA METHOD 200.7: TOTAL METALS							Analyst: JLF
Barium	0.13	0.0020		mg/L	1	6/16/2015 6:38:12 PM	19718
Cadmium	ND	0.0020		mg/L	1	6/19/2015 2:28:09 PM	19718
Chromium	ND	0.0060		mg/L	1	6/19/2015 2:28:09 PM	19718
Copper	0.011	0.0060		mg/L	1	6/16/2015 6:38:12 PM	19718
Iron	1.6	0.10	*	mg/L	5	6/16/2015 6:40:17 PM	19718
Manganese	0.60	0.0020	*	mg/L	1	6/16/2015 6:38:12 PM	19718
Silver	ND	0.0050		mg/L	1	6/16/2015 6:38:12 PM	19718
Zinc	0.016	0.010		mg/L	1	6/16/2015 6:38:12 PM	19718
200.8 ICPMS METALS:TOTAL							Analyst: DBD
Arsenic	ND	0.0050		mg/L	5	6/17/2015 3:49:39 PM	19718
Lead	ND	0.0025		mg/L	5	6/17/2015 3:49:39 PM	19718
Selenium	ND	0.0050		mg/L	5	6/17/2015 3:49:39 PM	19718
Uranium	0.036	0.0025	*	mg/L	5	6/17/2015 3:49:39 PM	19718
EPA METHOD 245.1: MERCURY							Analyst: MED
Mercury	ND	0.00020		mg/L	1	6/17/2015 11:00:24 AM	19745
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH
Diesel Range Organics (DRO)	60	1.0		mg/L	1	6/11/2015 9:49:57 AM	19656
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/11/2015 9:49:57 AM	19656
Surr: DNOP	113	76.5-150		%REC	1	6/11/2015 9:49:57 AM	19656
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.10	0.050		mg/L	1	6/13/2015 2:05:27 AM	R26810
Surr: BFB	113	57.8-137		%REC	1	6/13/2015 2:05:27 AM	R26810

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Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-42

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 12:35:00 PM

Lab ID: 1506436-007

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Acenaphthylene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Aniline	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Anthracene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Azobenzene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Benz(a)anthracene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Benzo(a)pyrene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Benzo(b)fluoranthene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Benzo(k)fluoranthene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Benzoic acid	ND	20		µg/L	1	6/15/2015 3:07:10 PM	19699
Benzyl alcohol	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Butyl benzyl phthalate	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Carbazole	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
4-Chloroaniline	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
2-Chloronaphthalene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
2-Chlorophenol	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Chrysene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Di-n-butyl phthalate	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Di-n-octyl phthalate	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Dibenzofuran	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
1,2-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
1,3-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
1,4-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Diethyl phthalate	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Dimethyl phthalate	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
2,4-Dichlorophenol	ND	20		µg/L	1	6/15/2015 3:07:10 PM	19699
2,4-Dimethylphenol	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/15/2015 3:07:10 PM	19699
2,4-Dinitrophenol	ND	20		µg/L	1	6/15/2015 3:07:10 PM	19699

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	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-42

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 12:35:00 PM

Lab ID: 1506436-007

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: DAM	
2,4-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
2,6-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Fluoranthene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Fluorene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Hexachlorobenzene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Hexachlorobutadiene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Hexachloroethane	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Isophorone	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
1-Methylnaphthalene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
2-Methylnaphthalene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
2-Methylphenol	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
3+4-Methylphenol	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
N-Nitrosodimethylamine	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Naphthalene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
2-Nitroaniline	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
3-Nitroaniline	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
4-Nitroaniline	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Nitrobenzene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
2-Nitrophenol	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
4-Nitrophenol	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Pentachlorophenol	ND	20		µg/L	1	6/15/2015 3:07:10 PM	19699
Phenanthrene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Phenol	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Pyrene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Pyridine	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/15/2015 3:07:10 PM	19699
Surr: 2-Fluorophenol	65.6	14.9-111		%REC	1	6/15/2015 3:07:10 PM	19699
Surr: Phenol-d5	56.5	11.3-108		%REC	1	6/15/2015 3:07:10 PM	19699
Surr: 2,4,6-Tribromophenol	2.68	15.7-154	S	%REC	1	6/15/2015 3:07:10 PM	19699
Surr: Nitrobenzene-d5	71.8	47.8-106		%REC	1	6/15/2015 3:07:10 PM	19699
Surr: 2-Fluorobiphenyl	79.8	21.3-123		%REC	1	6/15/2015 3:07:10 PM	19699
Surr: 4-Terphenyl-d14	57.1	14.3-135		%REC	1	6/15/2015 3:07:10 PM	19699

EPA METHOD 8260B: VOLATILES

Analyst: **cadg**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-42

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 12:35:00 PM

Lab ID: 1506436-007

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	1.6	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
Toluene	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
Ethylbenzene	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
1,2,4-Trimethylbenzene	3.4	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
1,3,5-Trimethylbenzene	2.8	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
Naphthalene	9.0	2.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
1-Methylnaphthalene	7.5	4.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
2-Methylnaphthalene	4.2	4.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
Acetone	ND	10		µg/L	1	6/17/2015 6:17:40 AM	R26872
Bromobenzene	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
Bromodichloromethane	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
Bromoform	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
Bromomethane	ND	3.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
2-Butanone	ND	10		µg/L	1	6/17/2015 6:17:40 AM	R26872
Carbon disulfide	ND	10		µg/L	1	6/17/2015 6:17:40 AM	R26872
Carbon Tetrachloride	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
Chlorobenzene	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
Chloroethane	ND	2.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
Chloroform	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
Chloromethane	ND	3.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
2-Chlorotoluene	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
4-Chlorotoluene	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
cis-1,2-DCE	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
Dibromochloromethane	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
Dibromomethane	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
1,1-Dichloroethane	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
1,1-Dichloroethene	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
1,2-Dichloropropane	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
1,3-Dichloropropane	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
2,2-Dichloropropane	ND	2.0		µg/L	1	6/17/2015 6:17:40 AM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-42

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015 12:35:00 PM

Lab ID: 1506436-007

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
1,1-Dichloropropene	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
Hexachlorobutadiene	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
2-Hexanone	ND	10		µg/L	1	6/17/2015 6:17:40 AM	R26872
Isopropylbenzene	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
4-Isopropyltoluene	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
4-Methyl-2-pentanone	ND	10		µg/L	1	6/17/2015 6:17:40 AM	R26872
Methylene Chloride	ND	3.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
n-Butylbenzene	ND	3.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
n-Propylbenzene	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
sec-Butylbenzene	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
Styrene	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
tert-Butylbenzene	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
trans-1,2-DCE	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
Trichlorofluoromethane	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
Vinyl chloride	ND	1.0		µg/L	1	6/17/2015 6:17:40 AM	R26872
Xylenes, Total	11	1.5		µg/L	1	6/17/2015 6:17:40 AM	R26872
Surr: 1,2-Dichloroethane-d4	95.6	70-130		%REC	1	6/17/2015 6:17:40 AM	R26872
Surr: 4-Bromofluorobenzene	97.7	70-130		%REC	1	6/17/2015 6:17:40 AM	R26872
Surr: Dibromofluoromethane	110	70-130		%REC	1	6/17/2015 6:17:40 AM	R26872
Surr: Toluene-d8	104	70-130		%REC	1	6/17/2015 6:17:40 AM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Blind Duplicate

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015

Lab ID: 1506436-008

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst: DAM		
Acenaphthene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Acenaphthylene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Aniline	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Anthracene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Azobenzene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Benz(a)anthracene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Benzo(a)pyrene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Benzo(b)fluoranthene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Benzo(k)fluoranthene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Benzoic acid	ND	20		µg/L	1	6/15/2015 3:35:20 PM	19699
Benzyl alcohol	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Bis(2-chloroethyl)ether	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Butyl benzyl phthalate	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Carbazole	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
4-Chloro-3-methylphenol	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
4-Chloroaniline	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
2-Chloronaphthalene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
2-Chlorophenol	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Chrysene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Di-n-butyl phthalate	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Di-n-octyl phthalate	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Dibenzofuran	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
1,2-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
1,3-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
1,4-Dichlorobenzene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
3,3'-Dichlorobenzidine	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Diethyl phthalate	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Dimethyl phthalate	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
2,4-Dichlorophenol	ND	20		µg/L	1	6/15/2015 3:35:20 PM	19699
2,4-Dimethylphenol	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	6/15/2015 3:35:20 PM	19699
2,4-Dinitrophenol	ND	20		µg/L	1	6/15/2015 3:35:20 PM	19699

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 33 of 52
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Blind Duplicate

Project: 2015 2nd QTR (MKTF)

Collection Date: 6/9/2015

Lab ID: 1506436-008

Matrix: AQUEOUS

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES				Analyst: DAM			
2,4-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
2,6-Dinitrotoluene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Fluoranthene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Fluorene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Hexachlorobenzene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Hexachlorobutadiene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Hexachlorocyclopentadiene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Hexachloroethane	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Isophorone	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
1-Methylnaphthalene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
2-Methylnaphthalene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
2-Methylphenol	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
3+4-Methylphenol	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
N-Nitrosodimethylamine	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Naphthalene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
2-Nitroaniline	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
3-Nitroaniline	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
4-Nitroaniline	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Nitrobenzene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
2-Nitrophenol	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
4-Nitrophenol	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Pentachlorophenol	ND	20		µg/L	1	6/15/2015 3:35:20 PM	19699
Phenanthrene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Phenol	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Pyrene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Pyridine	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
2,4,6-Trichlorophenol	ND	10		µg/L	1	6/15/2015 3:35:20 PM	19699
Surr: 2-Fluorophenol	46.8	14.9-111		%REC	1	6/15/2015 3:35:20 PM	19699
Surr: Phenol-d5	44.6	11.3-108		%REC	1	6/15/2015 3:35:20 PM	19699
Surr: 2,4,6-Tribromophenol	86.5	15.7-154		%REC	1	6/15/2015 3:35:20 PM	19699
Surr: Nitrobenzene-d5	63.4	47.8-106		%REC	1	6/15/2015 3:35:20 PM	19699
Surr: 2-Fluorobiphenyl	63.0	21.3-123		%REC	1	6/15/2015 3:35:20 PM	19699
Surr: 4-Terphenyl-d14	56.9	14.3-135		%REC	1	6/15/2015 3:35:20 PM	19699

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: 2015 2nd QTR (MKTF)

Collection Date:

Lab ID: 1506436-009

Matrix: TRIP BLANK

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/13/2015 2:30:51 AM	R26810
Surr: BFB	91.0	57.8-137		%REC	1	6/13/2015 2:30:51 AM	R26810
EPA METHOD 8260B: VOLATILES							Analyst: cadg
Benzene	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
Toluene	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
Ethylbenzene	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
Naphthalene	ND	2.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
1-Methylnaphthalene	ND	4.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
2-Methylnaphthalene	ND	4.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
Acetone	ND	10		µg/L	1	6/17/2015 6:46:20 AM	R26872
Bromobenzene	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
Bromodichloromethane	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
Bromoform	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
Bromomethane	ND	3.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
2-Butanone	ND	10		µg/L	1	6/17/2015 6:46:20 AM	R26872
Carbon disulfide	ND	10		µg/L	1	6/17/2015 6:46:20 AM	R26872
Carbon Tetrachloride	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
Chlorobenzene	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
Chloroethane	ND	2.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
Chloroform	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
Chloromethane	ND	3.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
2-Chlorotoluene	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
4-Chlorotoluene	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
cis-1,2-DCE	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
Dibromochloromethane	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
Dibromomethane	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
1,1-Dichloroethane	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
1,1-Dichloroethene	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506436

Date Reported: 7/7/2015

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: 2015 2nd QTR (MKTf)

Collection Date:

Lab ID: 1506436-009

Matrix: TRIP BLANK

Received Date: 6/9/2015 4:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							Analyst: cadg
1,2-Dichloropropane	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
1,3-Dichloropropane	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
2,2-Dichloropropane	ND	2.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
1,1-Dichloropropene	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
Hexachlorobutadiene	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
2-Hexanone	ND	10		µg/L	1	6/17/2015 6:46:20 AM	R26872
Isopropylbenzene	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
4-Isopropyltoluene	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
4-Methyl-2-pentanone	ND	10		µg/L	1	6/17/2015 6:46:20 AM	R26872
Methylene Chloride	ND	3.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
n-Butylbenzene	ND	3.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
n-Propylbenzene	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
sec-Butylbenzene	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
Styrene	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
tert-Butylbenzene	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
trans-1,2-DCE	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
Trichlorofluoromethane	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
Vinyl chloride	ND	1.0		µg/L	1	6/17/2015 6:46:20 AM	R26872
Xylenes, Total	ND	1.5		µg/L	1	6/17/2015 6:46:20 AM	R26872
Surr: 1,2-Dichloroethane-d4	97.7	70-130		%REC	1	6/17/2015 6:46:20 AM	R26872
Surr: 4-Bromofluorobenzene	107	70-130		%REC	1	6/17/2015 6:46:20 AM	R26872
Surr: Dibromofluoromethane	102	70-130		%REC	1	6/17/2015 6:46:20 AM	R26872
Surr: Toluene-d8	103	70-130		%REC	1	6/17/2015 6:46:20 AM	R26872

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506436

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: R26969			RunNo: 26969					
Prep Date:		Analysis Date: 6/19/2015			SeqNo: 805268		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26969		RunNo: 26969					
Prep Date:			Analysis Date: 6/19/2015		SeqNo: 805269		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	98.5	85	115			
Cadmium	0.51	0.0020	0.5000	0	101	85	115			
Chromium	0.50	0.0060	0.5000	0	100	85	115			
Copper	0.51	0.0060	0.5000	0	101	85	115			
Iron	0.48	0.020	0.5000	0	96.5	85	115			
Manganese	0.48	0.0020	0.5000	0	96.9	85	115			
Silver	0.10	0.0050	0.1000	0	104	85	115			
Zinc	0.50	0.010	0.5000	0	100	85	115			

Sample ID	1506436-005EMS		SampType: MS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	MKTF-32		Batch ID: R26969		RunNo: 26969					
Prep Date:			Analysis Date: 6/19/2015		SeqNo: 805358		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.56	0.0020	0.5000	0.05654	101	70	130			
Cadmium	0.53	0.0020	0.5000	0	106	70	130			
Chromium	0.52	0.0060	0.5000	0	103	70	130			
Copper	0.55	0.0060	0.5000	0	110	70	130			
Iron	0.57	0.020	0.5000	0.05775	103	70	130			
Manganese	0.59	0.0020	0.5000	0.08236	101	70	130			
Silver	0.082	0.0050	0.1000	0	81.7	70	130			
Zinc	0.55	0.010	0.5000	0.01638	107	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506436

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	1506436-005EMSD		SampType:	MSD		TestCode:	EPA Method 200.7: Dissolved Metals			
Client ID:	MKTF-32		Batch ID:	R26969		RunNo:	26969			
Prep Date:			Analysis Date:	6/19/2015		SeqNo:	805359		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.56	0.0020	0.5000	0.05654	101	70	130	0.746	20	
Cadmium	0.53	0.0020	0.5000	0	107	70	130	0.263	20	
Chromium	0.51	0.0060	0.5000	0	102	70	130	1.01	20	
Copper	0.55	0.0060	0.5000	0	109	70	130	1.21	20	
Iron	0.57	0.020	0.5000	0.05775	103	70	130	0.00697	20	
Manganese	0.58	0.0020	0.5000	0.08236	99.7	70	130	0.757	20	
Silver	0.077	0.0050	0.1000	0	76.6	70	130	6.39	20	
Zinc	0.55	0.010	0.5000	0.01638	106	70	130	0.796	20	

Sample ID	MB		SampType:	MBLK		TestCode:	EPA Method 200.7: Dissolved Metals			
Client ID:	PBW		Batch ID:	R26969		RunNo:	26969			
Prep Date:			Analysis Date:	6/19/2015		SeqNo:	805397		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID	LCS		SampType:	LCS		TestCode:	EPA Method 200.7: Dissolved Metals			
Client ID:	LCSW		Batch ID:	R26969		RunNo:	26969			
Prep Date:			Analysis Date:	6/19/2015		SeqNo:	805398		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	100	85	115			
Cadmium	0.51	0.0020	0.5000	0	102	85	115			
Chromium	0.51	0.0060	0.5000	0	101	85	115			
Copper	0.51	0.0060	0.5000	0	102	85	115			
Iron	0.49	0.020	0.5000	0	97.4	85	115			
Manganese	0.49	0.0020	0.5000	0	98.0	85	115			
Silver	0.10	0.0050	0.1000	0	105	85	115			
Zinc	0.51	0.010	0.5000	0	102	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506436

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	MB-19718		SampType: MBLK		TestCode: EPA Method 200.7: Total Metals					
Client ID:	PBW		Batch ID: 19718		RunNo: 26882					
Prep Date:	6/15/2015		Analysis Date: 6/16/2015		SeqNo: 802438		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-19718		SampType: LCS		TestCode: EPA Method 200.7: Total Metals					
Client ID:	LCSW		Batch ID: 19718		RunNo: 26882					
Prep Date:	6/15/2015		Analysis Date: 6/16/2015		SeqNo: 802439		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	0.52	0.0020	0.5000	0	104	85	115			
Chromium	0.49	0.0060	0.5000	0	98.8	85	115			
Copper	0.48	0.0060	0.5000	0	95.9	85	115			
Iron	0.50	0.020	0.5000	0	99.2	85	115			
Manganese	0.47	0.0020	0.5000	0	94.6	85	115			
Silver	0.10	0.0050	0.1000	0	101	85	115			
Zinc	0.49	0.010	0.5000	0	98.2	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506436

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26941		RunNo: 26941					
Prep Date:			Analysis Date: 6/18/2015		SeqNo: 804321		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.012	0.00050	0.01250	0	96.0	85	115			
Uranium	0.013	0.00050	0.01250	0	101	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R26941		RunNo: 26941					
Prep Date:			Analysis Date: 6/18/2015		SeqNo: 804322		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.012	0.00050	0.01250	0	95.4	85	115			
Uranium	0.013	0.00050	0.01250	0	101	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R26941			RunNo: 26941					
Prep Date:		Analysis Date: 6/18/2015			SeqNo: 804324		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.00050								
Uranium	ND	0.00050								

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R26941			RunNo: 26941					
Prep Date:		Analysis Date: 6/18/2015			SeqNo: 804325		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.00050								
Uranium	ND	0.00050								

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R27034		RunNo: 27034					
Prep Date:			Analysis Date: 6/23/2015		SeqNo: 807912		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	97.6	85	115			
Lead	0.013	0.00050	0.01250	0	101	85	115			
Selenium	0.024	0.0010	0.02500	0	96.9	85	115			
Uranium	0.013	0.00050	0.01250	0	101	85	115			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506436

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R27034		RunNo: 27034					
Prep Date:			Analysis Date: 6/23/2015		SeqNo: 807913		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	96.5	85	115			
Lead	0.013	0.00050	0.01250	0	101	85	115			
Selenium	0.024	0.0010	0.02500	0	94.7	85	115			
Uranium	0.012	0.00050	0.01250	0	100	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R27034		RunNo: 27034					
Prep Date:			Analysis Date: 6/23/2015		SeqNo: 807914		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	104	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R27034			RunNo: 27034					
Prep Date:		Analysis Date: 6/23/2015			SeqNo: 807916		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: R27034			RunNo: 27034					
Prep Date:		Analysis Date: 6/23/2015			SeqNo: 807917		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: R27034			RunNo: 27034					
Prep Date:		Analysis Date: 6/23/2015			SeqNo: 807918		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.00050								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506436

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	LLLCS-19718		SampType: LCSLL		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	BatchQC		Batch ID: 19718		RunNo: 26875					
Prep Date:	6/15/2015		Analysis Date: 6/16/2015		SeqNo: 801988		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	97.3	85	115			
Lead	0.012	0.00050	0.01250	0	99.3	85	115			
Selenium	0.025	0.0010	0.02500	0	98.1	85	115			
Uranium	0.013	0.00050	0.01250	0	103	85	115			

Sample ID	MB-19718		SampType: MBLK		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	PBW		Batch ID: 19718		RunNo: 26875					
Prep Date:	6/15/2015		Analysis Date: 6/16/2015		SeqNo: 801989		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.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506436

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	MB-19745	SampType:	MBLK	TestCode:	EPA Method 245.1: Mercury					
Client ID:	PBW	Batch ID:	19745	RunNo:	26888					
Prep Date:	6/16/2015	Analysis Date:	6/17/2015	SeqNo:	802692	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	LCS-19745	SampType:	LCS	TestCode:	EPA Method 245.1: Mercury					
Client ID:	LCSW	Batch ID:	19745	RunNo:	26888					
Prep Date:	6/16/2015	Analysis Date:	6/17/2015	SeqNo:	802693	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0052	0.00020	0.005000	0	103	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506436

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	LCS-19656		SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range				
Client ID:	LCSW		Batch ID: 19656			RunNo: 26742				
Prep Date:	6/10/2015		Analysis Date: 6/11/2015			SeqNo: 797509		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	60.1	156			
Surr: DNOP	0.52		0.5000		105	76.5	150			

Sample ID	MB-19656		SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range				
Client ID:	PBW		Batch ID: 19656			RunNo: 26743				
Prep Date:	6/10/2015		Analysis Date: 6/11/2015			SeqNo: 798441		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	0.79		1.000		79.0	76.5	150			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506436

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	5ML RB	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID: R26810			RunNo: 26810					
Prep Date:		Analysis Date: 6/12/2015			SeqNo: 799637		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		89.6	57.8	137			

Sample ID	2.5UG GRO LCS		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSW		Batch ID: R26810		RunNo: 26810					
Prep Date:			Analysis Date: 6/12/2015		SeqNo: 799638		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.50	0.050	0.5000	0	99.2	80	120			
Surr: BFB	21		20.00		105	57.8	137			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506436

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	rb1	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R26872	RunNo:	26872					
Prep Date:		Analysis Date:	6/16/2015	SeqNo:	801831	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506436

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	rb1	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R26872	RunNo:	26872					
Prep Date:		Analysis Date:	6/16/2015	SeqNo:	801831	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	11		10.00		106	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID:	R26872	RunNo:	26872					
Prep Date:		Analysis Date:	6/16/2015	SeqNo:	801833	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.5	70	130			
Toluene	21	1.0	20.00	0	103	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506436

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	100ng lcs		SampType: LCS			TestCode: EPA Method 8260B: VOLATILES				
Client ID:	LCSW		Batch ID: R26872			RunNo: 26872				
Prep Date:	Analysis Date: 6/16/2015			SeqNo: 801833		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	21	1.0	20.00	0	105	75.6	144			
Trichloroethene (TCE)	18	1.0	20.00	0	92.1	70	130			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.3	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID	rb1	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R26906			RunNo: 26906					
Prep Date:		Analysis Date: 6/17/2015			SeqNo: 803329		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.9	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		108	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID	100ng lcs1		SampType: LCS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW		Batch ID: R26906		RunNo: 26906					
Prep Date:			Analysis Date: 6/17/2015		SeqNo: 803331		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	10		10.00		104	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130			
Surr: Dibromofluoromethane	11		10.00		111	70	130			
Surr: Toluene-d8	11		10.00		105	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506436

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	mb-19699		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 19699		RunNo: 26827					
Prep Date:	6/12/2015		Analysis Date: 6/15/2015		SeqNo: 800922		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								

Qualifiers:

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S Spike Recovery outside accepted recovery limits

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P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506436

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	mb-19699	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	19699	RunNo:	26827					
Prep Date:	6/12/2015	Analysis Date:	6/15/2015	SeqNo:	800922	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2-Fluorophenol	140		200.0		70.4	14.9	111			
Surr: Phenol-d5	150		200.0		76.3	11.3	108			
Surr: 2,4,6-Tribromophenol	190		200.0		96.4	15.7	154			
Surr: Nitrobenzene-d5	82		100.0		81.7	47.8	106			
Surr: 2-Fluorobiphenyl	76		100.0		76.2	21.3	123			
Surr: 4-Terphenyl-d14	66		100.0		66.5	14.3	135			

Qualifiers:

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O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506436

07-Jul-15

Client: Western Refining Southwest, Gallup

Project: 2015 2nd QTR (MKTF)

Sample ID	lcs-19699		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 19699		RunNo: 26827					
Prep Date:	6/12/2015		Analysis Date: 6/15/2015		SeqNo: 800927		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	71	10	100.0	0	70.6	47.8	99.7			
4-Chloro-3-methylphenol	160	10	200.0	0	80.3	58.1	103			
2-Chlorophenol	150	10	200.0	0	76.0	49.5	96.8			
1,4-Dichlorobenzene	79	10	100.0	0	78.9	40.4	89.4			
2,4-Dinitrotoluene	52	10	100.0	0	52.5	38.6	91.3			
N-Nitrosodi-n-propylamine	78	10	100.0	0	78.3	53.9	95.6			
4-Nitrophenol	120	10	200.0	0	60.6	26.4	108			
Pentachlorophenol	130	20	200.0	0	64.6	36.5	86.6			
Phenol	150	10	200.0	0	75.2	29.3	108			
Pyrene	66	10	100.0	0	65.6	45.7	100			
1,2,4-Trichlorobenzene	85	10	100.0	0	84.8	39.3	94.5			
Surr: 2-Fluorophenol	160		200.0		79.0	14.9	111			
Surr: Phenol-d5	170		200.0		82.6	11.3	108			
Surr: 2,4,6-Tribromophenol	170		200.0		85.5	15.7	154			
Surr: Nitrobenzene-d5	75		100.0		75.4	47.8	106			
Surr: 2-Fluorobiphenyl	73		100.0		73.3	21.3	123			
Surr: 4-Terphenyl-d14	54		100.0		54.3	14.3	135			

Sample ID	lcsd-19699		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 19699		RunNo: 26827					
Prep Date:	6/12/2015		Analysis Date: 6/15/2015		SeqNo: 800932		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	69	10	100.0	0	69.0	47.8	99.7	2.26	28.2	
4-Chloro-3-methylphenol	160	10	200.0	0	79.4	58.1	103	1.09	24.4	
2-Chlorophenol	140	10	200.0	0	68.3	49.5	96.8	10.6	28.1	
1,4-Dichlorobenzene	68	10	100.0	0	67.6	40.4	89.4	15.3	31.2	
2,4-Dinitrotoluene	65	10	100.0	0	65.1	38.6	91.3	21.4	44.4	
N-Nitrosodi-n-propylamine	77	10	100.0	0	76.5	53.9	95.6	2.27	24.2	
4-Nitrophenol	140	10	200.0	0	69.1	26.4	108	13.2	36.6	
Pentachlorophenol	130	20	200.0	0	63.2	36.5	86.6	2.18	29.5	
Phenol	140	10	200.0	0	67.6	29.3	108	10.8	30	
Pyrene	73	10	100.0	0	72.8	45.7	100	10.5	31	
1,2,4-Trichlorobenzene	79	10	100.0	0	79.4	39.3	94.5	6.63	24	
Surr: 2-Fluorophenol	130		200.0		66.4	14.9	111	0	0	
Surr: Phenol-d5	150		200.0		73.0	11.3	108	0	0	
Surr: 2,4,6-Tribromophenol	160		200.0		81.4	15.7	154	0	0	
Surr: Nitrobenzene-d5	73		100.0		72.8	47.8	106	0	0	
Surr: 2-Fluorobiphenyl	68		100.0		68.1	21.3	123	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506436

07-Jul-15

Client: Western Refining Southwest, Gallup**Project:** 2015 2nd QTR (MKTF)

Sample ID	lcsd-19699		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 19699		RunNo: 26827					
Prep Date:	6/12/2015		Analysis Date: 6/15/2015		SeqNo: 800932		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	58		100.0		57.8	14.3	135	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
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R RPD outside accepted recovery limits
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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: 1506436

RcptNo: 1

Received by/date:

CS

06/09/15

Logged By: Ashley Gallegos

6/9/2015 4:12:00 PM

Completed By: Ashley Gallegos

6/9/2015 5:08:27 PM

Reviewed By:

At 06/11/15

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 ☐

11. Were any sample containers received broken?

Yes ☐

No ☒

12. Does paperwork match bottle labels?

Yes ☒

No ☐

(Note discrepancies on chain of custody)

13. Are matrices correctly identified on Chain of Custody?

Yes ☒

No ☐

14. Is it clear what analyses were requested?

Yes ☒

No ☐

15. Were all holding times able to be met?

Yes ☒

No ☐

(If no, notify customer for authorization.)

For Diss Metals analysis: Added 0.4 mL HNO₃ + 0.004E + 0.007E for
acceptability
and held in Log in for 24
hr prior to
analysis:
of preserved
bottles checked
for pH: 12
(<2 or >12 unless noted)
Adjusted? Yes
Checked by: AFJ

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order?

Yes ☐

No ☐

NA ☒

Person Notified:

Date

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.3	Good	Yes			

