

GW - 032

**MONITORING
REPORT
(4)**

August 2009

Chavez, Carl J, EMNRD

From: Rajen, Gaurav [Gaurav.Rajen@wnr.com]
Sent: Friday, September 11, 2009 2:36 PM
To: Monzeglio, Hope, NMENV; Chavez, Carl J, EMNRD
Cc: Riege, Ed; Johnson, Cheryl; Larsen, Thurman
Subject: Data for NAPIS-3 and KA-3 for 3rd quarter
Attachments: August 31, 2009.pdf

Dear Hope:

It is a pleasure to send you the latest sampling data for wells NAPIS-3 and KA-3. As you will recall, these wells were covered over because of maintenance work ongoing in the area and were not sampled earlier in the 3rd quarter.

Best regards,

Raj

This inbound email has been scanned by the MessageLabs Email Security System.



COVER LETTER

Friday, September 11, 2009

Gaurav Rajen
Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301
TEL: (505) 722-3833
FAX (505) 722-0210

RE: 3rd Qtr NAPIS

Order No.: 0909044

Dear Gaurav Rajen:

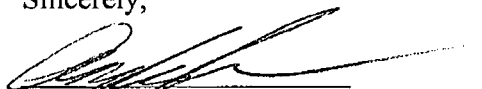
Hall Environmental Analysis Laboratory, Inc. received 3 sample(s) on 9/2/2009 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

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

Sincerely,



Andy Freeman, Laboratory Manager

NM Lab # NM9425
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX



Hall Environmental Analysis Laboratory, Inc.

Date: 11-Sep-09

CLIENT: Western Refining Southwest, Gallup
 Lab Order: 0909044
 Project: 3rd Qtr NAPIS
 Lab ID: 0909044-01

Client Sample ID: NAPIS-3
 Collection Date: 8/31/2009 9:58:00 AM
 Date Received: 9/2/2009
 Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	9/3/2009 6:17:41 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	9/3/2009 6:17:41 AM
Surr: DNOP	118	58-140		%REC	1	9/3/2009 6:17:41 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	9/8/2009 6:20:08 PM
Surr: BFB	105	55.2-107		%REC	1	9/8/2009 6:20:08 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	9/8/2009 6:20:08 PM
Benzene	ND	1.0		µg/L	1	9/8/2009 6:20:08 PM
Toluene	ND	1.0		µg/L	1	9/8/2009 6:20:08 PM
Ethylbenzene	ND	1.0		µg/L	1	9/8/2009 6:20:08 PM
Xylenes, Total	ND	2.0		µg/L	1	9/8/2009 6:20:08 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/8/2009 6:20:08 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/8/2009 6:20:08 PM
Surr: 4-Bromofluorobenzene	101	65.9-130		%REC	1	9/8/2009 6:20:08 PM
EPA METHOD 8310: PAHS						Analyst: JAT
Naphthalene	ND	2.0		µg/L	1	9/9/2009 6:17:03 PM
1-Methylnaphthalene	ND	2.0		µg/L	1	9/9/2009 6:17:03 PM
2-Methylnaphthalene	ND	2.0		µg/L	1	9/9/2009 6:17:03 PM
Acenaphthylene	ND	2.5		µg/L	1	9/9/2009 6:17:03 PM
Acenaphthene	ND	5.0		µg/L	1	9/9/2009 6:17:03 PM
Fluorene	ND	0.80		µg/L	1	9/9/2009 6:17:03 PM
Phenanthrene	ND	0.60		µg/L	1	9/9/2009 6:17:03 PM
Anthracene	ND	0.60		µg/L	1	9/9/2009 6:17:03 PM
Fluoranthene	ND	0.30		µg/L	1	9/9/2009 6:17:03 PM
Pyrene	ND	0.30		µg/L	1	9/9/2009 6:17:03 PM
Benz(a)anthracene	ND	0.070		µg/L	1	9/9/2009 6:17:03 PM
Chrysene	ND	0.20		µg/L	1	9/9/2009 6:17:03 PM
Benzo(b)fluoranthene	ND	0.10		µg/L	1	9/9/2009 6:17:03 PM
Benzo(k)fluoranthene	ND	0.070		µg/L	1	9/9/2009 6:17:03 PM
Benzo(a)pyrene	ND	0.070		µg/L	1	9/9/2009 6:17:03 PM
Dibenz(a,h)anthracene	ND	0.070		µg/L	1	9/9/2009 6:17:03 PM
Benzo(g,h,i)perylene	ND	0.080		µg/L	1	9/9/2009 6:17:03 PM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	9/9/2009 6:17:03 PM
Surr: Benzo(e)pyrene	66.5	28.3-111		%REC	1	9/9/2009 6:17:03 PM
EPA METHOD 300.0: ANIONS						Analyst: LJB
Fluoride	0.47	0.10		mg/L	1	9/2/2009 5:09:38 PM
Chloride	1000	10		mg/L	100	9/4/2009 2:55:35 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Estimated value
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 11-Sep-09

CLIENT: Western Refining Southwest, Gallup
Lab Order: 0909044
Project: 3rd Qtr NAPIS
Lab ID: 0909044-01

Client Sample ID: NAPIS-3
Collection Date: 8/31/2009 9:58:00 AM
Date Received: 9/2/2009
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LJB
Nitrate (As N)+Nitrite (As N)	14	4.0		mg/L	20	9/4/2009 3:13:00 PM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	9/2/2009 5:09:38 PM
Sulfate	ND	10		mg/L	20	9/2/2009 5:27:03 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: DAM
Specific Conductance	4000	0.010		µmhos/cm	1	9/3/2009 4:29:00 PM
SM4500-H+B: PH						Analyst: DAM
pH	8.07	0.1		pH units	1	9/3/2009 4:29:00 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

Date: 11-Sep-09

CLIENT: Western Refining Southwest, Gallup
 Lab Order: 0909044
 Project: 3rd Qtr NAPIS
 Lab ID: 0909044-02

Client Sample ID: KA-3
 Collection Date: 8/31/2009 10:31:00 AM
 Date Received: 9/2/2009
 Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	1.4	1.0		mg/L	1	9/3/2009 6:53:54 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	9/3/2009 6:53:54 AM
Surr: DNOP	120	58-140		%REC	1	9/3/2009 6:53:54 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	0.52	0.050		mg/L	1	9/8/2009 7:20:46 PM
Surr: BFB	127	55.2-107	S	%REC	1	9/8/2009 7:20:46 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	170	25		µg/L	10	9/8/2009 6:50:36 PM
Benzene	ND	1.0		µg/L	1	9/8/2009 7:20:46 PM
Toluene	ND	1.0		µg/L	1	9/8/2009 7:20:46 PM
Ethylbenzene	ND	1.0		µg/L	1	9/8/2009 7:20:46 PM
Xylenes, Total	ND	2.0		µg/L	1	9/8/2009 7:20:46 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/8/2009 7:20:46 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/8/2009 7:20:46 PM
Surr: 4-Bromofluorobenzene	107	65.9-130		%REC	1	9/8/2009 7:20:46 PM
EPA METHOD 8310: PAHS						Analyst: JAT
Naphthalene	ND	2.0		µg/L	1	9/9/2009 6:37:15 PM
1-Methylnaphthalene	ND	2.0		µg/L	1	9/9/2009 6:37:15 PM
2-Methylnaphthalene	ND	2.0		µg/L	1	9/9/2009 6:37:15 PM
Acenaphthylene	ND	2.5		µg/L	1	9/9/2009 6:37:15 PM
Acenaphthene	ND	5.0		µg/L	1	9/9/2009 6:37:15 PM
Fluorene	ND	0.80		µg/L	1	9/9/2009 6:37:15 PM
Phenanthrene	ND	0.60		µg/L	1	9/9/2009 6:37:15 PM
Anthracene	ND	0.80		µg/L	1	9/9/2009 6:37:15 PM
Fluoranthene	ND	0.30		µg/L	1	9/9/2009 6:37:15 PM
Pyrene	ND	0.30		µg/L	1	9/9/2009 6:37:15 PM
Benz(a)anthracene	ND	0.070		µg/L	1	9/9/2009 6:37:15 PM
Chrysene	ND	0.20		µg/L	1	9/9/2009 6:37:15 PM
Benzo(b)fluoranthene	ND	0.10		µg/L	1	9/9/2009 6:37:15 PM
Benzo(k)fluoranthene	ND	0.070		µg/L	1	9/9/2009 6:37:15 PM
Benzo(a)pyrene	ND	0.070		µg/L	1	9/9/2009 6:37:15 PM
Dibenz(a,h)anthracene	ND	0.070		µg/L	1	9/9/2009 6:37:15 PM
Benzo(g,h,i)perylene	ND	0.080		µg/L	1	9/9/2009 6:37:15 PM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	9/9/2009 6:37:15 PM
Surr: Benzo(e)pyrene	40.1	28.3-111		%REC	1	9/9/2009 6:37:15 PM
EPA METHOD 300.0: ANIONS						Analyst: LJB
Fluoride	2.4	0.10		mg/L	1	9/2/2009 6:19:17 PM
Chloride	230	2.0		mg/L	20	9/2/2009 6:36:41 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Estimated value
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 11-Sep-09

CLIENT: Western Refining Southwest, Gallup
Lab Order: 0909044
Project: 3rd Qtr NAPIS
Lab ID: 0909044-02

Client Sample ID: KA-3
Collection Date: 8/31/2009 10:31:00 AM
Date Received: 9/2/2009
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Analyst: LJB						
EPA METHOD 300.0: ANIONS						
Nitrate (As N)+Nitrite (As N)	ND	2.0		mg/L	10	9/4/2009 1:02:30 AM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	9/2/2009 6:19:17 PM
Sulfate	50	0.50		mg/L	1	9/2/2009 6:19:17 PM
Analyst: DAM						
EPA 120.1: SPECIFIC CONDUCTANCE						
Specific Conductance	1500	0.010		µmhos/cm	1	9/3/2009 4:37:00 PM
Analyst: DAM						
SM4500-H+B: PH						
pH	7.58	0.1		pH units	1	9/3/2009 4:37:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
E Estimated value
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
MCL Maximum Contaminant Level
RL Reporting Limit

Page 4 of 5

Hall Environmental Analysis Laboratory, Inc.

Date: 11-Sep-09

CLIENT: Western Refining Southwest, Gallup
Lab Order: 0909044
Project: 3rd Qtr NAPIS
Lab ID: 0909044-03

Client Sample ID: Trip Blank
Collection Date:
Date Received: 9/2/2009
Matrix: TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	9/8/2009 8:21:12 PM
Surr: BFB	104	55.2-107		%REC	1	9/8/2009 8:21:12 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	9/8/2009 8:21:12 PM
Benzene	ND	1.0		µg/L	1	9/8/2009 8:21:12 PM
Toluene	ND	1.0		µg/L	1	9/8/2009 8:21:12 PM
Ethylbenzene	ND	1.0		µg/L	1	9/8/2009 8:21:12 PM
Xylenes, Total	ND	2.0		µg/L	1	9/8/2009 8:21:12 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/8/2009 8:21:12 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/8/2009 8:21:12 PM
Surr: 4-Bromofluorobenzene	102	65.9-130		%REC	1	9/8/2009 8:21:12 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
MCL Maximum Contaminant Level
RL Reporting Limit



ENVIRONMENTAL
SCIENCE CORP.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

September 10, 2009

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

ESC Sample # : L420901-01

Date Received : September 04, 2009
Description : 0909044

Site ID :

Sample ID : NAPIS-3

Project # : 0909044

Collected By :
Collection Date : 08/31/09 09:58

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Mercury	BDL	0.00020	mg/l	7470A	09/09/09	1
Arsenic	BDL	0.020	mg/l	6010B	09/09/09	1
Barium	0.092	0.0050	mg/l	6010B	09/09/09	1
Cadmium	BDL	0.0050	mg/l	6010B	09/09/09	1
Calcium	39.	0.50	mg/l	6010B	09/09/09	1
Chromium	BDL	0.010	mg/l	6010B	09/09/09	1
Lead	BDL	0.0050	mg/l	6010B	09/09/09	1
Magnesium	6.4	0.10	mg/l	6010B	09/09/09	1
Potassium	4.0	0.50	mg/l	6010B	09/09/09	1
Selenium	BDL	0.020	mg/l	6010B	09/09/09	1
Silver	BDL	0.010	mg/l	6010B	09/09/09	1
Sodium	870	0.50	mg/l	6010B	09/09/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 09/10/09 16:01 Printed: 09/10/09 16:02



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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

September 10, 2009

Date Received : September 04, 2009
Description : 0909044
Sample ID : KA-3
Collected By :
Collection Date : 08/31/09 10:31

ESC Sample # : L420901-02

Site ID :

Project # : 0909044

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Mercury	BDL	0.00020	mg/l	7470A	09/09/09	1
Arsenic	BDL	0.020	mg/l	6010B	09/09/09	1
Barium	0.22	0.0050	mg/l	6010B	09/09/09	1
Cadmium	BDL	0.0050	mg/l	6010B	09/09/09	1
Calcium	53.	0.50	mg/l	6010B	09/09/09	1
Chromium	BDL	0.010	mg/l	6010B	09/09/09	1
Lead	BDL	0.0050	mg/l	6010B	09/09/09	1
Magnesium	8.9	0.10	mg/l	6010B	09/09/09	1
Potassium	0.73	0.50	mg/l	6010B	09/09/09	1
Selenium	BDL	0.020	mg/l	6010B	09/09/09	1
Silver	BDL	0.010	mg/l	6010B	09/09/09	1
Sodium	330	0.50	mg/l	6010B	09/09/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

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Reported: 09/10/09 16:01 Printed: 09/10/09 16:02



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Est. 1970

Hall Environmental Analysis Laboratory
Anne Thorne
4901 Hawkins NE

Quality Assurance Report Level II

Albuquerque, NM 87109

L420901

September 10, 2009

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Mercury	0.0002	mg/l	100	20	WG439934	09/09/09 12:59
Potassium	< .5	mg/l			WG439934	09/09/09 18:32
Sodium	0.0002	mg/l	100	20	WG439934	09/09/09 18:32
Arsenic	< .02	mg/l			WG439934	09/08/09 22:26
Barium	< .005	mg/l			WG439934	09/08/09 22:26
Cadmium	0.0002	mg/l	100	20	WG439934	09/08/09 22:26
Calcium	< .5	mg/l			WG439934	09/08/09 22:26
Chromium	< .01	mg/l			WG439934	09/08/09 22:26
Copper	0.0002	mg/l	100	20	WG439934	09/08/09 22:26
Magnesium	< .1	mg/l			WG439934	09/08/09 22:26
Selenium	< .02	mg/l			WG439934	09/08/09 22:26
Silver	0.0002	mg/l	100	20	WG439934	09/08/09 22:26

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Mercury	mg/l	0.00	0.00	0.00	20	L420909-06	WG439864
Arsenic	mg/l	0.00	0.00	0.00	20	L420909-06	WG439934
Barium	mg/l	0.00	0.00020	NA	20	L420909-06	WG439934
Cadmium	mg/l	0.00	0.00	0.00	20	L420909-06	WG439934
Calcium	mg/l	0.00	0.315	NA	20	L420909-06	WG439934
Chromium	mg/l	0.00	0.00100	NA	20	L420909-06	WG439934
Lead	mg/l	0.00	0.00126	NA	20	L420909-06	WG439934
Magnesium	mg/l	0.00	0.0973	NA	20	L420909-06	WG439934
Potassium	mg/l	0.00	0.833	NA	20	L420909-06	WG439934
Selenium	mg/l	0.00	0.00180	NA	20	L420909-06	WG439934
Silver	mg/l	0.00	0.000300	NA	20	L420909-06	WG439934
Sodium	mg/l	0.00	0.09	NA	20	L420909-06	WG439934

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Mercury	mg/l	0.003	0.00307	102	85-115	WG439864
Arsenic	mg/l	1.13	0.991	87.7	85-115	WG439934
Barium	mg/l	1.13	1.05	92.9	85-115	WG439934
Cadmium	mg/l	1.13	1.04	92.0	85-115	WG439934
Calcium	mg/l	11.3	10.3	91.2	85-115	WG439934
Chromium	mg/l	1.13	1.04	92.0	85-115	WG439934
Lead	mg/l	1.13	1.06	93.8	85-115	WG439934
Magnesium	mg/l	11.3	10.4	92.0	85-115	WG439934
Potassium	mg/l	1.13	1.13	100	85-115	WG439934
Selenium	mg/l	1.13	0.959	84.9*	85-115	WG439934
Silver	mg/l	1.13	1.02	90.3	85-115	WG439934
Sodium	mg/l	1.13	1.06	93.8	85-115	WG439934

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Mercury	mg/l	0.00315	0.00	0.003	106	70-140	L420902-04	WG439864
Arsenic	mg/l	0.954	0.00	1.13	84.4	75-125	L420909-06	WG439934
Barium	mg/l	0.003	0.00024	1.13	91.1	75-125	L420909-06	WG439934

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
 Project: 3rd Qtr NAPIS

Work Order: 0909044

Analyte	Result	Units	PQL	SPK Va	SPK.ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions											
Sample ID: 0909044-01CMSD	MSD					Batch ID: R35157	Analysis Date:	9/2/2009 6:01:52 PM			
Fluoride	0.9447	mg/L	0.10	0.5	0.4669	95.6	75.3	117	4.90	20	
Nitrate (As N)+Nitrite (As N)	20.42	mg/L	0.20	3.5	17.44	85.0	72.5	119	1.06	20	
Phosphorus, Orthophosphate (As P)	4.929	mg/L	0.50	5	0	98.6	74.5	116	7.12	20	
Sample ID: MB	MBLK					Batch ID: R35157	Analysis Date:	9/2/2009 4:34:50 PM			
Fluoride	ND	mg/L	0.10								
Chloride	ND	mg/L	0.10								
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20								
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50								
Sulfate	ND	mg/L	0.50								
Sample ID: MB	MBLK					Batch ID: R35172	Analysis Date:	9/3/2009 2:01:00 PM			
Fluoride	ND	mg/L	0.10								
Chloride	ND	mg/L	0.10								
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20								
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50								
Sulfate	ND	mg/L	0.50								
Sample ID: MB	MBLK					Batch ID: R35196	Analysis Date:	9/4/2009 11:44:05 AM			
Fluoride	ND	mg/L	0.10								
Chloride	ND	mg/L	0.10								
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20								
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50								
Sulfate	ND	mg/L	0.50								
Sample ID: LCS	LCS					Batch ID: R35157	Analysis Date:	9/2/2009 4:52:14 PM			
Fluoride	0.5343	mg/L	0.10	0.5	0	107	90	110			
Chloride	4.833	mg/L	0.10	5	0	96.7	90	110			
Nitrate (As N)+Nitrite (As N)	3.426	mg/L	0.20	3.5	0	97.9	90	110			
Phosphorus, Orthophosphate (As P)	5.218	mg/L	0.50	5	0	104	90	110			
Sulfate	10.03	mg/L	0.50	10	0	100	90	110			
Sample ID: LCS	LCS					Batch ID: R35172	Analysis Date:	9/3/2009 2:18:24 PM			
Fluoride	0.5550	mg/L	0.10	0.5	0	111	90	110			S
Chloride	4.844	mg/L	0.10	5	0	96.9	90	110			
Nitrate (As N)+Nitrite (As N)	3.436	mg/L	0.20	3.5	0	98.2	90	110			
Phosphorus, Orthophosphate (As P)	4.973	mg/L	0.50	5	0	99.5	90	110			
Sulfate	9.844	mg/L	0.50	10	0	98.4	90	110			
Sample ID: LCS	LCS					Batch ID: R35195	Analysis Date:	9/4/2009 12:01:30 PM			
Fluoride	0.5134	mg/L	0.10	0.5	0	103	90	110			
Chloride	4.819	mg/L	0.10	5	0	96.4	90	110			
Nitrate (As N)+Nitrite (As N)	3.427	mg/L	0.20	3.5	0	97.9	90	110			
Phosphorus, Orthophosphate (As P)	4.869	mg/L	0.50	5	0	97.4	90	110			
Sulfate	9.825	mg/L	0.50	10	0	98.3	90	110			
Sample ID: 0909044-01CMS	MS					Batch ID: R35157	Analysis Date:	9/2/2009 5:44:28 PM			
Fluoride	0.9922	mg/L	0.10	0.5	0.4669	105	75.3	117			
Nitrate (As N)+Nitrite (As N)	20.20	mg/L	0.20	3.5	17.44	78.8	72.5	119			
Phosphorus, Orthophosphate (As P)	4.590	mg/L	0.50	5	0	91.8	74.5	116			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Page 1

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
 Project: 3rd Qtr NAPIS

Work Order: 0909044

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8015B: Diesel Range											
Sample ID: MB-20013		MBLK									
Diesel Range Organics (DRO)	ND	mg/L	1.0								
Motor Oil Range Organics (MRO)	ND	mg/L	5.0								
Sample ID: LCS-20013		LCS									
Diesel Range Organics (DRO)	4.778	mg/L	1.0	5	0	95.6	74	157			
Sample ID: LCSD-20013		LCSD									
Diesel Range Organics (DRO)	4.764	mg/L	1.0	5	0	95.3	74	157	0.289	23	
Method: EPA Method 8015B: Gasoline Range											
Sample ID: 0909044-01A MSD		MSD									
Gasoline Range Organics (GRO)	0.5564	mg/L	0.050	0.5	0	111	80	115	8.82	8.39	R
Sample ID: 5ML RB		MBLK									
Gasoline Range Organics (GRO)	ND	mg/L	0.050								
Sample ID: 2.5UG GRO LCS		LCS									
Gasoline Range Organics (GRO)	0.5232	mg/L	0.050	0.5	0	105	80	115			
Sample ID: 0909044-01A MS		MS									
Gasoline Range Organics (GRO)	0.5094	mg/L	0.050	0.5	0	102	80	115			

Qualifiers:

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QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
 Project: 3rd Qtr NAPIS

Work Order: 0909044

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8021B: Volatiles											
Sample ID: 0909044-01A MSD		MSD				Batch ID: R35219	Analysis Date:		9/9/2009 2:24:51 AM		
Methyl tert-butyl ether (MTBE)	20.22	µg/L	2.5	20	0	101	51.2	138	0.208	28	
Benzene	21.26	µg/L	1.0	20	0	106	85.9	113	0.169	27	
Toluene	22.58	µg/L	1.0	20	0	113	86.4	113	0.470	19	
Ethylbenzene	21.97	µg/L	1.0	20	0.082	109	83.5	118	2.20	10	
Xylenes, Total	63.67	µg/L	2.0	60	0	106	83.4	122	0.820	13	
1,2,4-Trimethylbenzene	19.82	µg/L	1.0	20	0	99.1	83.5	115	1.53	21	
1,3,5-Trimethylbenzene	19.34	µg/L	1.0	20	0	96.7	85.2	113	0.155	10	
Sample ID: 5ML RB		MBLK				Batch ID: R35219	Analysis Date:		9/8/2009 9:20:48 AM		
Methyl tert-butyl ether (MTBE)	ND	µg/L	2.5								
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	2.0								
1,2,4-Trimethylbenzene	ND	µg/L	1.0								
1,3,5-Trimethylbenzene	ND	µg/L	1.0								
Sample ID: 100NG BTEX LCS		LCS				Batch ID: R35219	Analysis Date:		9/9/2009 2:55:15 AM		
Methyl tert-butyl ether (MTBE)	20.97	µg/L	2.5	20	0	105	51.2	138			
Benzene	21.17	µg/L	1.0	20	0	106	85.9	113			
Toluene	21.76	µg/L	1.0	20	0	109	86.4	113			
Ethylbenzene	21.04	µg/L	1.0	20	0.134	105	83.5	118			
Xylenes, Total	62.33	µg/L	2.0	60	0	104	83.4	122			
1,2,4-Trimethylbenzene	21.00	µg/L	1.0	20	0.132	104	83.5	115			
1,3,5-Trimethylbenzene	19.74	µg/L	1.0	20	0	98.7	85.2	113			
Sample ID: 0909044-01A MS		MS				Batch ID: R35219	Analysis Date:		9/9/2009 1:54:30 AM		
Methyl tert-butyl ether (MTBE)	20.18	µg/L	2.5	20	0	101	51.2	138			
Benzene	21.22	µg/L	1.0	20	0	106	85.9	113			
Toluene	22.48	µg/L	1.0	20	0	112	86.4	113			
Ethylbenzene	21.49	µg/L	1.0	20	0.082	107	83.5	118			
Xylenes, Total	63.15	µg/L	2.0	60	0	105	83.4	122			
1,2,4-Trimethylbenzene	19.52	µg/L	1.0	20	0	97.6	83.5	115			
1,3,5-Trimethylbenzene	19.31	µg/L	1.0	20	0	96.5	85.2	113			

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
 Project: 3rd Qtr NAPIS

Work Order: 0909044

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8310: PAHs											
Sample ID: MB-20037	MBLK			Batch ID: 20037		Analysis Date: 9/9/2009 5:16:32 PM					
Naphthalene	ND	µg/L	2.0								
1-Methylnaphthalene	ND	µg/L	2.0								
2-Methylnaphthalene	ND	µg/L	2.0								
Acenaphthylene	ND	µg/L	2.5								
Acenaphthene	ND	µg/L	5.0								
Fluorene	ND	µg/L	0.80								
Phenanthrene	ND	µg/L	0.60								
Anthracene	ND	µg/L	0.60								
Fluoranthene	ND	µg/L	0.30								
Pyrene	ND	µg/L	0.30								
Benz(a)anthracene	ND	µg/L	0.070								
Chrysene	ND	µg/L	0.20								
Benzo(b)fluoranthene	ND	µg/L	0.10								
Benzo(k)fluoranthene	ND	µg/L	0.070								
Benzo(a)pyrene	ND	µg/L	0.070								
Dibenz(a,h)anthracene	ND	µg/L	0.070								
Benzo(g,h,i)perylene	ND	µg/L	0.080								
Indeno(1,2,3-cd)pyrene	ND	µg/L	0.080								
Sample ID: LCS-20037	LCS			Batch ID: 20037		Analysis Date: 9/9/2009 5:36:43 PM					
Naphthalene	38.23	µg/L	2.0	80	0	47.8	20.5	109			
1-Methylnaphthalene	37.76	µg/L	2.0	80.2	0	47.1	23.1	116			
2-Methylnaphthalene	34.08	µg/L	2.0	80	0	42.6	19.5	112			
Acenaphthylene	41.89	µg/L	2.5	80.2	0	52.2	27.5	119			
Acenaphthene	43.97	µg/L	5.0	80	0	55.0	31	117			
Fluorene	3.950	µg/L	0.80	8.02	0	49.3	17.1	109			
Phenanthrene	2.460	µg/L	0.60	4.02	0	61.2	25.5	112			
Anthracene	2.440	µg/L	0.60	4.02	0	60.7	25.8	119			
Fluoranthene	4.970	µg/L	0.30	8.02	0	62.0	27.2	122			
Pyrene	4.510	µg/L	0.30	8.02	0	56.2	24.1	118			
Benz(a)anthracene	0.4700	µg/L	0.070	0.802	0	58.6	31.1	125			
Chrysene	2.350	µg/L	0.20	4.02	0	58.5	32.8	119			
Benzo(b)fluoranthene	0.5500	µg/L	0.10	1.002	0	54.9	24.4	117			
Benzo(k)fluoranthene	0.3000	µg/L	0.070	0.5	0	60.0	28.4	132			
Benzo(a)pyrene	0.2600	µg/L	0.070	0.502	0	51.8	32.4	119			
Dibenz(a,h)anthracene	0.5700	µg/L	0.070	1.002	0	56.9	33.9	120			
Benzo(g,h,i)perylene	0.5600	µg/L	0.080	1	0	56.0	35.2	113			
Indeno(1,2,3-cd)pyrene	1.140	µg/L	0.080	2.004	0	56.9	33.6	115			
Sample ID: LCSD-20037	LCSD			Batch ID: 20037		Analysis Date: 9/9/2009 5:56:54 PM					
Naphthalene	41.02	µg/L	2.0	80	0	51.3	20.5	109	7.04	32.1	
1-Methylnaphthalene	41.64	µg/L	2.0	80.2	0	51.9	23.1	116	9.77	32.7	
2-Methylnaphthalene	40.22	µg/L	2.0	80	0	50.3	19.5	112	16.5	34	
Acenaphthylene	41.73	µg/L	2.5	80.2	0	52.0	27.5	119	0.383	38.8	
Acenaphthene	46.47	µg/L	5.0	80	0	58.1	31	117	5.53	38.6	
Fluorene	4.170	µg/L	0.80	8.02	0	52.0	17.1	109	5.42	29.3	

Qualifiers:

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QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
 Project: 3rd Qtr NAPIS

Work Order: 0909044

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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Method: EPA Method 8310: PAHs

Sample ID: LCSD-20037

LCSD

Batch ID: 20037 Analysis Date: 9/9/2009 5:56:54 PM

Phenanthrene	2.550	µg/L	0.60	4.02	0	63.4	25.5	112	3.59	25	
Anthracene	2.510	µg/L	0.60	4.02	0	62.4	25.8	119	2.83	23.9	
Fluoranthene	5.510	µg/L	0.30	8.02	0	68.7	27.2	122	10.3	15.7	
Pyrene	5.160	µg/L	0.30	8.02	0	64.3	24.1	118	13.4	15.3	
Benz(a)anthracene	0.4700	µg/L	0.070	0.802	0	58.6	31.1	125	0	19	
Chrysene	2.410	µg/L	0.20	4.02	0	60.0	32.8	119	2.52	16.6	
Benzo(b)fluoranthene	0.5600	µg/L	0.10	1.002	0	55.9	24.4	117	1.80	21.7	
Benzo(k)fluoranthene	0.2900	µg/L	0.070	0.5	0	58.0	28.4	132	3.39	19.4	
Benzo(a)pyrene	0.2000	µg/L	0.070	0.502	0	39.8	32.4	119	26.1	16.7	R
Dibenz(a,h)anthracene	0.4900	µg/L	0.070	1.002	0	48.9	33.9	120	15.1	17.3	
Benzo(g,h,i)perylene	0.4700	µg/L	0.080	1	0	47.0	35.2	113	17.5	18	
Indeno(1,2,3-cd)pyrene	0.9700	µg/L	0.080	2.004	0	48.4	33.6	115	16.1	17.7	

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
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Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **WESTERN REFINING GALLU**

Date Received:

9/2/2009

Work Order Number **0909044**

Received by: **ARS**

Sample ID labels checked by:

Checklist completed by:

Signature

Date

Initials

Matrix:

Carrier name: **UPS**

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☒

No ☐

Not Present ☐

Not Shipped ☐

Custody seals intact on sample bottles?

Yes ☒

No ☐

N/A

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☐

No ☒

Water - VOA vials have zero headspace?

No VOA vials submitted ☒

Yes ☐

No ☐

Water - Preservation labels on bottle and cap match?

Yes ☒

No ☐

N/A ☐

Water - pH acceptable upon receipt?

Yes ☒

No ☐

N/A ☐

Container/Temp Blank temperature?

19.7°

<6° C Acceptable

If given sufficient time to cool.

Number of preserved bottles checked for pH:

(2) >12 unless noted below.

COMMENTS:

Client contacted

Date contacted:

Person contacted

Contacted by:

Regarding:

Comments:

Corrective Action

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

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