Van Horn, Kristen, NMENV

ENTERED

From: Monzeglio, Hope, NMENV
Sent: Wednesday, February 03, 2010 1:05 PM
To: Van Horn, Kristen, NMENV
Subject: FW: Flow rates and benzene analytical data for January 2010
Attachments: January 25-2010.pdf; January 4-2010.pdf; January 14-2010.pdf; January 18-2010.pdf

More benzene data. Again, enter into excel and put a note for Pam to put in the folder for the benzene stripper information on the stacks. Thanks

Hope

From: Rajen, Gaurav [mailto:Gaurav.Rajen@wnr.com]
Sent: Wednesday, February 03, 2010 11:24 AM
To: Monzeglio, Hope, NMENV; Chavez, Carl J, EMNRD
Cc: Turri, Mark; Riege, Ed; Allen, Ann; Cobrain, Dave, NMENV
Subject: Flow rates and benzene analytical data for January 2010

Dear Hope:

It is a pleasure to send you our flow rate data and benzene strippers' analytical data for the month of January 2010.

The analytical data are attached in the reports we have received from Hall Environmental Laboratory.

You will be pleased to know that we have installed two electronic flow meters on the inlets to our strippers 1 and 2, which allows us to get far more accurate data than the manual method of measuring within a flume, which was done six times a day and then averaged for the day. Our new flow meters have become operational since January 28. The flume we believe may have been overestimating the flows, as it got flooded at times. I have combined the data from both approaches to get you an average flow rate for the month. However, I am also sending you the data from January 28-31 as we believe it is more accurate.

You will also be pleased to note that our fourth stripper is now on-line and seems to be running well. This too became operational on January 28, 2010. We are confident that from this week on – with the additional stripper – we will have consistent results well below 0.5 ppm in the outlets of the strippers.

Through the benzene strippers 1 and 2 after the New API Separator (NAPIS), our average flow rate for the month of January 2010 in gallons per minutes was 237 GPM (with a maximum of approximately 324 GPM and a minimum of approximately 135 GPM). From January 28-31 as measured by the new electronic flow meters, the average flow rate was 152 GPM. The maximum averaged daily flow rate in this period was 189 GPM, and the minimum was 135 GPM.

For the benzene stripper 3 in our process area, in January only our Desalter effluent was routed to this stripper. The Desalter effluent is approximately 4.5% of our crude charge rates, and for January this works out to approximately 29 GPM as the monthly average flow rate. As our crude charge rate varied through January, we estimate that the minimum and maximum average daily flow rates through the benzene stripper 3 were 26 GPM and 30 GPM for the month of January 2010.

Best regards,

Raj

This inbound email has been scanned for malicious software and transmitted safely to you using Webroot Email Security.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

COVER LETTER

Monday, February 01, 2010

Gaurav Rajen
Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-3833
FAX (505) 722-0210

RE: Benzene Strippers

Order No.: 1001370

Dear Gaurav Rajen:

Hall Environmental Analysis Laboratory, Inc. received 4 sample(s) on 1/28/2010 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 NM0901
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

ACCREDITED IN ACCORDANCE WITH nelac

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *01-Feb-10*

CLIENT: Western Refining Southwest, Gallup
Project: Benzene Strippers

Lab Order: 1001370

Lab ID: 1001370-01
Client Sample ID: BZ 3 IN

Collection Date: 1/25/2010 8:30:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: **NSB**
EPA METHOD 8021B: VOLATILES						
Methyl tert-butyl ether (MTBE)	ND	1300		µg/L	500	1/28/2010 4:39:49 PM
Benzene	20000	500		µg/L	500	1/28/2010 4:39:49 PM
Toluene	18000	500		µg/L	500	1/28/2010 4:39:49 PM
Ethylbenzene	1300	500		µg/L	500	1/28/2010 4:39:49 PM
Xylenes, Total	8800	1000		µg/L	500	1/28/2010 4:39:49 PM
Surr: 4-Bromofluorobenzene	100	65.9-130		%REC	500	1/28/2010 4:39:49 PM

Lab ID: 1001370-02
Client Sample ID: BZ 3 OUT

Collection Date: 1/25/2010 8:45:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: **NSB**
EPA METHOD 8021B: VOLATILES						
Methyl tert-butyl ether (MTBE)	ND	250		µg/L	100	1/28/2010 5:10:01 PM
Benzene	1100	100		µg/L	100	1/28/2010 5:10:01 PM
Toluene	1400	100		µg/L	100	1/28/2010 5:10:01 PM
Ethylbenzene	130	100		µg/L	100	1/28/2010 5:10:01 PM
Xylenes, Total	900	200		µg/L	100	1/28/2010 5:10:01 PM
Surr: 4-Bromofluorobenzene	103	65.9-130		%REC	100	1/28/2010 5:10:01 PM

Lab ID: 1001370-03
Client Sample ID: BZ 1-2 IN

Collection Date: 1/25/2010 9:15:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: **NSB**
EPA METHOD 8021B: VOLATILES						
Methyl tert-butyl ether (MTBE)	ND	500		µg/L	200	1/29/2010 12:14:33 AM
Benzene	13000	200		µg/L	200	1/29/2010 12:14:33 AM
Toluene	19000	200		µg/L	200	1/29/2010 12:14:33 AM
Ethylbenzene	1500	200		µg/L	200	1/29/2010 12:14:33 AM
Xylenes, Total	9100	400		µg/L	200	1/29/2010 12:14:33 AM
Surr: 4-Bromofluorobenzene	108	65.9-130		%REC	200	1/29/2010 12:14:33 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *01-Feb-10*

CLIENT: Western Refining Southwest, Gallup
Project: Benzene Strippers

Lab Order: 1001370

Lab ID: 1001370-04
Client Sample ID: BZ 1-2 OUT

Collection Date: 1/25/2010 9:30:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	130		µg/L	50	1/29/2010 12:44:46 AM
Benzene	970	50		µg/L	50	1/29/2010 12:44:46 AM
Toluene	2300	50		µg/L	50	1/29/2010 12:44:46 AM
Ethylbenzene	420	50		µg/L	50	1/29/2010 12:44:46 AM
Xylenes, Total	2700	100		µg/L	50	1/29/2010 12:44:46 AM
Surr: 4-Bromofluorobenzene	102	65.9-130		%REC	50	1/29/2010 12:44:46 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Benzene Strippers

Work Order: 1001370

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8021B: Volatiles											
Sample ID: b 5		*MBLK*				Batch ID:	**R37167**	Analysis Date:	1/28/2010 11:36:19 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								
Sample ID: 100NG BTEX LCS		*LCS*				Batch ID:	**R37167**	Analysis Date:	1/28/2010 9:43:12 PM		
Methyl tert-butyl ether (MTBE)	19.86	µg/L	2.5	20	0	99.3	51.2	138			
Benzene	20.59	µg/L	1.0	20	0	103	85.9	113			
Toluene	20.56	µg/L	1.0	20	0	103	86.4	113			
Ethylbenzene	20.22	µg/L	1.0	20	0.088	101	83.5	118			
Xylenes, Total	61.58	µg/L	2.0	60	0	103	83.4	122			

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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **WESTERN REFINING GALLU**

Date Received: **1/28/2010**

Work Order Number **1001370**

Received by: TLS

Sample ID labels checked by: _____ Initials

Checklist completed by: _____ Signature 1/28/10 Date

Matrix:

Carrier name: FedEx

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?	**6.7°**	*<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 _____

Chain-of-Custody Record

Client: WESTERN - REFINING
Gallup Refinery
Mailing Address: RT 3 Box 9
Gallup NM 87301
Phone #: 505 722 3227
email or Fax#: 505 722 3833
QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☐ Rush _____
Project Name: BZ STRIPPERS
Project #: MONTHLY CONDITIONS (BTEX)
Project Manager: GAURAV, RAJEN
Sampler: ALVIN DORSEY
On Ice: [redacted]
Sample Temperature: [redacted]

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. 1003310	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	8021B BTEX-MTBE				Air Bubbles (Y or N)
01-25-10	0830	water	BZ 3 IN	3-40ml	HCL	1												X				
01-25-10	0845	water	BZ 3 OUT	3-40ml	HCL	2												X				
01-25-10	0915	water	BZ 1-2 IN	3-40ml	HCL	3												X				
01-25-10	0930	water	BZ 1-2 OUT	3-40ml	HCL	4												X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
01-26-10	12:00	[signature]	[signature]	1/26/10	930
Date:	Time:	Relinquished by:	Received by:	Date	Time

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

COVER LETTER

Thursday, January 14, 2010

Gaurav Rajen
Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-3833
FAX (505) 722-0210

RE: Benzene Strippers

Order No.: 1001028

Dear Gaurav Rajen:

Hall Environmental Analysis Laboratory, Inc. received 4 sample(s) on 1/6/2010 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,

For Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

ACCREDITED IN ACCORDANCE WITH nelac

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *14-Jan-10*

CLIENT: Western Refining Southwest, Gallup
Project: Benzene Strippers

Lab Order: 1001028

Lab ID: 1001028-01
Client Sample ID: BZ 3 IN

Collection Date: 1/4/2010 8:30:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: NSB
EPA METHOD 8021B: VOLATILES						
Methyl tert-butyl ether (MTBE)	ND	1300		µg/L	500	1/11/2010 11:51:34 PM
Benzene	22000	500		µg/L	500	1/11/2010 11:51:34 PM
Toluene	24000	1000		µg/L	1000	1/12/2010 9:43:13 PM
Ethylbenzene	2000	500		µg/L	500	1/11/2010 11:51:34 PM
Xylenes, Total	12000	1000		µg/L	500	1/11/2010 11:51:34 PM
Surr: 4-Bromofluorobenzene	123	65.9-130		%REC	500	1/11/2010 11:51:34 PM

Lab ID: 1001028-02
Client Sample ID: BZ 3 OUT

Collection Date: 1/4/2010 8:45:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: NSB
EPA METHOD 8021B: VOLATILES						
Methyl tert-butyl ether (MTBE)	ND	130		µg/L	50	1/12/2010 12:22:00 AM
Benzene	3700	100		µg/L	100	1/12/2010 10:13:34 PM
Toluene	3700	100		µg/L	100	1/12/2010 10:13:34 PM
Ethylbenzene	370	50		µg/L	50	1/12/2010 12:22:00 AM
Xylenes, Total	2500	100		µg/L	50	1/12/2010 12:22:00 AM
Surr: 4-Bromofluorobenzene	137	65.9-130	S	%REC	50	1/12/2010 12:22:00 AM

Lab ID: 1001028-03
Client Sample ID: BZ 1-2 IN

Collection Date: 1/4/2010 9:15:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: NSB
EPA METHOD 8021B: VOLATILES						
Methyl tert-butyl ether (MTBE)	ND	500		µg/L	200	1/12/2010 12:52:20 AM
Benzene	7000	200		µg/L	200	1/12/2010 12:52:20 AM
Toluene	21000	500		µg/L	500	1/13/2010 12:16:50 PM
Ethylbenzene	2300	200		µg/L	200	1/12/2010 12:52:20 AM
Xylenes, Total	13000	400		µg/L	200	1/12/2010 12:52:20 AM
Surr: 4-Bromofluorobenzene	123	65.9-130		%REC	200	1/12/2010 12:52:20 AM

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: *14-Jan-10*

CLIENT: Western Refining Southwest, Gallup
Project: Benzene Strippers

Lab Order: 1001028

Lab ID: 1001028-04
Client Sample ID: BZ 1-2 OUT

Collection Date: 1/4/2010 9:30:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	130		µg/L	50	1/12/2010 1:22:36 AM
Benzene	290	50		µg/L	50	1/12/2010 1:22:36 AM
Toluene	1400	50		µg/L	50	1/12/2010 1:22:36 AM
Ethylbenzene	300	50		µg/L	50	1/12/2010 1:22:36 AM
Xylenes, Total	1800	100		µg/L	50	1/12/2010 1:22:36 AM
Surr: 4-Bromofluorobenzene	124	65.9-130		%REC	50	1/12/2010 1:22:36 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Date: 14-Jan-10

Hall Environmental Analysis Laboratory, Inc.

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup **Work Order:** 1001028
Project: Benzene Strippers

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8021B: Volatiles						Batch ID:	**R36897**	Analysis Date:		1/11/2010 9:41:58 AM	
Sample ID: 5ML RB		*MBLK*									
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								
						Batch ID:	**R36919**	Analysis Date:		1/12/2010 9:33:32 AM	
Sample ID: 5ML RB		*MBLK*									
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								
						Batch ID:	**R36936**	Analysis Date:		1/13/2010 9:14:25 AM	
Sample ID: 5ML RB		*MBLK*									
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								
						Batch ID:	**R36897**	Analysis Date:		1/11/2010 8:50:02 PM	
Sample ID: 100NG BTEX LCS		*LCS*									
Methyl tert-butyl ether (MTBE)	22.54	µg/L	2.5	20	0	113	51.2	138			
Benzene	20.97	µg/L	1.0	20	0	105	85.9	113			
Toluene	21.53	µg/L	1.0	20	0	108	86.4	113			
Ethylbenzene	22.40	µg/L	1.0	20	0.13	111	83.5	118			
Xylenes, Total	67.86	µg/L	2.0	60	0	113	83.4	122			
						Batch ID:	**R36919**	Analysis Date:		1/12/2010 6:08:40 PM	
Sample ID: 100NG BTEX LCS		*LCS*									
Methyl tert-butyl ether (MTBE)	20.68	µg/L	2.5	20	0	103	51.2	138			
Benzene	21.55	µg/L	1.0	20	0	108	85.9	113			
Toluene	22.15	µg/L	1.0	20	0	111	86.4	113			
Ethylbenzene	23.32	µg/L	1.0	20	0	117	83.5	118			
Xylenes, Total	70.10	µg/L	2.0	60	0	117	83.4	122			
						Batch ID:	**R36936**	Analysis Date:		1/13/2010 7:24:24 PM	
Sample ID: 100NG BTEX LCS		*LCS*									
Methyl tert-butyl ether (MTBE)	15.66	µg/L	2.5	20	0	78.3	51.2	138			
Benzene	19.97	µg/L	1.0	20	0	99.9	85.9	113			
Toluene	20.28	µg/L	1.0	20	0	101	86.4	113			
Ethylbenzene	21.19	µg/L	1.0	20	0.076	106	83.5	118			
Xylenes, Total	64.83	µg/L	2.0	60	0	108	83.4	122			
						Batch ID:	**R36897**	Analysis Date:		1/11/2010 9:20:19 PM	
Sample ID: 100NG BTEX LCSD		*LCSD*									
Methyl tert-butyl ether (MTBE)	22.10	µg/L	2.5	20	0	110	51.2	138	1.99	28	
Benzene	20.52	µg/L	1.0	20	0	103	85.9	113	2.18	27	
Toluene	21.18	µg/L	1.0	20	0	106	86.4	113	1.63	19	
Ethylbenzene	22.06	µg/L	1.0	20	0.13	110	83.5	118	1.54	10	
Xylenes, Total	66.16	µg/L	2.0	60	0	110	83.4	122	2.53	13	

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **WESTERN REFINING GALLU** Date Received: **1/6/2010**

Work Order Number **1001028** Received by: TLS

Sample ID labels checked by: _____ Initials

Checklist completed by: _____ Signature 1/6/10 Date

Matrix: Carrier name: FedEx

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 ☐		Number of preserved bottles checked for pH:
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 ☑	*<2 >12 unless noted below.*
Container/Temp Blank temperature?	**0.9°**	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: WESTERN-REFINING
Gallup Refinery
Mailing Address: RT 3 Box 9
Gallup NM 87301
Phone #: 505 722 3833
email or Fax#: 505 722 0210
QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)
☐ Other
☐ EDD (Type)

Turn-Around Time:
☐ Standard ☐ Rush

Project Name: BZ STRIPPERS
Project #: WEEKLY
Project Manager: GAURAV, RAJEN
Sampler: ALVIN DARSEY
On Ice: ☒ Yes ☐ No
Sample Temperature: 0°C

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 1001028	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	8021 BTEX-MTBE				Air Bubbles (Y or N)
01-04-10	0830		BZ 3IN	40ML-3	HCL	1												X				
01-04-10	0845		BZ 3OUT	40ML-3	HCL	2												X				
01-04-10	0915		BZ 1-2 IN	40ML-3	HCL	3												X				
01-04-10	0930		BZ 1-2 OUT	40ML-3	HCL	4												X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
01-05-10	12:00	Alvin Darsey	[signature]	1/6/10	902
Date:	Time:	Relinquished by:	Received by:	Date	Time

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

COVER LETTER

Tuesday, January 26, 2010

Gaurav Rajen
Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-0227
FAX (505) 722-0210

RE: Qtrly Method 8260B Air Quality Permit 0633-M7

Dear Gaurav Rajen: Order No.: 1001264

Hall Environmental Analysis Laboratory, Inc. received 4 sample(s) on 1/20/2010 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,

For Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *26-Jan-10*

CLIENT: Western Refining Southwest, Gallup
Lab Order: 1001264
Project: Qtrly Method 8260B Air Quality Permit 0633-M
Lab ID: 1001264-01

Client Sample ID: BZ 3 IN
Collection Date: 1/14/2010 9:00:00 AM
Date Received: 1/20/2010
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: HL
EPA METHOD 8260B: VOLATILES						
Benzene	23000	500		µg/L	500	1/20/2010 2:12:56 PM
Toluene	17000	500		µg/L	500	1/20/2010 2:12:56 PM
Ethylbenzene	810	500		µg/L	500	1/20/2010 2:12:56 PM
Methyl tert-butyl ether (MTBE)	ND	500		µg/L	500	1/20/2010 2:12:56 PM
1,2,4-Trimethylbenzene	580	500		µg/L	500	1/20/2010 2:12:56 PM
1,3,5-Trimethylbenzene	ND	500		µg/L	500	1/20/2010 2:12:56 PM
1,2-Dichloroethane (EDC)	ND	500		µg/L	500	1/20/2010 2:12:56 PM
1,2-Dibromoethane (EDB)	ND	500		µg/L	500	1/20/2010 2:12:56 PM
Naphthalene	ND	1000		µg/L	500	1/20/2010 2:12:56 PM
1-Methylnaphthalene	ND	2000		µg/L	500	1/20/2010 2:12:56 PM
2-Methylnaphthalene	ND	2000		µg/L	500	1/20/2010 2:12:56 PM
Acetone	5100	5000		µg/L	500	1/20/2010 2:12:56 PM
Bromobenzene	ND	500		µg/L	500	1/20/2010 2:12:56 PM
Bromodichloromethane	ND	500		µg/L	500	1/20/2010 2:12:56 PM
Bromoform	ND	500		µg/L	500	1/20/2010 2:12:56 PM
Bromomethane	ND	500		µg/L	500	1/20/2010 2:12:56 PM
2-Butanone	ND	5000		µg/L	500	1/20/2010 2:12:56 PM
Carbon disulfide	ND	5000		µg/L	500	1/20/2010 2:12:56 PM
Carbon Tetrachloride	ND	500		µg/L	500	1/20/2010 2:12:56 PM
Chlorobenzene	ND	500		µg/L	500	1/20/2010 2:12:56 PM
Chloroethane	ND	1000		µg/L	500	1/20/2010 2:12:56 PM
Chloroform	ND	500		µg/L	500	1/20/2010 2:12:56 PM
Chloromethane	ND	500		µg/L	500	1/20/2010 2:12:56 PM
2-Chlorotoluene	ND	500		µg/L	500	1/20/2010 2:12:56 PM
4-Chlorotoluene	ND	500		µg/L	500	1/20/2010 2:12:56 PM
cis-1,2-DCE	ND	500		µg/L	500	1/20/2010 2:12:56 PM
cis-1,3-Dichloropropene	ND	500		µg/L	500	1/20/2010 2:12:56 PM
1,2-Dibromo-3-chloropropane	ND	1000		µg/L	500	1/20/2010 2:12:56 PM
Dibromochloromethane	ND	500		µg/L	500	1/20/2010 2:12:56 PM
Dibromomethane	ND	500		µg/L	500	1/20/2010 2:12:56 PM
1,2-Dichlorobenzene	ND	500		µg/L	500	1/20/2010 2:12:56 PM
1,3-Dichlorobenzene	ND	500		µg/L	500	1/20/2010 2:12:56 PM
1,4-Dichlorobenzene	ND	500		µg/L	500	1/20/2010 2:12:56 PM
Dichlorodifluoromethane	ND	500		µg/L	500	1/20/2010 2:12:56 PM
1,1-Dichloroethane	ND	500		µg/L	500	1/20/2010 2:12:56 PM
1,1-Dichloroethene	ND	500		µg/L	500	1/20/2010 2:12:56 PM
1,2-Dichloropropane	ND	500		µg/L	500	1/20/2010 2:12:56 PM
1,3-Dichloropropane	ND	1000		µg/L	500	1/20/2010 2:12:56 PM
2,2-Dichloropropane	ND	500		µg/L	500	1/20/2010 2:12:56 PM
1,1-Dichloropropene	ND	500		µg/L	500	1/20/2010 2:12:56 PM
Hexachlorobutadiene	ND	5000		µg/L	500	1/20/2010 2:12:56 PM
2-Hexanone						

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: *26-Jan-10*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BZ 3 IN
Lab Order:	1001264	**Collection Date:**	1/14/2010 9:00:00 AM
Project:	Qtrly Method 8260B Air Quality Permit 0633-M	**Date Received:**	1/20/2010
Lab ID:	1001264-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
Isopropylbenzene	ND	500		µg/L	500	1/20/2010 2:12:56 PM
4-Isopropyltoluene	ND	500		µg/L	500	1/20/2010 2:12:56 PM
4-Methyl-2-pentanone	ND	5000		µg/L	500	1/20/2010 2:12:56 PM
Methylene Chloride	ND	1500		µg/L	500	1/20/2010 2:12:56 PM
n-Butylbenzene	ND	500		µg/L	500	1/20/2010 2:12:56 PM
n-Propylbenzene	ND	500		µg/L	500	1/20/2010 2:12:56 PM
sec-Butylbenzene	ND	500		µg/L	500	1/20/2010 2:12:56 PM
Styrene	ND	500		µg/L	500	1/20/2010 2:12:56 PM
tert-Butylbenzene	ND	500		µg/L	500	1/20/2010 2:12:56 PM
1,1,1,2-Tetrachloroethane	ND	500		µg/L	500	1/20/2010 2:12:56 PM
1,1,2,2-Tetrachloroethane	ND	1000		µg/L	500	1/20/2010 2:12:56 PM
Tetrachloroethene (PCE)	ND	500		µg/L	500	1/20/2010 2:12:56 PM
trans-1,2-DCE	ND	500		µg/L	500	1/20/2010 2:12:56 PM
trans-1,3-Dichloropropene	ND	500		µg/L	500	1/20/2010 2:12:56 PM
1,2,3-Trichlorobenzene	ND	500		µg/L	500	1/20/2010 2:12:56 PM
1,2,4-Trichlorobenzene	ND	500		µg/L	500	1/20/2010 2:12:56 PM
1,1,1-Trichloroethane	ND	500		µg/L	500	1/20/2010 2:12:56 PM
1,1,2-Trichloroethane	ND	500		µg/L	500	1/20/2010 2:12:56 PM
Trichloroethene (TCE)	ND	500		µg/L	500	1/20/2010 2:12:56 PM
Trichlorofluoromethane	ND	500		µg/L	500	1/20/2010 2:12:56 PM
1,2,3-Trichloropropane	ND	1000		µg/L	500	1/20/2010 2:12:56 PM
Vinyl chloride	ND	500		µg/L	500	1/20/2010 2:12:56 PM
Xylenes, Total	5300	750		µg/L	500	1/20/2010 2:12:56 PM
Surr: 1,2-Dichloroethane-d4	102	54.6-141		%REC	500	1/20/2010 2:12:56 PM
Surr: 4-Bromofluorobenzene	117	60.1-133		%REC	500	1/20/2010 2:12:56 PM
Surr: Dibromofluoromethane	102	78.5-130		%REC	500	1/20/2010 2:12:56 PM
Surr: Toluene-d8	104	79.5-126		%REC	500	1/20/2010 2:12:56 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *26-Jan-10*

CLIENT: Western Refining Southwest, Gallup
Lab Order: 1001264
Project: Qtrly Method 8260B Air Quality Permit 0633-M
Lab ID: 1001264-02

Client Sample ID: BZ 3 OUT
Collection Date: 1/14/2010 9:15:00 AM
Date Received: 1/20/2010
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: HL
EPA METHOD 8260B: VOLATILES						
Benzene	5500	100		µg/L	100	1/20/2010 5:27:11 PM
Toluene	2800	50		µg/L	50	1/20/2010 2:40:42 PM
Ethylbenzene	89	50		µg/L	50	1/20/2010 2:40:42 PM
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	1/20/2010 2:40:42 PM
1,2,4-Trimethylbenzene	120	50		µg/L	50	1/20/2010 2:40:42 PM
1,3,5-Trimethylbenzene	ND	50		µg/L	50	1/20/2010 2:40:42 PM
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	1/20/2010 2:40:42 PM
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	1/20/2010 2:40:42 PM
Naphthalene	ND	100		µg/L	50	1/20/2010 2:40:42 PM
1-Methylnaphthalene	ND	200		µg/L	50	1/20/2010 2:40:42 PM
2-Methylnaphthalene	ND	200		µg/L	50	1/20/2010 2:40:42 PM
Acetone	1800	500		µg/L	50	1/20/2010 2:40:42 PM
Bromobenzene	ND	50		µg/L	50	1/20/2010 2:40:42 PM
Bromodichloromethane	ND	50		µg/L	50	1/20/2010 2:40:42 PM
Bromoform	ND	50		µg/L	50	1/20/2010 2:40:42 PM
Bromomethane	ND	50		µg/L	50	1/20/2010 2:40:42 PM
2-Butanone	ND	500		µg/L	50	1/20/2010 2:40:42 PM
Carbon disulfide	ND	500		µg/L	50	1/20/2010 2:40:42 PM
Carbon Tetrachloride	ND	50		µg/L	50	1/20/2010 2:40:42 PM
Chlorobenzene	ND	50		µg/L	50	1/20/2010 2:40:42 PM
Chloroethane	ND	100		µg/L	50	1/20/2010 2:40:42 PM
Chloroform	ND	50		µg/L	50	1/20/2010 2:40:42 PM
Chloromethane	ND	50		µg/L	50	1/20/2010 2:40:42 PM
2-Chlorotoluene	ND	50		µg/L	50	1/20/2010 2:40:42 PM
4-Chlorotoluene	ND	50		µg/L	50	1/20/2010 2:40:42 PM
cis-1,2-DCE	ND	50		µg/L	50	1/20/2010 2:40:42 PM
cis-1,3-Dichloropropene	ND	50		µg/L	50	1/20/2010 2:40:42 PM
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	1/20/2010 2:40:42 PM
Dibromochloromethane	ND	50		µg/L	50	1/20/2010 2:40:42 PM
Dibromomethane	ND	50		µg/L	50	1/20/2010 2:40:42 PM
1,2-Dichlorobenzene	ND	50		µg/L	50	1/20/2010 2:40:42 PM
1,3-Dichlorobenzene	ND	50		µg/L	50	1/20/2010 2:40:42 PM
1,4-Dichlorobenzene	ND	50		µg/L	50	1/20/2010 2:40:42 PM
Dichlorodifluoromethane	ND	50		µg/L	50	1/20/2010 2:40:42 PM
1,1-Dichloroethane	ND	50		µg/L	50	1/20/2010 2:40:42 PM
1,1-Dichloroethene	ND	50		µg/L	50	1/20/2010 2:40:42 PM
1,2-Dichloropropane	ND	50		µg/L	50	1/20/2010 2:40:42 PM
1,3-Dichloropropane	ND	100		µg/L	50	1/20/2010 2:40:42 PM
2,2-Dichloropropane	ND	50		µg/L	50	1/20/2010 2:40:42 PM
1,1-Dichloropropene	ND	50		µg/L	50	1/20/2010 2:40:42 PM
Hexachlorobutadiene	ND	500		µg/L	50	1/20/2010 2:40:42 PM
2-Hexanone						

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: *26-Jan-10*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BZ 3 OUT
Lab Order:	1001264	**Collection Date:**	1/14/2010 9:15:00 AM
Project:	Qtrly Method 8260B Air Quality Permit 0633-M	**Date Received:**	1/20/2010
Lab ID:	1001264-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
Isopropylbenzene	ND	50		µg/L	50	1/20/2010 2:40:42 PM
4-Isopropyltoluene	ND	50		µg/L	50	1/20/2010 2:40:42 PM
4-Methyl-2-pentanone	ND	500		µg/L	50	1/20/2010 2:40:42 PM
Methylene Chloride	ND	150		µg/L	50	1/20/2010 2:40:42 PM
n-Butylbenzene	ND	50		µg/L	50	1/20/2010 2:40:42 PM
n-Propylbenzene	ND	50		µg/L	50	1/20/2010 2:40:42 PM
sec-Butylbenzene	ND	50		µg/L	50	1/20/2010 2:40:42 PM
Styrene	ND	50		µg/L	50	1/20/2010 2:40:42 PM
tert-Butylbenzene	ND	50		µg/L	50	1/20/2010 2:40:42 PM
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	1/20/2010 2:40:42 PM
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	1/20/2010 2:40:42 PM
Tetrachloroethene (PCE)	ND	50		µg/L	50	1/20/2010 2:40:42 PM
trans-1,2-DCE	ND	50		µg/L	50	1/20/2010 2:40:42 PM
trans-1,3-Dichloropropene	ND	50		µg/L	50	1/20/2010 2:40:42 PM
1,2,3-Trichlorobenzene	ND	50		µg/L	50	1/20/2010 2:40:42 PM
1,2,4-Trichlorobenzene	ND	50		µg/L	50	1/20/2010 2:40:42 PM
1,1,1-Trichloroethane	ND	50		µg/L	50	1/20/2010 2:40:42 PM
1,1,2-Trichloroethane	ND	50		µg/L	50	1/20/2010 2:40:42 PM
Trichloroethene (TCE)	ND	50		µg/L	50	1/20/2010 2:40:42 PM
Trichlorofluoromethane	ND	50		µg/L	50	1/20/2010 2:40:42 PM
1,2,3-Trichloropropane	ND	100		µg/L	50	1/20/2010 2:40:42 PM
Vinyl chloride	ND	50		µg/L	50	1/20/2010 2:40:42 PM
Xylenes, Total	630	75		µg/L	50	1/20/2010 2:40:42 PM
Surr: 1,2-Dichloroethane-d4	102	54.6-141		%REC	50	1/20/2010 2:40:42 PM
Surr: 4-Bromofluorobenzene	116	60.1-133		%REC	50	1/20/2010 2:40:42 PM
Surr: Dibromofluoromethane	105	78.5-130		%REC	50	1/20/2010 2:40:42 PM
Surr: Toluene-d8	101	79.5-126		%REC	50	1/20/2010 2:40:42 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *26-Jan-10*

CLIENT: Western Refining Southwest, Gallup
Lab Order: 1001264
Project: Qtrly Method 8260B Air Quality Permit 0633-M
Lab ID: 1001264-03

Client Sample ID: BZ 1-2 IN
Collection Date: 1/14/2010 10:00:00 AM
Date Received: 1/20/2010
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: HL
EPA METHOD 8260B: VOLATILES						
Benzene	5600	200		µg/L	200	1/20/2010 3:08:29 PM
Toluene	11000	200		µg/L	200	1/20/2010 3:08:29 PM
Ethylbenzene	910	200		µg/L	200	1/20/2010 3:08:29 PM
Methyl tert-butyl ether (MTBE)	ND	200		µg/L	200	1/20/2010 3:08:29 PM
1,2,4-Trimethylbenzene	710	200		µg/L	200	1/20/2010 3:08:29 PM
1,3,5-Trimethylbenzene	ND	200		µg/L	200	1/20/2010 3:08:29 PM
1,2-Dichloroethane (EDC)	ND	200		µg/L	200	1/20/2010 3:08:29 PM
1,2-Dibromoethane (EDB)	ND	200		µg/L	200	1/20/2010 3:08:29 PM
Naphthalene	ND	400		µg/L	200	1/20/2010 3:08:29 PM
1-Methylnaphthalene	ND	800		µg/L	200	1/20/2010 3:08:29 PM
2-Methylnaphthalene	ND	800		µg/L	200	1/20/2010 3:08:29 PM
Acetone	2600	2000		µg/L	200	1/20/2010 3:08:29 PM
Bromobenzene	ND	200		µg/L	200	1/20/2010 3:08:29 PM
Bromodichloromethane	ND	200		µg/L	200	1/20/2010 3:08:29 PM
Bromoform	ND	200		µg/L	200	1/20/2010 3:08:29 PM
Bromomethane	ND	200		µg/L	200	1/20/2010 3:08:29 PM
2-Butanone	ND	2000		µg/L	200	1/20/2010 3:08:29 PM
Carbon disulfide	ND	2000		µg/L	200	1/20/2010 3:08:29 PM
Carbon Tetrachloride	ND	200		µg/L	200	1/20/2010 3:08:29 PM
Chlorobenzene	ND	200		µg/L	200	1/20/2010 3:08:29 PM
Chloroethane	ND	400		µg/L	200	1/20/2010 3:08:29 PM
Chloroform	ND	200		µg/L	200	1/20/2010 3:08:29 PM
Chloromethane	ND	200		µg/L	200	1/20/2010 3:08:29 PM
2-Chlorotoluene	ND	200		µg/L	200	1/20/2010 3:08:29 PM
4-Chlorotoluene	ND	200		µg/L	200	1/20/2010 3:08:29 PM
cis-1,2-DCE	ND	200		µg/L	200	1/20/2010 3:08:29 PM
cis-1,3-Dichloropropene	ND	200		µg/L	200	1/20/2010 3:08:29 PM
1,2-Dibromo-3-chloropropane	ND	400		µg/L	200	1/20/2010 3:08:29 PM
Dibromochloromethane	ND	200		µg/L	200	1/20/2010 3:08:29 PM
Dibromomethane	ND	200		µg/L	200	1/20/2010 3:08:29 PM
1,2-Dichlorobenzene	ND	200		µg/L	200	1/20/2010 3:08:29 PM
1,3-Dichlorobenzene	ND	200		µg/L	200	1/20/2010 3:08:29 PM
1,4-Dichlorobenzene	ND	200		µg/L	200	1/20/2010 3:08:29 PM
Dichlorodifluoromethane	ND	200		µg/L	200	1/20/2010 3:08:29 PM
1,1-Dichloroethane	ND	200		µg/L	200	1/20/2010 3:08:29 PM
1,1-Dichloroethene	ND	200		µg/L	200	1/20/2010 3:08:29 PM
1,2-Dichloropropane	ND	200		µg/L	200	1/20/2010 3:08:29 PM
1,3-Dichloropropane	ND	200		µg/L	200	1/20/2010 3:08:29 PM
2,2-Dichloropropane	ND	400		µg/L	200	1/20/2010 3:08:29 PM
1,1-Dichloropropene	ND	200		µg/L	200	1/20/2010 3:08:29 PM
Hexachlorobutadiene	ND	200		µg/L	200	1/20/2010 3:08:29 PM
2-Hexanone	ND	2000		µg/L	200	1/20/2010 3:08:29 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: *26-Jan-10*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BZ 1-2 IN
Lab Order:	1001264	**Collection Date:**	1/14/2010 10:00:00 AM
Project:	Qtrly Method 8260B Air Quality Permit 0633-M	**Date Received:**	1/20/2010
Lab ID:	1001264-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
Isopropylbenzene	ND	200		µg/L	200	1/20/2010 3:08:29 PM
4-Isopropyltoluene	ND	200		µg/L	200	1/20/2010 3:08:29 PM
4-Methyl-2-pentanone	ND	2000		µg/L	200	1/20/2010 3:08:29 PM
Methylene Chloride	ND	600		µg/L	200	1/20/2010 3:08:29 PM
n-Butylbenzene	ND	200		µg/L	200	1/20/2010 3:08:29 PM
n-Propylbenzene	ND	200		µg/L	200	1/20/2010 3:08:29 PM
sec-Butylbenzene	ND	200		µg/L	200	1/20/2010 3:08:29 PM
Styrene	ND	200		µg/L	200	1/20/2010 3:08:29 PM
tert-Butylbenzene	ND	200		µg/L	200	1/20/2010 3:08:29 PM
1,1,1,2-Tetrachloroethane	ND	200		µg/L	200	1/20/2010 3:08:29 PM
1,1,2,2-Tetrachloroethane	ND	400		µg/L	200	1/20/2010 3:08:29 PM
Tetrachloroethene (PCE)	ND	200		µg/L	200	1/20/2010 3:08:29 PM
trans-1,2-DCE	ND	200		µg/L	200	1/20/2010 3:08:29 PM
trans-1,3-Dichloropropene	ND	200		µg/L	200	1/20/2010 3:08:29 PM
1,2,3-Trichlorobenzene	ND	200		µg/L	200	1/20/2010 3:08:29 PM
1,2,4-Trichlorobenzene	ND	200		µg/L	200	1/20/2010 3:08:29 PM
1,1,1-Trichloroethane	ND	200		µg/L	200	1/20/2010 3:08:29 PM
1,1,2-Trichloroethane	ND	200		µg/L	200	1/20/2010 3:08:29 PM
Trichloroethene (TCE)	ND	200		µg/L	200	1/20/2010 3:08:29 PM
Trichlorofluoromethane	ND	200		µg/L	200	1/20/2010 3:08:29 PM
1,2,3-Trichloropropane	ND	400		µg/L	200	1/20/2010 3:08:29 PM
Vinyl chloride	ND	200		µg/L	200	1/20/2010 3:08:29 PM
Xylenes, Total	5300	300		µg/L	200	1/20/2010 3:08:29 PM
Surr: 1,2-Dichloroethane-d4	103	54.6-141		%REC	200	1/20/2010 3:08:29 PM
Surr: 4-Bromofluorobenzene	114	60.1-133		%REC	200	1/20/2010 3:08:29 PM
Surr: Dibromofluoromethane	103	78.5-130		%REC	200	1/20/2010 3:08:29 PM
Surr: Toluene-d8	105	79.5-126		%REC	200	1/20/2010 3:08:29 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *26-Jan-10*

CLIENT: Western Refining Southwest, Gallup
Lab Order: 1001264
Project: Qtrly Method 8260B Air Quality Permit 0633-M
Lab ID: 1001264-04

Client Sample ID: BZ 1-2 OUT
Collection Date: 1/14/2010 10:15:00 AM
Date Received: 1/20/2010
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: HL
EPA METHOD 8260B: VOLATILES						
Benzene	310	20		µg/L	20	1/20/2010 4:04:01 PM
Toluene	780	20		µg/L	20	1/20/2010 4:04:01 PM
Ethylbenzene	120	20		µg/L	20	1/20/2010 4:04:01 PM
Methyl tert-butyl ether (MTBE)	ND	20		µg/L	20	1/20/2010 4:04:01 PM
1,2,4-Trimethylbenzene	250	20		µg/L	20	1/20/2010 4:04:01 PM
1,3,5-Trimethylbenzene	79	20		µg/L	20	1/20/2010 4:04:01 PM
1,2-Dichloroethane (EDC)	ND	20		µg/L	20	1/20/2010 4:04:01 PM
1,2-Dibromoethane (EDB)	ND	20		µg/L	20	1/20/2010 4:04:01 PM
Naphthalene	170	40		µg/L	20	1/20/2010 4:04:01 PM
1-Methylnaphthalene	210	80		µg/L	20	1/20/2010 4:04:01 PM
2-Methylnaphthalene	330	80		µg/L	20	1/20/2010 4:04:01 PM
Acetone	1500	200		µg/L	20	1/20/2010 4:04:01 PM
Bromobenzene	ND	20		µg/L	20	1/20/2010 4:04:01 PM
Bromodichloromethane	ND	20		µg/L	20	1/20/2010 4:04:01 PM
Bromoform	ND	20		µg/L	20	1/20/2010 4:04:01 PM
Bromomethane	ND	20		µg/L	20	1/20/2010 4:04:01 PM
2-Butanone	ND	200		µg/L	20	1/20/2010 4:04:01 PM
Carbon disulfide	ND	200		µg/L	20	1/20/2010 4:04:01 PM
Carbon Tetrachloride	ND	20		µg/L	20	1/20/2010 4:04:01 PM
Chlorobenzene	ND	20		µg/L	20	1/20/2010 4:04:01 PM
Chloroethane	ND	40		µg/L	20	1/20/2010 4:04:01 PM
Chloroform	ND	20		µg/L	20	1/20/2010 4:04:01 PM
Chloromethane	ND	20		µg/L	20	1/20/2010 4:04:01 PM
2-Chlorotoluene	ND	20		µg/L	20	1/20/2010 4:04:01 PM
4-Chlorotoluene	ND	20		µg/L	20	1/20/2010 4:04:01 PM
cis-1,2-DCE	ND	20		µg/L	20	1/20/2010 4:04:01 PM
cis-1,3-Dichloropropene	ND	20		µg/L	20	1/20/2010 4:04:01 PM
1,2-Dibromo-3-chloropropane	ND	40		µg/L	20	1/20/2010 4:04:01 PM
Dibromochloromethane	ND	20		µg/L	20	1/20/2010 4:04:01 PM
Dibromomethane	ND	20		µg/L	20	1/20/2010 4:04:01 PM
1,2-Dichlorobenzene	ND	20		µg/L	20	1/20/2010 4:04:01 PM
1,3-Dichlorobenzene	ND	20		µg/L	20	1/20/2010 4:04:01 PM
1,4-Dichlorobenzene	ND	20		µg/L	20	1/20/2010 4:04:01 PM
Dichlorodifluoromethane	ND	20		µg/L	20	1/20/2010 4:04:01 PM
1,1-Dichloroethane	ND	20		µg/L	20	1/20/2010 4:04:01 PM
1,1-Dichloroethene	ND	20		µg/L	20	1/20/2010 4:04:01 PM
1,2-Dichloropropane	ND	20		µg/L	20	1/20/2010 4:04:01 PM
1,3-Dichloropropane	ND	40		µg/L	20	1/20/2010 4:04:01 PM
2,2-Dichloropropane	ND	20		µg/L	20	1/20/2010 4:04:01 PM
1,1-Dichloropropene	ND	20		µg/L	20	1/20/2010 4:04:01 PM
Hexachlorobutadiene	ND	200		µg/L	20	1/20/2010 4:04:01 PM
2-Hexanone						

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: *26-Jan-10*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BZ 1-2 OUT
Lab Order:	1001264	**Collection Date:**	1/14/2010 10:15:00 AM
Project:	Qtrly Method 8260B Air Quality Permit 0633-M	**Date Received:**	1/20/2010
Lab ID:	1001264-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
Isopropylbenzene	ND	20		µg/L	20	1/20/2010 4:04:01 PM
4-Isopropyltoluene	ND	20		µg/L	20	1/20/2010 4:04:01 PM
4-Methyl-2-pentanone	ND	200		µg/L	20	1/20/2010 4:04:01 PM
Methylene Chloride	ND	60		µg/L	20	1/20/2010 4:04:01 PM
n-Butylbenzene	ND	20		µg/L	20	1/20/2010 4:04:01 PM
n-Propylbenzene	34	20		µg/L	20	1/20/2010 4:04:01 PM
sec-Butylbenzene	ND	20		µg/L	20	1/20/2010 4:04:01 PM
Styrene	ND	20		µg/L	20	1/20/2010 4:04:01 PM
tert-Butylbenzene	ND	20		µg/L	20	1/20/2010 4:04:01 PM
1,1,1,2-Tetrachloroethane	ND	20		µg/L	20	1/20/2010 4:04:01 PM
1,1,2,2-Tetrachloroethane	ND	40		µg/L	20	1/20/2010 4:04:01 PM
Tetrachloroethene (PCE)	ND	20		µg/L	20	1/20/2010 4:04:01 PM
trans-1,2-DCE	ND	20		µg/L	20	1/20/2010 4:04:01 PM
trans-1,3-Dichloropropene	ND	20		µg/L	20	1/20/2010 4:04:01 PM
1,2,3-Trichlorobenzene	ND	20		µg/L	20	1/20/2010 4:04:01 PM
1,2,4-Trichlorobenzene	ND	20		µg/L	20	1/20/2010 4:04:01 PM
1,1,1-Trichloroethane	ND	20		µg/L	20	1/20/2010 4:04:01 PM
1,1,2-Trichloroethane	ND	20		µg/L	20	1/20/2010 4:04:01 PM
Trichloroethene (TCE)	ND	20		µg/L	20	1/20/2010 4:04:01 PM
Trichlorofluoromethane	ND	20		µg/L	20	1/20/2010 4:04:01 PM
1,2,3-Trichloropropane	ND	40		µg/L	20	1/20/2010 4:04:01 PM
Vinyl chloride	ND	20		µg/L	20	1/20/2010 4:04:01 PM
Xylenes, Total	720	30		µg/L	20	1/20/2010 4:04:01 PM
Surr: 1,2-Dichloroethane-d4	102	54.6-141		%REC	20	1/20/2010 4:04:01 PM
Surr: 4-Bromofluorobenzene	118	60.1-133		%REC	20	1/20/2010 4:04:01 PM
Surr: Dibromofluoromethane	105	78.5-130		%REC	20	1/20/2010 4:04:01 PM
Surr: Toluene-d8	106	79.5-126		%REC	20	1/20/2010 4:04:01 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Qtrly Method 8260B Air Quality Permit 0633-M
Work Order: 1001264

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES											
Sample ID: 5ml rb		*MBLK*									
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0								
1,2,4-Trimethylbenzene	ND	µg/L	1.0								
1,3,5-Trimethylbenzene	ND	µg/L	1.0								
1,2-Dichloroethane (EDC)	ND	µg/L	1.0								
1,2-Dibromoethane (EDB)	ND	µg/L	1.0								
Naphthalene	ND	µg/L	2.0								
1-Methylnaphthalene	ND	µg/L	4.0								
2-Methylnaphthalene	ND	µg/L	4.0								
Acetone	ND	µg/L	10								
Bromobenzene	ND	µg/L	1.0								
Bromodichloromethane	ND	µg/L	1.0								
Bromoform	ND	µg/L	1.0								
Bromomethane	ND	µg/L	1.0								
2-Butanone	ND	µg/L	10								
Carbon disulfide	ND	µg/L	10								
Carbon Tetrachloride	ND	µg/L	1.0								
Chlorobenzene	ND	µg/L	1.0								
Chloroethane	ND	µg/L	2.0								
Chloroform	ND	µg/L	1.0								
Chloromethane	ND	µg/L	1.0								
2-Chlorotoluene	ND	µg/L	1.0								
4-Chlorotoluene	ND	µg/L	1.0								
cis-1,2-DCE	ND	µg/L	1.0								
cis-1,3-Dichloropropene	ND	µg/L	1.0								
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0								
Dibromochloromethane	ND	µg/L	1.0								
Dibromomethane	ND	µg/L	1.0								
1,2-Dichlorobenzene	ND	µg/L	1.0								
1,3-Dichlorobenzene	ND	µg/L	1.0								
1,4-Dichlorobenzene	ND	µg/L	1.0								
Dichlorodifluoromethane	ND	µg/L	1.0								
1,1-Dichloroethane	ND	µg/L	1.0								
1,1-Dichloroethene	ND	µg/L	1.0								
1,2-Dichloropropane	ND	µg/L	1.0								
1,3-Dichloropropane	ND	µg/L	1.0								
2,2-Dichloropropane	ND	µg/L	2.0								
1,1-Dichloropropene	ND	µg/L	1.0								
Hexachlorobutadiene	ND	µg/L	1.0								
2-Hexanone	ND	µg/L	10								
Isopropylbenzene	ND	µg/L	1.0								
4-Isopropyltoluene	ND	µg/L	1.0								

Batch ID: **R37040** Analysis Date: 1/20/2010 12:06:11 PM

Qualifiers:

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

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Qtrly Method 8260B Air Quality Permit 0633-M **Work Order:** 1001264

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES											
Sample ID: 5ml rb		*MBLK*				Batch ID:	**R37040**	Analysis Date:		1/20/2010 12:06:11 PM	
4-Methyl-2-pentanone	ND	µg/L	10								
Methylene Chloride	ND	µg/L	3.0								
n-Butylbenzene	ND	µg/L	1.0								
n-Propylbenzene	ND	µg/L	1.0								
sec-Butylbenzene	ND	µg/L	1.0								
Styrene	ND	µg/L	1.0								
tert-Butylbenzene	ND	µg/L	1.0								
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0								
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0								
Tetrachloroethene (PCE)	ND	µg/L	1.0								
trans-1,2-DCE	ND	µg/L	1.0								
trans-1,3-Dichloropropene	ND	µg/L	1.0								
1,2,3-Trichlorobenzene	ND	µg/L	1.0								
1,2,4-Trichlorobenzene	ND	µg/L	1.0								
1,1,1-Trichloroethane	ND	µg/L	1.0								
1,1,2-Trichloroethane	ND	µg/L	1.0								
Trichloroethene (TCE)	ND	µg/L	1.0								
Trichlorofluoromethane	ND	µg/L	1.0								
1,2,3-Trichloropropane	ND	µg/L	2.0								
Vinyl chloride	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	1.5								
Sample ID: 100ng lcs		*LCS*				Batch ID:	**R37040**	Analysis Date:		1/20/2010 1:17:29 PM	
Benzene	19.53	µg/L	1.0	20	0	97.7	76.7	114			
Toluene	20.78	µg/L	1.0	20	0	104	78.4	117			
Chlorobenzene	20.62	µg/L	1.0	20	0	103	80.7	127			
1,1-Dichloroethene	22.21	µg/L	1.0	20	0	111	80.2	128			
Trichloroethene (TCE)	16.94	µg/L	1.0	20	0	84.7	77.4	115			
Sample ID: 100ng lcs-dup		*LCSD*				Batch ID:	**R37040**	Analysis Date:		1/20/2010 6:22:38 PM	
Benzene	19.32	µg/L	1.0	20	0	96.6	76.7	114	1.08	11	
Toluene	20.27	µg/L	1.0	20	0	101	78.4	117	2.48	12.2	
Chlorobenzene	20.58	µg/L	1.0	20	0	103	80.7	127	0.200	12	
1,1-Dichloroethene	22.07	µg/L	1.0	20	0	110	80.2	128	0.649	19.3	
Trichloroethene (TCE)	17.19	µg/L	1.0	20	0	85.9	77.4	115	1.45	15.5	

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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **WESTERN REFINING GALLU**

Date Received: **1/20/2010**

Work Order Number **1001264**

Received by: ARS

Sample ID labels checked by: _____ Initials

Checklist completed by: _____ Signature 1/20/10 Date

Matrix:

Carrier name: FedEx

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 ☐	Number of preserved bottles checked for pH: _____
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	*<2 >12 unless noted below.*
Container/Temp Blank temperature?	**3.1°**	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: WESTERN - REFINING
Gallup Refinery
Mailing Address: RT 3 Box 9
Gallup NM 87301
Phone #: 505 722 3833
email or Fax#: 505 722 0210
QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☐ Standard ☐ Rush
Project Name: QUARTERLY METHOD 8260 B
AIRQUALITY PERMIT 0633-M7
Project #:
Project Manager: GAURAV, RAJEN
Sampler: ALVIN DORSEY
On Ice: ☑ Yes ☐ No
Sample Temperature: 3.1

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. 1001261	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) All Voc	8270 (Semi-VOA)					Air Bubbles (Y or N)
01-14-10	0900	AQ	BZ 3 IN	40ML-3	HCL	1										X						
01-14-10	0915	↓	BZ 3 OUT	40ML-3	HCL	2										X						
01-14-10	1000	↓	BZ 1-2 IN	40ML-3	HCL	3										X						
01-14-10	1015	↓	BZ 1-2 OUT	40ML-3	HCL	4										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
01-19-10	12:00	[signature]	[signature]	1/20/10	8:55
Date:	Time:	Relinquished by:	Received by:	Date	Time

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

COVER LETTER

Tuesday, January 26, 2010

Gaurav Rajen
Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-3833
FAX (505) 722-0210

RE: BZ Strippers

Order No.: 1001263

Dear Gaurav Rajen:

Hall Environmental Analysis Laboratory, Inc. received 4 sample(s) on 1/20/2010 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,

For Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *26-Jan-10*

CLIENT: Western Refining Southwest, Gallup
Project: BZ Strippers

Lab Order: 1001263

Lab ID: 1001263-01
Client Sample ID: BZ 3 IN

Collection Date: 1/18/2010 9:00:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: **NSB**
EPA METHOD 8021B: VOLATILES						
Methyl tert-butyl ether (MTBE)	ND	1300		µg/L	500	1/22/2010 2:18:23 PM
Benzene	22000	500		µg/L	500	1/22/2010 2:18:23 PM
Toluene	18000	500		µg/L	500	1/22/2010 2:18:23 PM
Ethylbenzene	1200	500		µg/L	500	1/22/2010 2:18:23 PM
Xylenes, Total	7700	1000		µg/L	500	1/22/2010 2:18:23 PM
Surr: 4-Bromofluorobenzene	98.7	65.9-130		%REC	500	1/22/2010 2:18:23 PM

Lab ID: 1001263-02
Client Sample ID: BZ 3 OUT

Collection Date: 1/18/2010 9:15:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: **NSB**
EPA METHOD 8021B: VOLATILES						
Methyl tert-butyl ether (MTBE)	ND	130		µg/L	50	1/22/2010 2:48:45 PM
Benzene	6700	100		µg/L	100	1/25/2010 1:17:04 PM
Toluene	5700	100		µg/L	100	1/25/2010 1:17:04 PM
Ethylbenzene	350	50		µg/L	50	1/22/2010 2:48:45 PM
Xylenes, Total	2400	100		µg/L	50	1/22/2010 2:48:45 PM
Surr: 4-Bromofluorobenzene	119	65.9-130		%REC	50	1/22/2010 2:48:45 PM

Lab ID: 1001263-03
Client Sample ID: BZ 1-2 IN

Collection Date: 1/18/2010 10:30:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: **NSB**
EPA METHOD 8021B: VOLATILES						
Methyl tert-butyl ether (MTBE)	ND	500		µg/L	200	1/22/2010 3:19:15 PM
Benzene	5700	200		µg/L	200	1/22/2010 3:19:15 PM
Toluene	13000	200		µg/L	200	1/22/2010 3:19:15 PM
Ethylbenzene	1400	200		µg/L	200	1/22/2010 3:19:15 PM
Xylenes, Total	7000	400		µg/L	200	1/22/2010 3:19:15 PM
Surr: 4-Bromofluorobenzene	117	65.9-130		%REC	200	1/22/2010 3:19:15 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *26-Jan-10*

CLIENT: Western Refining Southwest, Gallup
Project: BZ Strippers

Lab Order: 1001263

Lab ID: 1001263-04
Client Sample ID: BZ 1-2 OUT

Collection Date: 1/18/2010 10:35:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	130		µg/L	50	1/22/2010 3:49:39 PM
Benzene	340	50		µg/L	50	1/22/2010 3:49:39 PM
Toluene	1100	50		µg/L	50	1/22/2010 3:49:39 PM
Ethylbenzene	220	50		µg/L	50	1/22/2010 3:49:39 PM
Xylenes, Total	1200	100		µg/L	50	1/22/2010 3:49:39 PM
Surr: 4-Bromofluorobenzene	122	65.9-130		%REC	50	1/22/2010 3:49:39 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: BZ Strippers
Work Order: 1001263

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8021B: Volatiles											
Sample ID: 5ML RB		*MBLK*				Batch ID:	**R37089**	Analysis Date:	1/22/2010 9:15:10 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								
Sample ID: 100NG BTEX LCS		*LCS*				Batch ID:	**R37089**	Analysis Date:	1/22/2010 8:52:53 PM		
Methyl tert-butyl ether (MTBE)	18.14	µg/L	2.5	20	0	90.7	51.2	138			
Benzene	20.72	µg/L	1.0	20	0	104	85.9	113			
Toluene	20.44	µg/L	1.0	20	0	102	86.4	113			
Ethylbenzene	20.79	µg/L	1.0	20	0	104	83.5	118			
Xylenes, Total	63.16	µg/L	2.0	60	0	105	83.4	122			

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **WESTERN REFINING GALLUP** Date Received: **1/20/2010**

Work Order Number **1001263** Received by: ARS

Sample ID labels checked by: _____ Initials

Checklist completed by: _____ Signature 1/20/10 Date

Matrix: Carrier name: FedEx

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 ☐		Number of preserved bottles checked for pH:
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 ☑	*<2 >12 unless noted below.*
Container/Temp Blank temperature?	**3.1°**	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: WESTERN REFINING Gallup Refinery

Mailing Address: RT 3 Box 9 Gallup NM 87301

Phone #: 505 722 3833

email or Fax#: 505 722 0210

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☐ Rush _____

Project Name: BZ STRIPPERS

Project #: WEEKLY

Project Manager: GAURAV, RAJEN

Sampler: ALVIN DORSEY

On Ice: ☑ Yes ☐ No

Sample Temperature: 3.1

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 (Bo 1/20/10)	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1001263	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	8021 B BTEX-MTBE				Air Bubbles (Y or N)
01-18-10	0900	AQ	BZ 3 IN	40mL-3	HCL	1												X				
01-18-10	0915	↓	BZ 3 OUT	40mL-3	HCL	2												X				
01-18-10	1030	↓	BZ 1-2 IN	40mL-3	HCL	3												X				
01-18-10	1035	↓	BZ 1-2 OUT	40mL-3	HCL	4												X				

Date	Time	Relinquished by	Received by	Date	Time
01-18-10	12:00	[signature]	[signature]	1/20/10	8:55
Date:	Time:	Relinquished by:	Received by:	Date	Time

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.