

May 2011

Gallup

 ENTERED

benzene exceedences



COVER LETTER

Tuesday, May 10, 2011

Thurman B. Larsen
Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301

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

RE: BZ Strippers

Order No.: 1105353

Dear Thurman B. Larsen:

Hall Environmental Analysis Laboratory, Inc. received 4 sample(s) on 5/9/2011 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. 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.

Please do not 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



Hall Environmental Analysis Laboratory, Inc.

Date: 10-May-11

CLIENT: Western Refining Southwest, Gallup
 Lab Order: 1105353
 Project: BZ Strippers
 Lab ID: 1105353-01

Client Sample ID: BZ 1-2 OUT
 Collection Date: 5/6/2011 8:00:00 AM
 Date Received: 5/9/2011
 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	5/9/2011 8:45:32 PM
Benzene	550	50	µg/L	50	5/9/2011 8:45:32 PM
Toluene	1100	50	µg/L	50	5/9/2011 8:45:32 PM
Ethylbenzene	100	50	µg/L	50	5/9/2011 8:45:32 PM
Xylenes, Total	650	100	µg/L	50	5/9/2011 8:45:32 PM
Surr: 4-Bromofluorobenzene	109	96.8-145	%REC	50	5/9/2011 8:45:32 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: 10-May-11

CLIENT:	Western Refining Southwest, Gallup	Client Sample ID:	BZ 1-2 OUT
Lab Order:	1105353	Collection Date:	5/7/2011 8:00:00 AM
Project:	BZ Strippers	Date Received:	5/9/2011
Lab ID:	1105353-02	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	5/9/2011 9:15:40 PM
Benzene	430	50		µg/L	50	5/9/2011 9:15:40 PM
Toluene	900	50		µg/L	50	5/9/2011 9:15:40 PM
Ethylbenzene	87	50		µg/L	50	5/9/2011 9:15:40 PM
Xylenes, Total	580	100		µg/L	50	5/9/2011 9:15:40 PM
Surr: 4-Bromofluorobenzene	117	96.8-145		%REC	50	5/9/2011 9:15:40 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 |
| NC Non-Chlorinated | ND Not Detected at the Reporting Limit |
| PQL Practical Quantitation Limit | S Spike recovery outside accepted recovery limits |

Hall Environmental Analysis Laboratory, Inc.

Date: 10-May-11

CLIENT: Western Refining Southwest, Gallup
 Lab Order: 1105353
 Project: BZ Strippers
 Lab ID: 1105353-03

Client Sample ID: BZ 1-2 OUT
~~Collection Date: 5/8/2011 8:00:00 AM~~
 Date Received: 5/9/2011
 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	5/9/2011 9:45:52 PM
Benzene	690	50		µg/L	50	5/9/2011 9:45:52 PM
Toluene	1300	50		µg/L	50	5/9/2011 9:45:52 PM
Ethylbenzene	91	50		µg/L	50	5/9/2011 9:45:52 PM
Xylenes, Total	570	100		µg/L	50	5/9/2011 9:45:52 PM
Surr: 4-Bromofluorobenzene	114	96.8-145		%REC	50	5/9/2011 9:45:52 PM

Qualifiers:

* Value exceeds Maximum Contaminant Level
 E Estimated value
 J Analyte detected below quantitation limits
 NC Non-Chlorinated
 PQL Practical Quantitation Limit

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: 10-May-11

CLIENT: Western Refining Southwest, Gallup
 Lab Order: 1105353
 Project: BZ Strippers
 Lab ID: 1105353-04

Client Sample ID: BZ 1-2 OUT
~~Collection Date: 5/9/2011 9:00:00 AM~~
 Date Received: 5/9/2011
 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	5/9/2011 10:15:56 PM
Benzene	530	50		µg/L	50	5/9/2011 10:15:56 PM
Toluene	1600	50		µg/L	50	5/9/2011 10:15:56 PM
Ethylbenzene	300	50		µg/L	50	5/9/2011 10:15:56 PM
Xylenes, Total	2000	100		µg/L	50	5/9/2011 10:15:56 PM
Surr: 4-Bromofluorobenzene	117	96.8-145		%REC	50	5/9/2011 10:15:56 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup

Project: BZ Strippers

Work Order: 1105353

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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Method: EPA Method 8021B: Volatiles

Sample ID: 5ML RB MBLK Batch ID: R45218 Analysis Date: 5/9/2011 8:40:10 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: R45218 Analysis Date: 5/9/2011 11:11:00 AM

Methyl tert-butyl ether (MTBE)	22.17	µg/L	2.5	20	0	111	97.6	132			
Benzene	22.96	µg/L	1.0	20	0	115	93.4	120			
Toluene	23.47	µg/L	1.0	20	0	117	96.2	122			
Ethylbenzene	22.41	µg/L	1.0	20	0	112	95	121			
Xylenes, Total	69.18	µg/L	2.0	60	0	115	97.6	122			

Sample ID: 100NG BTEX LCSD LCSD Batch ID: R45218 Analysis Date: 5/9/2011 7:15:22 PM

Methyl tert-butyl ether (MTBE)	21.70	µg/L	2.5	20	0	109	97.6	132	2.13	10.6	
Benzene	22.67	µg/L	1.0	20	0	113	93.4	120	1.28	10.1	
Toluene	23.11	µg/L	1.0	20	0	116	96.2	122	1.53	14.3	
Ethylbenzene	22.30	µg/L	1.0	20	0	111	95	121	0.519	15.5	
Xylenes, Total	69.61	µg/L	2.0	60	0	116	97.6	122	0.617	10.4	

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name WESTERN REFINING GALLU

Date Received:

5/9/2011

Work Order Number 1105353

Received by: MMG

Checklist completed by:

[Signature]
Signature

5/9/11
Date

Sample ID labels checked by:

[Initials]
Initials

Matrix:

Carrier name: Client drop-off

- 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? **1.0°** <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

Turn-Around Time: No Charge

Client: Western Refining
GALLUP REFINERY
 Mailing Address: RT3 Box 7
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) _____

Standard Rush
 Project Name: BZ strippers
 Project #: BZ 1-2 OUT
 Project Manager: THURMEN LORSEU
 Sampler: EH
 On Ice: Yes No
 Sample Temperature: 1.0



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.	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)	
5-6-11	8AM	H ₂ O	BZ 1-2 OUT	40ML-3	HCL	1105853													X	
5-7-11	8AM	A ₂ O	BZ 1-2 OUT	40ML-3	HCL														X	
5-8-11	8AM	H ₂ O	BZ 1-2 OUT	40ML-3	HCL														X	
5-9-11	9AM	H ₂ O	BZ 1-2 OUT	40ML-3	HCL														X	

Date: 050911 Time: 1:20 Relinquished by: Alvin [Signature]

Received by: Michelle [Signature] Date: 5/9/11 Time: 13:20

Remarks: BZ 1-2 OUT
ALSO cc: HOPE, MON ZOO
KRISTEN VAN HORN

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.