Monzeglio, Hope, NMENV

From: Rajen, Gaurav [Gaurav.Rajen@wnr.com]

Sent: Thursday, February 19, 2009 4:29 PM

To: Monzeglio, Hope, NMENV

Cc: Cobrain, Dave, NMENV; Jones, Brad A., EMNRD

Subject: RE: Benzene results

Dear Hope:

The IDs got switched unfortunately. I should have pointed that out right away. Sorry, the lab had called us – we decided not to change the IDs in the lab reports as the Chain-of-custody would not have matched the times of sample collection. One of our environmental technicians collected the sample and made an error in the ID labels.

You are right! The levels always drop off by a factor of ten and more from what comes in: in is always higher than out, consistently since we started sampling. This was a simple ID label error by the sampler – you will note it is for all analytes, not just benzene.

I had made a note in a summary table I prepare, and forgot to add the note to my e-mail when I sent you the laboratory reports.

Best regards,

Raj

From: Monzeglio, Hope, NMENV [mailto:hope.monzeglio@state.nm.us]
Sent: Thursday, February 19, 2009 4:12 PM
To: Rajen, Gaurav
Cc: Cobrain, Dave, NMENV; Jones, Brad A., EMNRD
Subject: RE: Benzene results

Raj

I have a question for the samples collected on 2/11/09 from Benzene Stripper 3. Would there be an error in these results as there is more benzene coming out of stripper 3 than going into it; 3rd BZ Stripper-IN is 1,800 ug/l and 3rd BZ Stripper-OUT is 39,000 ug/. Let me know your thoughts.

Thanks

Hope

From: Rajen, Gaurav [mailto:Gaurav.Rajen@wnr.com]
Sent: Thursday, February 19, 2009 3:34 PM
To: Monzeglio, Hope, NMENV
Cc: Riege, Ed; Chavez, Carl J, EMNRD
Subject: Benzene results

Dear Hope:

It is a pleasure to send you our recent sampling results for benzene levels in the influent and effluent to our benzene strippers.

With my best regards,

Raj

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

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



COVER LETTER

Thursday, February 19, 2009

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

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

RE: Bz Strippers

Dear Gaurav Rajen:

Order No.: 0902136

Hall Environmental Analysis Laboratory, Inc. received 4 sample(s) on 2/13/2009 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, Business Manager Nancy McDuffie, Laboratory Manager

NM Lab # NM9425 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

CLIENT: Project:	Western Refining South Bz Strippers	nwest, Gallup				Lab Order:	0902136
	0002126.01			(Collection I	Date: 2/11/200	9 11:40:00 AM
Lab ID:	0902130-01	r			Ma	trix: AQUEO	US
Client Sample ID:	3RD BZ Stripper-10	⊦ - ∔ -			T T * 4 -	DF	Date Analyzed
Analyses	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Result	PQL	Qual	Units	Dr	
Thirdly 505					-		Analyst: DA
EPA METHOD 802	21B: VOLATILES	ND	130		µg/L	50	2/17/2009 3:57:40 PM
Methyl tert-butyl et	ner (MTBE)	1800	50		µg/L	50	2/17/2009 3:57:40 PN
Benzene		1000	50		µg/L	50	2/17/2009 3:57:40 PM
Toluene		130	50		µg/L	50	2/17/2009 3:57:40 PM
Ethylbenzene		150	100		ug/L	50	2/17/2009 3:57:40 PM
Xylenes, Total		950	65 9-130		%REC	50	2/17/2009 3:57:40 PM
Surr: 4-Bromofiu	lorobenzene	00.9	00.0 .00				
	0002126-02				Collection	Date: 2/11/200	09 12:00:00 PM
Lab ID:	0902150-02	TT.			Μ	atrix: AQUEC	DUS
Client Sample ID	: 3RD BZ Stripper-O	N Result	PQL	Qual	Units	DF	Date Analyzed
Analyses							Analyst: D
EPA METHOD 80	21B: VOLATILES		1000		. mfl	500	2/14/2009 7:28:17 A
Methyl tert-butyl e	ther (MTBE)	ND	1300		µg/⊏ uo/l	500	2/14/2009 7:28:17 A
Benzene		39000	500		µy/⊏ a/l	500	2/14/2009 7:28:17 A
Toluene		36000	500		µg/L	500	2/14/2009 7:28:17 A
Ethylbenzene		2100	500		µy/c	500	2/14/2009 7:28:17 A
Xvienes, Total		14000	1000		µg/L MDEO	500	2/14/2009 7:28:17 A
Surr: 4-Bromof	luorobenzene	92.3	65.9-130		WREU	000	
					Collection	Date: 2/11/20	009 12:30:00 PM
Lab ID:	0902136-03	N			N	fatrix: AQUE	OUS
Client Sample II	5: BZ Stripper 1&2 1	Result	PQL	Qua	l Units	DF	Date Analyzed
Analyses							Analyst: [
EPA METHOD 8	021B: VOLATILES		500		ua/l	200	2/14/2009 7:58:36
Methyl tert-bulyl	ether (MTBE)	ND	500		µg/⊏ ug/l	200	2/14/2009 7:58:36
Benzene		12000	200	,	µ9/⊏ ⊔0/I	200	2/14/2009 7:58:36
Toluene		17000	200	r N	H8/F	200	2/14/2009 7:58:36
Ethylbenzene		1500	200	,	HA.F	200	2/14/2009 7:58:36
Xylenes, Total		9400	400	,		200	2/14/2009 7:58:36
	fluerobenzene	103	65.9-130	,	VORCEO		

Date: 19-Feb-09

Qualifiers:	* E J ND	Value exceeds Maximum Contaminant Level Estimated value Analyte detected below quantitation limits Not Detected at the Reporting Limit	4	B H MCL RL	Analyte detected in the associated Me Holding times for preparation or analy Maximum Contaminant Level Reporting Limit	thod Blank _{/sis} exceeded Page 1 of 2
	S	Spike recovery outside accepted recovery limits	1			

CLIENT: Project:	Western Refining Son Bz Strippers	uthwest, Gallup				Lab Order:	0902136
Lab ID:	0902136-04	רייזע		. (Collection I Ma	Date: 2/11/200 trix: AQUEO	9 12:45:00 PM US
Analyses	ID. DE Suipper 102 C	Result	PQL	Qual	Units	DF	Date Analyzed
	8021B: VOLATILES						Analyst: DAM
Methyl tert-buly	lether (MTBE)	ND	130		µg/L	50	2/14/2009 8:28:59 AM
Benzene		1800	50		µg/L	50	2/14/2009 8:28:59 AM
Toluene		3200	50		µg/L	50	2/14/2009 8:28:59 AM
Fibvibenzene		550	50		µg/L	50	2/14/2009 8:28:59 AM
Yvienes Total		3400	100		µg/L	50	2/14/2009 8:28:59 AM
Surr: 4-Brom	ofluorobenzene	99.3	65.9-130		%REC	50	2/14/2009 8:28:59 AM

Qualifiers:

* Value exceeds Maximum Contaminant Level

- E Estimated valueJ Analyte detected below quantitation limits
- J Analyte avector over quantitation min
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank

Date: 19-Feb-09

- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

0-11.....

QA/QC SUMMARY REPORT

Client: Western Ro Project: Bz Strippe	efining South rs	west, Ganup					Work	Order: 0902136
Analyte	Result	Units	PQL	%Rec	LowLimit Hi	ghLimit	%RPD RP	DLimit Qual
Method: EPA Method 8021B: Sample ID: 5ML RB	Volatiles	MBLK			Batch ID:	R32412	Analysis Date:	2/13/2009 10:02:46 AM
Methyl tert-butyl ether (MTBE) Benzene Toluene	ND ND ND	μg/L μg/L μg/L υσ/L	2.5 1.0 1.0 1.0					
Ethylbenzene Xylenes, Total Sample ID: 100NG BTEX LCS	ND	μg/L LCS	2.0		Batch ID:	R32412	Analysis Date:	2/14/2009 3:52:52 AM
Methyl tert-butyl ether (MTBE) Benzene Toluene Ethylbenzene	21.56 19.28 20.43 21.19	μg/L μg/L μg/L μg/L	2.5 1.0 1.0 1.0	108 96.4 101 106 108	51.2 85.9 86.4 83.5 83.4	138 113 113 118 122	• •	
Xylenes, Total Sample ID: 100NG BTEX LCS	64.55 D	µg/L LCSD	2.0	100	Batch ID	R32412	Analysis Date: 1 48	2/14/2009 4:23:20 AM
Methyl tert-butyl ether (MTBE) Benzene Toluene Ethylbenzene	21.24 19.00 19.72 20.69	μg/L μg/L μg/L μg/L	2.5 1.0 1.0 1.0	106 95.0 97.2 103	51.2 85.9 86.4 83.5	113 113 118 122	1.44 3.52 2.37 2.00	27 19 10 13
Xylenes, Total	63.27	µg/L	2.0	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

Page 1

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Sample	Receipt Ch	ecklist			
Client Name WESTERN REFINING GALLU		Date Received	:	2/13/2009	
Work Order Number 0902136		Received by:	ARS		
	012	Sample 1D lat	cels checked by:		
Checklist completed by:	Date				
Materia Carrier name	FedEx				
	<u></u>				
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 🗹	Νο			
All samples received within holding time?	Yes 🗹	No 🗔			
Water - VOA vials have zero headspace? No VOA vials subn	nitted	Yes 🗹	No 🗔		
Water - Preservation labels on bottle and cap match?	Yes 🗋		N/A ⊻		
Water - pH acceptable upon receipt?	Yes 🗋	No 🗌	N/A 🗹		
Container/Temp Blank temperature?	11°	<6° C Acceptabl	e time to cool		
COMMENTS:		if given sumcient			
Data contracted		Pers	on contacted		
Contacted by: Regarding:					
Comments:					
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Corrective Action					
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(hallu	n	Refinery	Project Name								.halle	nviro	nm	enta	al.co	m		 	•
Mailing	Address:	RT	3 Box 9	Bz	STrip	OFUS		4901 Hawkins NE - Albuquerque, NM 87109												
Gun	Hine		n 87301	Project #:	<u> </u>			Tel. 505-345-3975 Fax 505-345-4107												
Phone #	t: 50)5 ⁻	122 3227									An	alysi	s R	lequ	iest				
email or	Fax#: [505	722 3833	Project Manag	ger:		(ly)	sel)				ĺ	(4)				9		
QA/QC F	Package:			GAN	S IVA		8021	as ol	/Die					5	CB			6		
🗆 Stan	dard		Level 4 (Full Validation)			HJEN	B's (Ű	Gas					2,	22 D			8		
	r			Sampler: ALVIN WORSEY				Ē	5B (8.1)	(-)	(Ŧ			/ 80		2	X		Î
	(Type)			Sample Temp			》 + 2888 	н Ш	180	d 41	d 50	P P	NO 1918		des	2	0	6		د ک
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Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	FIEAENO	+ X:	+ 	¥	N T	E B	e)	Ĩ §	2	ц Б	0B	0 (S	3		Bub
				ijpo ana n		0902136	BTE	BTE	Ē	횬	Ē	831	RC A		808	826	827	ŏ		Air
02-1109	1140		3rd Bassinpper IN	3-40ML	HCL													\ge		
02-11-09	1200		3rd BzSTripper out	3-40ML	HCL	2												\times	 	
22-11-09	1230		BZSTRIPPER 122IN	3-40ml	HCL	3												\times		
02-11-09	1245)	BzSTrupper 12-200T	3-40ML	HCI	4												\times		
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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.

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COVER LETTER

Friday, February 13, 2009

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.: 0902030

Dear Gaurav Rajen:

Hall Environmental Analysis Laboratory, Inc. received 8 sample(s) on 2/4/2009 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, Business Manager Nancy McDuffie, Laboratory Manager

NM Lab # NM9425 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

Date: 13-Feb-09

CLIENT:Western Refining Southwest, GallupProject:Benzene StrippersLab Order:0902030

CASE NARRATIVE

The pH was greater than 2.0 for samples: 3rd Bz Stripper In and 3rd Bz stripper out collected 2/3/2009

CLIENT: Project:	Western Refining South Benzene Strippers	west, Gallup			L	ıb Ordei	r: 0902030
Lab ID:	0902030-01				Collection Date:	1/29/20	009 2:20:00 PM
Client Sample ID:	3RD BZ Stripper-IN				Matrix:	AQUE	OUS
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 802						-	Analyst: DAM
Methyl tert-butyl eth	er (MTBE)	ND	2500		µg/L	1000	2/5/2009 10:12:59 PM
Benzene		27000	1000		µg/L	1000	2/5/2009 10:12:59 PM
Toluene		80000	1000		µg/L	1000	2/5/2009 10:12:59 PM
Ethylbenzene		22000	1000		µg/L	1000	2/5/2009 10:12:59 PM
Xvlenes, Total		140000	2000		µg/L	1000	2/5/2009 10:12:59 PM
Surr: 4-Bromoflue	probenzene	106	65.9-130		%REC	1000	2/5/2009 10:12:59 PM
Lab ID:	0902030-02				Collection Date:	1/29/20	09 2:50:00 PM
Client Sample ID:	3RD BZ Stripper-OU	T			Matrix:	AQUE	DUS
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 802	1B: VOLATILES						Analyst: DAM
Methyl tert-butyl eth	er (MTBE)	ND	1300		µg/L	500	2/6/2009 12:23:26 PM
Benzene		7400	500		µg/L	500	2/6/2009 12:23:26 PM
Toluene		37000	500		µg/L	500	2/6/2009 12:23:26 PM
Ethylbenzene		15000	500		µg/L	500	2/6/2009 12:23:26 PM
Xylenes, Total		92000	1000		µg/L	500	2/6/2009 12:23:26 PM
Surr: 4-Bromofluc	probenzene	89.7	65.9-130		%REC	500	2/6/2009 12:23:26 PM
Lab ID:	0902030-03				Collection Date:	1/29/20	09 8:45:00 AM
Client Sample ID:	BZ Stripper 1&2 IN				Matrix:	AQUE	OUS
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 802	1B: VOLATILES						Analyst: DAM
Methyl tert-butyl eth	er (MTBE)	ND	500		µg/L	200	2/6/2009 12:53:59 PM
Benzene		7600	200		µg/L	200	2/6/2009 12:53:59 PM
Toluene		11000	200		µg/L	200	2/6/2009 12:53:59 PM
Ethylbenzene		770	200		µg/L	200	2/6/2009 12:53:59 PM
Xylenes, Total		4800	400		µg/L	200	2/6/2009 12:53:59 PM
Surr: 4-Bromofluc	probenzene	92.8	65.9-130		%REC	200	2/6/2009 12:53:59 PM

Date: 13-Feb-09

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

Date: 13-Feb-09

30-04 ipper 1&2 OU ATILES) ne 30-05	T Result ND 980 1700 180 1200 89.4	PQL 130 50 50 100 65.9-130	C Quai	Collection Date Matrix Units µg/L µg/L µg/L µg/L µg/L %REC	2: 1/29/200 2: AQUEO DF 50 50 50 50 50 50 50 50 50	9 9:20:00 AM US Date Analyzed Analyst: DAM 2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM
ATILES	T Result ND 980 1700 180 1200 89.4	PQL 130 50 50 100 65.9-130	Qual	Matrix Units μg/L μg/L μg/L μg/L μg/L %REC	4: AQUEO DF 50 50 50 50 50 50 50	US Date Analyzed Analyst: DAM 2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM
ATILES) ne 130-05	Result ND 980 1700 180 1200 89.4	PQL 130 50 50 100 65.9-130	Qual	Units µg/L µg/L µg/L µg/L µg/L %REC	50 50 50 50 50 50 50	Date Analyzed Analyst: DAM 2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM
ATILES) ne 130-05	ND 980 1700 180 1200 89.4	130 50 50 100 65.9-130		μg/L μg/L μg/L μg/L μg/L %REC	50 50 50 50 50 50	Analyst: DAM 2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM
ATILES) ne /30-05	ND 980 1700 180 1200 89.4	130 50 50 100 65.9-130		μg/L μg/L μg/L μg/L μg/L %REC	50 50 50 50 50 50	2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM
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ne 130-05	980 1700 180 1200 89.4	50 50 50 100 65.9-130		μg/L μg/L μg/L %REC	50 50 50 50	2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM
ne 130-05	1700 180 1200 89.4	50 50 100 65.9-130		μg/L μg/L %REC	50 50 50	2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM
19 19 19 19 19 19 19 19 19 19 19 19 19 1	180 1200 89.4	100 65.9-130		μg/L %REC	50 50	2/5/2009 11:44:26 PM 2/5/2009 11:44:26 PM
ne 130-05	89.4	65.9-130		%REC	50	2/5/2009 11:44:26 PM
130-05	09.4	00.8-100		,0142 C		
30-05						
			(Collection Dat	e: 2/3/2009	7:50:00 AM
3Z Stripper-IN				Matri	x: AQUEC	OUS
22 0m-FF	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: DAM
_ATILES		0500		uo/I	1000	2/6/2009 12:15:02 AM
E)	ND	2500		µg/L	1000	2/6/2009 12:15:02 AM
	33000	1000		µg/L	1000	2/6/2009 12:15:02 AM
	45000	1000		μα/I	1000	2/6/2009 12:15:02 AM
	6200	1000		µg/L	1000	2/6/2009 12:15:02 AM
	41000	2000		49/L	1000	2/6/2009 12:15:02 AM
ne	88.8	65,9-130		WRED	1000	
20.06				Collection Da	te: 2/3/200	9 8:20:00 AM
	· 107			Matr	ix: AOUEC	OUS
BZ Stripper-Ou	J1 70	DOI	Quel	Tinite	DF	Date Analyzed
	Result	FQL	Quai			
LATILES				"	400	2/6/2009 12:45:35 AM
E)	ND	250	1	µg/L	100	2/0/2000 12:45:35 AM
	7300	100		µg/L	100	2/0/2009 12.40.00 AM
	9700	100)	µg/L	100	2/0/2009 12.43.35 AM
	1500	100)	µg/L	100	2/0/2003 12.40.00 AM
	9500	200)	µg/L	100	2/0/2003 12.40.00 MW
ene	98.7	65.9-130)	%REC	100	2/6/2009 12:45.55 AM
	ne)30-06 BZ Stripper-Ol LATILES E)	33000 45000 6200 41000 ne 88.8)30-06 BZ Stripper-OUT Result LATILES E) ND 7300 9700 1500 9500 ene 98.7	33000 1000 45000 1000 6200 1000 41000 2000 ne 88.8 65.9-130 J30-06 BZ Stripper-OUT Result PQL LATILES ND 250 E) ND 2500 9700 100 1500 9500 200 9500 200 ene 98.7 65.9-130	33000 1000 45000 1000 6200 1000 41000 2000 ne 88.8 65.9-130 Olympic Current Stripper-OUT Result PQL Qual LATILES ND 250 F) ND 250 9700 100 1500 9500 200 98.7 65.9-130 98.7 65.9-130	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

Hall Environmental Analysis Laboratory, Inc.

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

CLIENT: Project:	Western Refining South Benzene Strippers	west, Gallup		-		Lab Orde	r: 0902030
Lab ID:	0902030-07				Collection	Date: 2/3/200	09 9:30:00 AM
Client Sample ID:	BZ Stripper 1&2 IN				N	latrix: AQUE	OUS
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 802	1B: VOLATILES		······································				Analyst: DAM
Methyl tert-butyl eth	er (MTBE)	ND	500		µg/L	200	2/6/2009 1:16:01 AM
Benzene		9000	200		µg/L	200	2/6/2009 1:16:01 AM
Toluene		13000	200		µg/L	200	2/6/2009 1:16:01 AM
Ethylbenzene		1100	200		µg/L	200	2/6/2009 1:16:01 AM
Xylenes, Total		6700	400		µg/L	200	2/6/2009 1:16:01 AM
Surr: 4-Bromoflu	probenzene	95.0	65.9-130		%REC	200	2/6/2009 1:16:01 AM

Date: 13-Feb-09

Lab ID: 0

0902030-08

Client Sample ID: BZ Stripper 1&2 OUT

Collection Date: 2/3/2009 10:00:00 AM Matrix: AQUEOUS

Analyses	Result	PQL	Qual Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES					Analyst: DAM
Methyl tert-butyl ether (MTBE)	ND	130	μg/L	50	2/6/2009 1:46:24 AM
Benzene	1000	50	μg/L	50	2/6/2009 1:46:24 AM
Toluène	2000	50	µg/L	50	2/6/2009 1:46:24 AM
Ethylbenzene	260	50	µg/L	50	2/6/2009 1:46:24 AM
Xylenes, Total	1800	100	μg/L	50	2/6/2009 1:46:24 AM
Surr: 4-Bromofluorobenzene	98.8	65.9-130	%REC	50	2/6/2009 1:46:24 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

Date: 13-Feb-09

QA/QC SUMMARY REPORT

Client: Project:	Western Refini Benzene Stripp	ng South ers	west, Gallup			-		Wor	k Order: 090	2030
Analyte		Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD R	PDLimit Qual	
Method: EPA Me Sample ID: 5ML F	athod 8021B: Voli B	atiles	MBLK			Batch II	D: R32305	Analysis Date:	2/5/2009 10:32	2:55 AM
Methyl tert-butyl eth	er (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 Sample ID: 100N0	B BTEX LCS	ND	µg/L LCS	2.0		Batch I	D: R32305	Analysis Date:	2/6/2009 3:17	7:51 AM
Method fort hutul of		19 52	ua/L	2.5	97.6	51.2	138			
Recitive tell-bully built		19.93	uo/L	1.0	99.6	85.9	113		*	
Toluene		20.79	ua/L	1.0	101	86.4	113			
Sthuibenzene		21.32	ua/L	1.0	107	83.5	118			
Zulyinenzene Zulones Total		66.40	ua/L	2.0	111	83.4	122			
Sample ID: 100N(BITEX LOSD		LCSD			Batch I	D: R32305	Analysis Date	2/6/2009 3:4	8:14 AM
Sample ID. Took		20.17	ua/l	2.5	101	51.2	138	3.24	28	
Methyl ten-butyl etr	ier (IVITIBE)	20.17	µg/L	10	98.8	85.9	113	0.836	27	
Benzene		19.70	µg/L	1.0	101	86.4	113	0.289	19	
Toluene		20.13	μ9/L	1.0	105	83.5	118	1.17	10	
Ethylbenzene Xylenes, Total		21.07 65.45	μg/L	2.0	109	83.4	122	1.44	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

Page 1

	Sample	Rec	eipt Ch	necklist			
Client Name WESTERN REFINING GALLU				Date Receive	d:	2/4/2009	
Work Order Number 0902030			n	Received by	r: TLS abels checked by	. AS	
Checklist completed by:			Date			inilieis	
Matrix:	Carrier name	Fedi	Ex				
Shipping container/cooler in good condition?		Yes		No 🗖	Not Present]	_
Custody seals intact on shipping container/coole	ır?	Yes		No 🗌	Not Present	Not Shipped	
Custody seals intact on sample bottles?		Yes		No 🗔	N/A b		
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	\checkmark	No 🗔	_		
Water - VOA vials have zero headspace?	No VOA vials subr	nitted		Yes 🗹	No 🗌		
Water - Preservation labels on bottle and cap m	atch?	Yes	· 🔲		N/A ⊻		
Water - pH acceptable upon receipt?		Yes		No	N/A 🗹		
Container/Temp Blank temperature?			4°	<6° C Acceptal	ble Int time to cool		
COMMENTS:				ir givan sumcier			
Client contacted	Date contacted:			Per	son contacted		
Contacted by:	Regarding:						
Comments:							
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Corrective Action							
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Chain-of-Custody Record				Turn-Around Time:									- 8 1 %	8 T F					1	
Client:	NES	ĨĿſŊ	-Refining	□ Standard □ Rush																
Gollyo Rofinery				Project Name:				www.hallenvironmental.com												
Mailing Address: RT 3 By 9				B7 STUDDETS																
Golling 110 87301				Project #:				Tel 505-345-3975 Fax 505-345-4107												
Phone #:								10	.1. 00	0-0-	0.001	Ana	alysis	Req	uest	4107				
email or Fax#:				Project Manager:				ly)	(lei				(4)				س ا			
QA/QC Package:				Gaussia			021	IS OF	Die			ļ	SC SC	CB's			ai Bi			
□ Standard □ Level 4 (Full Validation)				GAULAN KAJEN			's (8	<u>છ</u>	3as/				PO O	2 PC			<u> </u>			
□ Other				Sampler: AWIN DOrsey			TMB	ΗL	9) 8	Ē	,	Î	l S	808			La la		Î	
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Dale		Wallin	Sample Request ID	Type and #	Туре	20 C C C C C C C C C C C C C C C C C C C		E E	H	H	BB	310		081	260	270	00		lir B	
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020309	0750		3"BZ STRIPPER IN	3-40ML	HCI	5-											X	<u> </u>		
020309	0820		3rd BzSTrippel OUT	3-40M1	HCL									ļ	L		X			
02-03-09	0930		BZSTRIPPER 1220	3-yoml	HCL	7								<u> </u>			X			
02-0309	000		BZSTRIPFER HOUT	3-40ML	1+1	8									·		X			
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Date: Time: Relinquished by:				Received of:																

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.

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