Monzeglio, Hope, NMENV

From: Jim Lieb [Jim.Lieb@wnr.com]
Sent: Tuesday, March 11, 2008 7:57 AM
To: Monzeglio, Hope, NMENV; Chavez, Carl J, EMNRD
Cc: Ed Riege; Cheryl Johnson; Allen Hains; Ann Allen; Mark Turri
Subject: Western Refining - Gallup Refinery Laboratory Analytical for Well GWM-2
Attachments: GWM-2 WaterHEALtestdata.pdf

Western Refining - Gallup Refinery found water in GWM-2 during a quarterly inspection that was performed on February 18, 2008. Although recharge was limited, Western was able to obtain enough water sample on February 28, 2008 to conduct analysis for GRO, DRO, MRO and VOCs (8260B) including BTEX and MTBE. GRO, DRO, MRO, and BTEX were not detected in the sample. However, some MTBE was detected (28 ug/l). I have attached the Hall Environmental Analysis Laboratory report to this email.

Western will perform the quarterly inspection and resample the well (if there is sufficient water present in the well) at some point during the first two weeks of the next quarter (April). In the meantime, I will provide you on Friday with a summary of the daily GWM-2 water level measurements from this week.

If you have any questions, please contact me at (505) 722-0227.

Regards,

Jim Lieb

Environmental Engineer
Western Refining, Inc.
Gallup Refinery
I-40, Exit 39
Jamestown, NM 87347
(505) 722-0227
fax (505) 722-0210
jim.lieb@wnr.com

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Thursday, March 06, 2008

Jim Lieb
Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301

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

RE: GWM-2 Water Sample 22808

Order No.: 0802357

Dear Jim Lieb:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 2/29/2008 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

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

Hall Environmental Analysis Laboratory, Inc.

Date: *06-Mar-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	GWM-2
Lab Order:	0802357	**Collection Date:**	2/28/2008 2:30:00 PM
Project:	GWM-2 Water Sample 22808	**Date Received:**	2/29/2008
Lab ID:	0802357-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/4/2008 5:33:21 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/4/2008 5:33:21 PM
Surr: DNOP	118	58-140		%REC	1	3/4/2008 5:33:21 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/5/2008 5:54:49 PM
Surr: BFB	104	79.2-121		%REC	1	3/5/2008 5:54:49 PM
EPA METHOD 8260B: VOLATILES						Analyst: **SMP**
Benzene	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
Toluene	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
Ethylbenzene	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
Methyl tert-butyl ether (MTBE)	28	1.0		µg/L	1	3/3/2008 11:58:17 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
Naphthalene	ND	2.0		µg/L	1	3/3/2008 11:58:17 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	3/3/2008 11:58:17 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	3/3/2008 11:58:17 PM
Acetone	ND	10		µg/L	1	3/3/2008 11:58:17 PM
Bromobenzene	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
Bromodichloromethane	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
Bromoform	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
Bromomethane	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
2-Butanone	ND	10		µg/L	1	3/3/2008 11:58:17 PM
Carbon disulfide	ND	10		µg/L	1	3/3/2008 11:58:17 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
Chlorobenzene	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
Chloroethane	ND	2.0		µg/L	1	3/3/2008 11:58:17 PM
Chloroform	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
Chloromethane	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
2-Chlorotoluene	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
4-Chlorotoluene	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
cis-1,2-DCE	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/3/2008 11:58:17 PM
Dibromochloromethane	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
Dibromomethane	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	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: *06-Mar-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	GWM-2
Lab Order:	0802357	**Collection Date:**	2/28/2008 2:30:00 PM
Project:	GWM-2 Water Sample 22808	**Date Received:**	2/29/2008
Lab ID:	0802357-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **SMP**
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	3/3/2008 11:58:17 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
2-Hexanone	ND	10		µg/L	1	3/3/2008 11:58:17 PM
Isopropylbenzene	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	3/3/2008 11:58:17 PM
Methylene Chloride	ND	3.0		µg/L	1	3/3/2008 11:58:17 PM
n-Butylbenzene	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
n-Propylbenzene	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
sec-Butylbenzene	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
Styrene	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
tert-Butylbenzene	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/3/2008 11:58:17 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
trans-1,2-DCE	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/3/2008 11:58:17 PM
Vinyl chloride	ND	1.0		µg/L	1	3/3/2008 11:58:17 PM
Xylenes, Total	ND	1.5		µg/L	1	3/3/2008 11:58:17 PM
Surr: 1,2-Dichloroethane-d4	99.2	68.1-123		%REC	1	3/3/2008 11:58:17 PM
Surr: 4-Bromofluorobenzene	106	53.2-145		%REC	1	3/3/2008 11:58:17 PM
Surr: Dibromofluoromethane	97.1	68.5-119		%REC	1	3/3/2008 11:58:17 PM
Surr: Toluene-d8	101	64-131		%REC	1	3/3/2008 11:58:17 PM

Qualifiers:				
	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	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: GWM-2 Water Sample 22808 **Work Order:** 0802357

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8015B: Diesel Range									
Sample ID: MB-15278		*MBLK*			Batch ID: **15278**		Analysis Date:		3/4/2008 10:01:21 AM
Diesel Range Organics (DRO)	ND	mg/L	1.0						
Motor Oil Range Organics (MRO)	ND	mg/L	5.0						
Sample ID: LCS-15278		*LCS*			Batch ID: **15278**		Analysis Date:		3/4/2008 10:36:21 AM
Diesel Range Organics (DRO)	5.326	mg/L	1.0	107	74	157			
Sample ID: LCSD-15278		*LCSD*			Batch ID: **15278**		Analysis Date:		3/4/2008 11:10:50 AM
Diesel Range Organics (DRO)	4.843	mg/L	1.0	96.9	74	157	9.50	23	
Method: EPA Method 8015B: Gasoline Range									
Sample ID: 5ML RB		*MBLK*			Batch ID: **R27590**		Analysis Date:		3/5/2008 8:17:54 AM
Gasoline Range Organics (GRO)	ND	mg/L	0.050						
Sample ID: 2.5UG GRO LCS		*LCS*			Batch ID: **R27590**		Analysis Date:		3/5/2008 8:25:57 PM
Gasoline Range Organics (GRO)	0.4604	mg/L	0.050	92.1	80	115			
Sample ID: 2.5UG GRO LCSD		*LCSD*			Batch ID: **R27590**		Analysis Date:		3/5/2008 8:56:12 PM
Gasoline Range Organics (GRO)	0.4618	mg/L	0.050	92.4	80	115	0.304	8.39	

Qualifiers:

- E Value above quantitation range
- 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: GWM-2 Water Sample 22808 **Work Order:** 0802357

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5ml rb		*MBLK*			Batch ID: **R27552**		Analysis Date:	3/3/2008 6:03:36 AM	
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						

Qualifiers:

- E Value above quantitation range
- 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: GWM-2 Water Sample 22808 **Work Order:** 0802357

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5ml rb		*MBLK*			Batch ID: **R27552**		Analysis Date:		3/3/2008 6:03:36 AM
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: **R27552**		Analysis Date:		3/3/2008 7:13:13 AM
Benzene	21.40	µg/L	1.0	107	72.4	126			
Toluene	22.20	µg/L	1.0	111	79.2	115			
Chlorobenzene	21.71	µg/L	1.0	109	83.1	111			
1,1-Dichloroethene	25.82	µg/L	1.0	129	81.4	122			S
Trichloroethene (TCE)	20.10	µg/L	1.0	100	64.4	118			

Qualifiers:

E	Value above quantitation range	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: 2/29/2008

Work Order Number 0802357 | Received by: AT

Checklist completed by: Signature | 2/29/08 Date | Sample ID labels checked by Initials AT

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?	5°	*<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

QA / QC Package:
Std ☐ Level 4 ☐
Other:

Client: Western Refining - Gallup
Address: Route 3 Box 7 Gallup NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: GWM-2 Water Sample 22808
Project #:
Project Manager: Jim Lieb
Sampler: Glenn Morris
Sample Temperature: 5° on ice

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.
2-28-8	1430	H_2O	GWM-2	6				6902357 -1

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles or Headspace (Y or N)
		X								X						

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
2/29/08	3:52PM		
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
			2/29/08 1552

Remarks:

Monzeglio, Hope, NMENV

From: Jim Lieb [Jim.Lieb@wnr.com]
Sent: Thursday, March 06, 2008 4:00 PM
To: Monzeglio, Hope, NMENV
Cc: Ed Riege; Cheryl Johnson; Chavez, Carl J, EMNRD
Subject: RE: GWM-2 at Western Refining - Gallup
Attachments: _0306144127_001.pdf; GWM-2WaterLevels.xls; _0306155807_001.pdf

Hope:

I am providing the report for GWM-2 now. We have measured water levels over the week. The initial sample date we found water in the well was on 2/18/08. I prepared a table summarizing the well measurements of GWM-2 to date. Steve Morris was able to obtain a sample for analysis on 2/28/08 which has been delivered to HEAL in Albuquerque for TPH and VOCs (8260B) analysis. Not enough water was present in the well to provide sufficient sample for additional analysis. I have not yet received the lab results but will forward them to you when I receive them. Steve measured the riser and his report including some additional well data is attached.

GWM-2 is at the far northwestern side of aeration lagoon adjacent to evap. pond 1. GWM-2 is located close to GWM-1. I attached a section of one of Kingsley's maps showing the location of GWM-2. This is from Figure 3 in the 2006 GW Report.

We will continue taking water level measurements until you tell us to stop.

If you need additional info or have a question please contact me at 505-722-0227 or reply email.

Regards,
Jim Lieb

From: Monzeglio, Hope, NMENV [mailto:hope.monzeglio@state.nm.us]
Sent: Thursday, February 28, 2008 8:34 AM
To: Jim Lieb; Price, Wayne, EMNRD; Chavez, Carl J, EMNRD; Ed Riege
Cc: Cobrain, Dave, NMENV; Frischkorn, Cheryl, NMENV
Subject: GWM-2

GWM-2 update

Western Gallup found ~5 inches or less of water in GWM-2. There is not enough water for a sample. NMED is having Western bail down the 5 inches of water as much as possible and will check the water levels daily. Jim will send an email update on March 7th. Jim is also going to inquire about the well cap being sealed prior to the water level measurement. Jim mentioned that they have had a lot of snow and rain fall this winter and rain over the weekend (Feb 23). Jim is also going to find out the length of the riser above ground.

Jim in your message you said GWM-2 was between Aeration lagoon (AL) 1 and AL-2. The map shows GWM-2 between AL-2 and Evaporation Pond 1. Please clarify the location for me. What day was the water level measured?

Thanks
Hope

Hope Monzeglio
Environmental Specialist
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, BLDG 1
Santa Fe NM 87505
Phone: (505) 476-6045; Main No.: (505)-476-6000
Fax: (505)-476-6060
hope.monzeglio@state.nm.us

Websites:
New Mexico Environment Department
Hazardous Waste Bureau

Jim Lieb

From: Stephen Morris [smorris@trihydro.com]
Sent: Friday, February 29, 2008 9:12 AM
To: Jim Lieb
Subject: GWM-2 2-28-2008

Jim,

Alvin and I checked and sampled GWM-2 on Feb. 28, 2008:

Depth to water - 18.55 feet.

Sampled well using new plastic bailer for 8260 and 8015 GRO/DRO at 1430 hrs.

There was not enough water to sample well for General Chemistry.

Depth to water after sampling - 18.78 feet.

Total well depth measured - 18.98 feet.

Top of casing measured to concrete well pad (stick up) - 2.646 feet.

Top of casing measured to ground at well (stick up) - 2.812 feet.

Thanks, Steve

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other: _____

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Western Refining - Gallup
Address: Hwy 3 Box 7 Gallup NM 87301
Phone #: 505 722 9333
Fax #: 505 722 0210

Project Name: GCM-2 Water Analysis
Project #:
Project Manager: Jim Lieb
Sampler: Cody Kline
Sample Temperature:

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative			HEAL No.
					$HgCl_2$	HNO_3		
2-25-13	1430	H2O	GCM-2	6				

ANALYSIS REQUEST

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles or Headspace (Y or N)
		X								X						

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
2/25/13	3:52 PM		
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

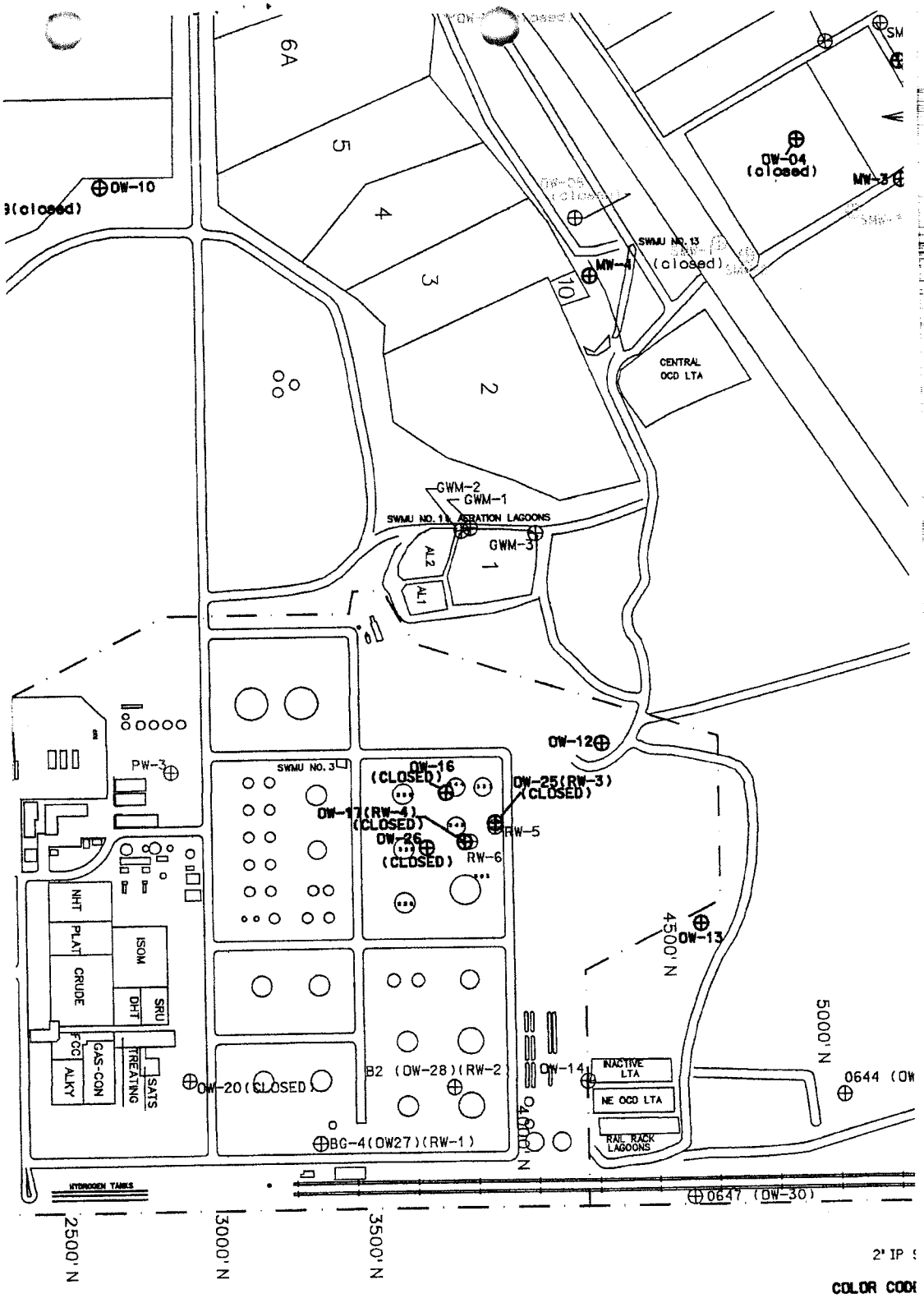
Remarks:

GWM-2 Inspections
Western Refining - Gallup Refinery

Date	Time	Depth to Water (feet)	Sampler
2/18/2008	2:12 PM	18.38	CJ
2/28/2008*	2:30 PM	18.55	SM
3/4/2008	1:00 PM	18.68	CJ
3/5/2008	9:00 AM	18.68	CJ
3/6/2008	8:45 AM	18.68	CJ

* The well water was sampled and delievered to HEAL for TPH and VOCs analysis
The well depth is before the sample was taken.

Note: Depth to well bottom = 18.98 feet measured 2-28-08 by Steve Morris



COLOR CODI

NOTE: CLOSED = ABANDONED

re 3

(Oct 2006)