

Monzeglio, Hope, NMENV

From: Rajen, Gaurav [Gaurav.Rajen@wnr.com]
Sent: Thursday, March 12, 2009 2:28 PM
To: Monzeglio, Hope, NMENV
Cc: Cobrain, Dave, NMENV; Riege, Ed; Turri, Mark
Subject: Quarterly sampling results for NAPIS and OW wells
Attachments: 0902201-February 2009.pdf; 1st quarter OW wells.pdf; 1ST QTR 2009 OW WELL LOG.xls; 1ST QTR 2009 NAPIS WELL LOG.xls; Table 1-February 2009 and November 2008.doc

Dear Hope:

It is a pleasure to send to you our latest sampling results for OW-13, OW-14, OW-30 and OW-29, as well as the NAPIS wells, NAPIS-1 (formerly KA-1R), NAPIS-2 (formerly KA-2R), and NAPIS-3 (formerly KA-3R), and well KA-3 (that you have asked us to add given that well NAPIS-3 is sometimes dry). The laboratory analytical results that we have received till now are attached.

As before, I have compiled a table of the results for the NAPIS wells, and compared our latest February 2009 data with the data we obtained in November 2008. You will note that levels of MTBE for the NAPIS wells are either going down or have stayed constant at low levels. The MTBE levels are either below or very close to the NMED standard for groundwater remediation of MTBE of 0.1 mg/L. For the OW wells, in some of the wells, trace levels of MTBE detected earlier have dropped to Non-detectable levels, while others are staying fairly constant around 1 mg/L.

I have also included separate tables of the volumes of water purged from each well and the water depth records our staff obtained. I would like you to note that at the time of the February sampling event for the NAPIS wells our staff members were unable to collect in the field water quality parameters, such as pH, Temperature, Dissolved Oxygen, etc. We will collect these data next week. For the OW wells, basic water quality data are provided along with the well purge logs.

If you need any further clarification, please do not hesitate to contact me at your convenience.

Best regards,

Raj

From: Monzeglio, Hope, NMENV [mailto:hope.monzeglio@state.nm.us]
Sent: Wednesday, March 11, 2009 11:32 AM
To: Rajen, Gaurav
Cc: Cobrain, Dave, NMENV; Riege, Ed
Subject: quarterly sampling results

Raj

Please let me know when I can be expecting the quarterly MTBE sampling results for OW-13, OW-14, OW-30, and OW-29 and the quarterly sampling results for the KA-1R, KA-2R, and KA-3r (the NAPIS wells)?

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

3/12/2009

**WESTERN REFINING - GALLUP REFINERY
WELL SAMPLING DATA**

| WELL # | 0W-13 | 0W-14 | 0W-29 | 0W-30 | 1WVA= .074 | |
|---------------|-----------|-------------|-----------|-------------|------------|--|
| PURGE DATE | 2/24/2009 | 2/23/2009 | 2/25/2009 | 2/23/2009 | | |
| PURGE TIME | 0855 HRS | 1040 HRS | 0840 HRS | 0755 HRS | | |
| LIQUID DEPTH | 23.93 | 26.73 | 21.43 | 28.87 | | |
| DEPTH TO BTM | 100 | 45 | 52 | 48 | | |
| DIFFERENCE | 76.07 | 18.27 | 30.57 | 19.13 | | |
| 1WVA = .074 | 56.2918 | 13.5198 | 22.6218 | 14.1562 | | |
| 3WVA'S | 168.8754 | 40.5594 | 67.8654 | 42.4686 | | |
| SAMPLE DAY | 2/24/2009 | 2/23/2009 | 2/25/2009 | 2/23/2009 | | |
| SAMPLE TIME | 1100 HRS | 1200 HRS | 0932 HRS | 1000 HRS | | |
| PUMP DEPTH | 35 FT | Hand Bailed | 30 FT | Hand Bailed | | |
| 1) TEMP DEG F | 58.2 | 56.4 | 57.5 | 57.3 | | |
| pH | 7.78 | 6.26 | 6.93 | 6.25 | | |
| Sp. COND. | 749uS | 1.26mS | 975uS | 818uS | | |
| 2) TEMP DEG F | 57.8 | 56.3 | 56.5 | 56.8 | | |
| pH | 7.75 | 6.19 | 6.65 | 6.19 | | |
| Sp. COND. | 732uS | 1.345mS | 971uS | 922uS | | |
| 3) TEMP DEG F | 58.1 | 56.3 | 57.1 | 57.3 | | |
| pH | 7.74 | 6.14 | 6.66 | 6.16 | | |
| Sp. COND. | 719uS | 1.349mS | 949uS | 908uS | | |
| 4) TEMP DEG F | 58.1 | 56.3 | 57.2 | 57.3 | | |
| pH | 7.74 | 6.15 | 6.66 | 6.15 | | |
| Sp. COND. | 728uS | 1.344mS | 962uS | 912 uS | | |

NOTES:

SAMPLER NAME/TITLE:

SAMPLING LOG

| | | |
|--------------|-------------------------|-------------------------|
| OW-13 | Sample Day 2/24/2009 | Sample Time 1100 HRS |
|--------------|-------------------------|-------------------------|

Weather: Clear day, no wind. Temp 50-60 Deg. On 2/24/09 at 0855 hrs lowered pump to approximately 35 feet inside well casing. Began pumping 3 well volumes = 168.9 gals. Pumped approximately 170 gals. Water is clear and no apparent odor detected.

Began taking temperature, pH, Sp Cond on last 10 gals remaining. At 1100 hours took 3 samples (VOA's preserved with HCl) for 8021B sampling. Samples labeled and sealed with tape.

| | | |
|--------------|-------------------------|-------------------------|
| OW-14 | Sample Day 2/23/2009 | Sample Time 1200 HRS |
|--------------|-------------------------|-------------------------|

Weather: Cloudy, windy day. Temp 50-60 Deg. On 2/23/09 at 1040 hrs began hand bailing with new bailer 3 well volumes = 40.6 gals. Water is clear and no apparent odor detected. Hand bailed approximately 42 gals.

Began taking temperature, pH, Sp Cond on last 10 bails. At 1200 hours took 3 samples (VOA's preserved with HCl) for 8021B sampling. Samples labeled and sealed with tape.

| | | |
|--------------|-------------------------|-------------------------|
| OW-29 | Sample Day 2/25/2009 | Sample Time 0932 HRS |
|--------------|-------------------------|-------------------------|

Weather: Clear day, no wind. Temp 65-60 Deg. On 2/25/09 at 0840 hrs lowered pump to approximately 30 feet inside well casing. Began pumping 3 well volumes = 67.9 gals. Pumped approximately 70 gals. Water is clear and no apparent odor detected.

Began taking temperature, pH, Sp Cond on last 10 gals remaining. At 0932 hours took 3 samples (VOA's preserved with HCl) for 8021B sampling. Samples labeled and sealed with tape.

| | | |
|--------------|-------------------------|-------------------------|
| OW-30 | Sample Day 2/23/2009 | Sample Time 1000 HRS |
|--------------|-------------------------|-------------------------|

Weather: Cloudy, windy day. Temp 50-60 Deg. On 2/23/09 at 1040 hrs began hand bailing with new bailer 3 well volumes = 42.5 gals. Water is clear and no apparent odor detected. Hand bailed approximately 43 gals.

Began taking temperature, pH, Sp Cond on last 10 bails. At 1000 hours took 3 samples (VOA's preserved with HCl) for 8021B sampling. Samples labeled and sealed with tape.

NOTES:

Samples kept on ice and shipped UPS RED on 2/25/09 at 1045 hours to Hall Labs.

SAMPLER NAME/TITLE:



COVER LETTER

Tuesday, March 03, 2009

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

TEL: (505) 722-0227

FAX (505) 722-0210

RE: 1st QTR 2009 OW Wells

Dear Gaurav Rajen:

Order No.: 0902288

Hall Environmental Analysis Laboratory, Inc. received 4 sample(s) on 2/26/2009 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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

NM Lab # NM9425

AZ license # AZ0682

ORELAP Lab # NM100001

Texas Lab# T104704424-08-TX



Hall Environmental Analysis Laboratory, Inc.

Date: 03-Mar-09

CLIENT: Western Refining Southwest, Gallup
Project: 1st QTR 2009 OW Wells

Lab Order: 0902288

Lab ID: 0902288-01
Client Sample ID: OW-30

Collection Date: 2/23/2009 10:00:00 AM
Matrix: AQUEOUS

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|------------------------------------|--------|----------|------|-------|----|----------------------|
| | | | | | | Analyst: DAM |
| EPA METHOD 8021B: VOLATILES | | | | | | |
| Methyl tert-butyl ether (MTBE) | 1000 | 130 | | µg/L | 50 | 3/2/2009 2:53:26 PM |
| Benzene | ND | 1.0 | | µg/L | 1 | 2/28/2009 7:21:05 AM |
| Toluene | ND | 1.0 | | µg/L | 1 | 2/28/2009 7:21:05 AM |
| Ethylbenzene | ND | 1.0 | | µg/L | 1 | 2/28/2009 7:21:05 AM |
| Xylenes, Total | ND | 2.0 | | µg/L | 1 | 2/28/2009 7:21:05 AM |
| 1,2,4-Trimethylbenzene | ND | 1.0 | | µg/L | 1 | 2/28/2009 7:21:05 AM |
| 1,3,5-Trimethylbenzene | ND | 1.0 | | µg/L | 1 | 2/28/2009 7:21:05 AM |
| Surr: 4-Bromofluorobenzene | 90.3 | 65.9-130 | | %REC | 1 | 2/28/2009 7:21:05 AM |

Lab ID: 0902288-02
Client Sample ID: OW-14

Collection Date: 2/23/2009 12:00:00 PM
Matrix: AQUEOUS

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|------------------------------------|--------|----------|------|-------|----|----------------------|
| | | | | | | Analyst: DAM |
| EPA METHOD 8021B: VOLATILES | | | | | | |
| Methyl tert-butyl ether (MTBE) | 1000 | 130 | | µg/L | 50 | 3/2/2009 3:28:40 PM |
| Benzene | 13 | 1.0 | | µg/L | 1 | 2/28/2009 7:51:29 AM |
| Toluene | 1.4 | 1.0 | | µg/L | 1 | 2/28/2009 7:51:29 AM |
| Ethylbenzene | 5.5 | 1.0 | | µg/L | 1 | 2/28/2009 7:51:29 AM |
| Xylenes, Total | ND | 2.0 | | µg/L | 1 | 2/28/2009 7:51:29 AM |
| 1,2,4-Trimethylbenzene | 1.6 | 1.0 | | µg/L | 1 | 2/28/2009 7:51:29 AM |
| 1,3,5-Trimethylbenzene | ND | 1.0 | | µg/L | 1 | 2/28/2009 7:51:29 AM |
| Surr: 4-Bromofluorobenzene | 106 | 65.9-130 | | %REC | 1 | 2/28/2009 7:51:29 AM |

Lab ID: 0902288-03
Client Sample ID: OW-13

Collection Date: 2/24/2009 11:00:00 AM
Matrix: AQUEOUS

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|------------------------------------|--------|----------|------|-------|----|---------------------|
| | | | | | | Analyst: DAM |
| EPA METHOD 8021B: VOLATILES | | | | | | |
| Methyl tert-butyl ether (MTBE) | ND | 2.5 | | µg/L | 1 | 3/2/2009 3:57:17 PM |
| Benzene | ND | 1.0 | | µg/L | 1 | 3/2/2009 3:57:17 PM |
| Toluene | ND | 1.0 | | µg/L | 1 | 3/2/2009 3:57:17 PM |
| Ethylbenzene | ND | 1.0 | | µg/L | 1 | 3/2/2009 3:57:17 PM |
| Xylenes, Total | ND | 2.0 | | µg/L | 1 | 3/2/2009 3:57:17 PM |
| 1,2,4-Trimethylbenzene | ND | 1.0 | | µg/L | 1 | 3/2/2009 3:57:17 PM |
| 1,3,5-Trimethylbenzene | ND | 1.0 | | µg/L | 1 | 3/2/2009 3:57:17 PM |
| Surr: 4-Bromofluorobenzene | 85.7 | 65.9-130 | | %REC | 1 | 3/2/2009 3:57:17 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: 03-Mar-09

CLIENT: Western Refining Southwest, Gallup
 Project: 1st QTR 2009 OW Wells

Lab Order: 0902288

Lab ID: 0902288-04

Collection Date: 2/25/2009 9:32:00 AM

Client Sample ID: OW-29

Matrix: AQUEOUS

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|------------------------------------|--------|----------|------|-------|----|----------------------|
| EPA METHOD 8021B: VOLATILES | | | | | | Analyst: DAM |
| Methyl tert-butyl ether (MTBE) | 21 | 2.5 | | µg/L | 1 | 2/28/2009 8:52:29 AM |
| Benzene | ND | 1.0 | | µg/L | 1 | 2/28/2009 8:52:29 AM |
| Toluene | ND | 1.0 | | µg/L | 1 | 2/28/2009 8:52:29 AM |
| Ethylbenzene | ND | 1.0 | | µg/L | 1 | 2/28/2009 8:52:29 AM |
| Xylenes, Total | ND | 2.0 | | µg/L | 1 | 2/28/2009 8:52:29 AM |
| 1,2,4-Trimethylbenzene | ND | 1.0 | | µg/L | 1 | 2/28/2009 8:52:29 AM |
| 1,3,5-Trimethylbenzene | ND | 1.0 | | µg/L | 1 | 2/28/2009 8:52:29 AM |
| Surr: 4-Bromofluorobenzene | 89.1 | 65.9-130 | | %REC | 1 | 2/28/2009 8:52:29 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

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: 1st QTR 2009 OW Wells

Work Order: 0902288

| Analyte | Result | Units | PQL | %Rec | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---------|--------|-------|-----|------|----------|-----------|------|----------|------|
|---------|--------|-------|-----|------|----------|-----------|------|----------|------|

Method: EPA Method 8021B: Volatiles

Sample ID: 5ML RB

MBLK

Batch ID: R32612 **Analysis Date:** 2/27/2009 9:29:45 AM

| | | | | | | | | | |
|--------------------------------|----|------|-----|--|--|--|--|--|--|
| Methyl tert-butyl ether (MTBE) | ND | µg/L | 2.5 | | | | | | |
| Benzene | ND | µg/L | 1.0 | | | | | | |
| Toluene | ND | µg/L | 1.0 | | | | | | |
| Ethylbenzene | ND | µg/L | 1.0 | | | | | | |
| Xylenes, Total | ND | µg/L | 2.0 | | | | | | |
| 1,2,4-Trimethylbenzene | ND | µg/L | 1.0 | | | | | | |
| 1,3,5-Trimethylbenzene | ND | µg/L | 1.0 | | | | | | |

Sample ID: 100NG BTEX LCS

LCS

Batch ID: R32612 **Analysis Date:** 3/2/2009 12:18:16 PM

| | | | | | | | | | |
|--------------------------------|-------|------|-----|------|------|-----|--|--|--|
| Methyl tert-butyl ether (MTBE) | 20.61 | µg/L | 2.5 | 103 | 51.2 | 138 | | | |
| Benzene | 18.34 | µg/L | 1.0 | 91.7 | 85.9 | 113 | | | |
| Toluene | 18.55 | µg/L | 1.0 | 92.8 | 86.4 | 113 | | | |
| Ethylbenzene | 19.05 | µg/L | 1.0 | 95.3 | 83.5 | 118 | | | |
| Xylenes, Total | 58.64 | µg/L | 2.0 | 97.7 | 83.4 | 122 | | | |
| 1,2,4-Trimethylbenzene | 18.39 | µg/L | 1.0 | 92.0 | 83.5 | 115 | | | |
| 1,3,5-Trimethylbenzene | 18.81 | µg/L | 1.0 | 94.1 | 85.2 | 113 | | | |

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:

2/26/2009

Work Order Number 0902288

Received by:

ARS

Checklist completed by:

Signature [Handwritten Signature]

Sample ID labels checked by:

Initials [Handwritten Initials]

Date 2/26/09

Matrix:

Carrier name: UPS

- Shipping container/cooler in good condition? Yes No Not Present
- Custody seals intact on shipping container/cooler? Yes No Not Present Not Shipped
- Custody seals intact on sample bottles? Yes No N/A
- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels? Yes No
- Samples in proper container/bottle? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No
- All samples received within holding time? Yes No
- Water - VOA vials have zero headspace? No VOA vials submitted Yes No
- Water - Preservation labels on bottle and cap match? Yes No N/A
- Water - pH acceptable upon receipt? Yes No N/A

Container/Temp Blank temperature?

3°

<6° C Acceptable
If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: Per LJ collection date for OW-30 & OW-14 is 2/23/09

[Handwritten Signature] 3/2/09

Corrective Action _____

