

APPROVED Conditional By Kellie Jones at 11:01 am, Oct 20, 2015



Red Hills 21 Fed Com 2H

Sec. 16 T26S R32E

Lea County, NM

Work Plan

Kellie Jones Environmental Specialist NM Oil Conservation District – Division 1 1625 N. French Dr. Hobbs, NM 88240

RE: Mewbourne, Red Hills 21 Fed Com 2H – Remediation Work Plan

Ms. Jones,

Mewbourne has retained Diversified Field Service, Inc. (DFSI) to address environmental issues for the site detailed herein.

The site is located southwest of Jal, NM, in Lea County. The leak area is on the pad and in the pasture on the southwest corner of the pad.

Site Assessment and Delineation

On September 10, 2015, DFSI personnel obtained three surface and BGS (below ground surface) samples of the leak area. Each sample was tested for chloride levels as well as BTEX. The BTEX samples were performed using a Mini Rae Photoionization Detector (PID). All the clean field samples found under the BLM/NMOCD standards will be taken to a lab for confirmation. Those results are attached.

DFSI has conducted a groundwater study of the area and has determined that according to the New Mexico Office of the State Engineer the average depth to groundwater for this area is 550 foot below ground surface. Therefore, no eminent danger of groundwater impact or threat to life is anticipated.

Conclusion

After careful review DFSI on behalf of Mewbourne would like to propose the following:

The areas of SP #2 and SP #3 will be excavated to 1' BGS. The area of SP #1 will be delineated during excavation to obtain a confirmation sample. This sample will be sent to a commercial laboratory for confirmation.

The excavated area on the pad will be backfilled with fresh caliche, and the area in the pasture will be backfilled with fresh topsoil. All contaminated materials will be hauled to an approved NM state disposal.

Following the approval of the above plan, DFSI will submit all proper closure documentation to the NMOCD and BLM in accordance to the State and Federal Guidelines set forth.

Please feel free to contact me with any questions concerning this remediation plan request.

Sincerely,

Michael Burton

Michael Burton Environmental Operations Director Diversified Field Service, Inc. 206 West Snyder Hobbs, NM 88240 Office: (575)964-8394 Mobile: (575)390-5454 Fax: (575)964-8396 Email: <u>Mburton@diversifiedfsi.com</u>

cc Shelly Tucker BLM

Attachments: Site/Sample Map Sample Data

Site Diagram



Diversified Environmental Services

Company Name:MewbourneSP Date:Location Name:Red Hills West 21 Fed Com #2HRel Date:

9/10/2015

| SP1 | CHL | PID | SP2 | CHL | PID | SP3 | CHL | PID | SP4 | CHL | PID | SP5 | CHL | PID |
|-----------|--------|-------|----------|-------|-------|---------|-------|------|-----|-----|-----|-----|-----|-----|
| Surface | 20,694 | 27.6 | Surface | 2,949 | 127.3 | Surface | 3,299 | 17.6 | | | | | | |
| 1' | 8,172 | 377 | 1' | 750 | 28.2 | 1' | 925 | 4.7 | | | | | | |
| 2' | 750 | 19.5 | 2' | 125 | 66.5 | 2' | 100 | 2.2 | | | | | | |
| 3' | 8,297 | 188.4 | 3' | 200 | 59.4 | | | | | | | | | |
| AUGER REI | FUSAL | | AUGER RE | FUSAL | | | | | | | | | | |
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| Lab Confirmation Sample |
|--|
| Field Sampling |
| Needs Delineation and confirmation samples |

Page 1



October 02, 2015

ZACK THOMAS MEWBOURNE OIL COMPANY P. O. BOX 5270 HOBBS, NM 88240

RE: RED HILLS WEST 21 FED COM #2H

Enclosed are the results of analyses for samples received by the laboratory on 09/30/15 13:28.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

| Method EPA 552.2 | Haloacetic Acids (HAA-5) |
|------------------|------------------------------|
| Method EPA 524.2 | Total Trihalomethanes (TTHM) |
| Method EPA 524.4 | Regulated VOCs (V1, V2, V3) |

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



Analytical Results For:

MEWBOURNE OIL COMPANY ZACK THOMAS P. O. BOX 5270 HOBBS NM, 88240 Fax To: (575) 937-6252

| Received: | 09/30/2015 | Sampling Date: | 09/30/2015 |
|-------------------|-------------------------------|---------------------|----------------|
| Reported: | 10/02/2015 | Sampling Type: | Soil |
| Project Name: | RED HILLS WEST 21 FED COM #2H | Sampling Condition: | Cool & Intact |
| Project Number: | NONE GIVEN | Sample Received By: | Celey D. Keene |
| Project Location: | NOT GIVEN | | |

Sample ID: SAMPLE PT. 2 @ 2' (H502590-01)

| BTEX 8021B | mg/kg | | Analyzed By: MS | | | | | | |
|--------------------------------------|--------|-----------------|-----------------|--------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 09/30/2015 | ND | 2.07 | 103 | 2.00 | 1.10 | |
| Toluene* | 0.050 | 0.050 | 09/30/2015 | ND | 1.77 | 88.5 | 2.00 | 1.43 | |
| Ethylbenzene* | <0.050 | 0.050 | 09/30/2015 | ND | 1.68 | 84.2 | 2.00 | 2.52 | |
| Total Xylenes* | <0.150 | 0.150 | 09/30/2015 | ND | 5.28 | 87.9 | 6.00 | 3.58 | |
| Total BTEX | <0.300 | 0.300 | 09/30/2015 | ND | | | | | |
| Surrogate: 4-Bromofluorobenzene (PID | 102 % | 6 85.6-13 | 7 | | | | | | |
| Chloride, SM4500Cl-B | mg/kg | | Analyzed By: AP | | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 192 | 16.0 | 10/02/2015 | ND | 416 | 104 | 400 | 0.00 | |
| TPH 8015M | mg/ | kg | Analyze | d By: MS | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 09/30/2015 | ND | 193 | 96.6 | 200 | 4.68 | |
| DRO >C10-C28 | 45.4 | 10.0 | 09/30/2015 | ND | 210 | 105 | 200 | 4.70 | |
| Surrogate: 1-Chlorooctane | 102 9 | 6 47.2-15 | 7 | | | | | | |
| Surrogate: 1-Chlorooctadecane | 101 % | 6 52.1-17 | 6 | | | | | | |

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*=Accredited Analyte

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

MEWBOURNE OIL COMPANY ZACK THOMAS P. O. BOX 5270 HOBBS NM, 88240 Fax To: (575) 937-6252

| Received: | 09/30/2015 | Sampling Date: | 09/30/2015 |
|-------------------|-------------------------------|---------------------|----------------|
| Reported: | 10/02/2015 | Sampling Type: | Soil |
| Project Name: | RED HILLS WEST 21 FED COM #2H | Sampling Condition: | Cool & Intact |
| Project Number: | NONE GIVEN | Sample Received By: | Celey D. Keene |
| Project Location: | NOT GIVEN | | |

Sample ID: SAMPLE PT. 3 @ 2' (H502590-02)

| BTEX 8021B | mg/kg | | Analyzed By: MS | | | | | | |
|--------------------------------------|--------|-----------------|-----------------|--------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 09/30/2015 | ND | 2.07 | 103 | 2.00 | 1.10 | |
| Toluene* | <0.050 | 0.050 | 09/30/2015 | ND | 1.77 | 88.5 | 2.00 | 1.43 | |
| Ethylbenzene* | <0.050 | 0.050 | 09/30/2015 | ND | 1.68 | 84.2 | 2.00 | 2.52 | |
| Total Xylenes* | <0.150 | 0.150 | 09/30/2015 | ND | 5.28 | 87.9 | 6.00 | 3.58 | |
| Total BTEX | <0.300 | 0.300 | 09/30/2015 | ND | | | | | |
| Surrogate: 4-Bromofluorobenzene (PID | 105 % | 85.6-13 | 7 | | | | | | |
| Chloride, SM4500Cl-B | mg/kg | | Analyzed By: AP | | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 80.0 | 16.0 | 10/02/2015 | ND | 416 | 104 | 400 | 0.00 | |
| TPH 8015M | mg/ | kg | Analyze | d By: MS | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 09/30/2015 | ND | 193 | 96.6 | 200 | 4.68 | |
| DRO >C10-C28 | <10.0 | 10.0 | 09/30/2015 | ND | 210 | 105 | 200 | 4.70 | |
| Surrogate: 1-Chlorooctane | 101 9 | 47.2-15 | 7 | | | | | | |
| Surrogate: 1-Chlorooctadecane | 101 9 | 52.1-17 | 6 | | | | | | |

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

- ND
 Analyte NOT DETECTED at or above the reporting limit

 RPD
 Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



New Mexico Office of the State Engineer Water Column/Average Depth to Water

No records found.

PLSS Search:

Section(s): 16

Township: 26S

Range: 32E

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