

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-144
June 1, 2004

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☒ No ☐

Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☒

| | | |
|--|--|---|
| Operator: <u>Burlington Resources</u> Telephone: <u>(505) 326-9841</u> e-mail address: <u>LHasely@br-inc.com</u> | | |
| Address: <u>3401 East 30th Street, Farmington, New Mexico, 87402</u> | | |
| Facility or well name: <u>Nordhaus No. 5</u> | API #: <u>30045108440000</u> | U/L or Qtr/Qtr <u>M</u> Sec <u>12</u> T <u>31N</u> R <u>9W</u> |
| County: <u>San Juan</u> | Latitude <u>36.90761</u> | Longitude <u>-107.73854</u> NAD: 1927 <input checked="" type="checkbox"/> 1983 <input type="checkbox"/> |
| Surface Owner: Federal <input checked="" type="checkbox"/> State <input type="checkbox"/> Private <input type="checkbox"/> Indian <input type="checkbox"/> | | |
| Pit Type: Drilling <input type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input type="checkbox"/> Thickness _____ mil Clay <input type="checkbox"/> Pit Volume _____ bbl | Below-grade tank Volume: <u>40</u> bbl Type of fluid: <u>Produced Water and Incidental Oil</u> Construction material: <u>Fiberglass</u> Double-walled, with leak detection? Yes <input checked="" type="checkbox"/> If not, explain why not. | |
| Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.) | Less than 50 feet | (20 points) |
| | 50 feet or more, but less than 100 feet | (10 points) |
| | 100 feet or more | (0 points) 20 |
| Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.) | Yes | (20 points) |
| | No | (0 points) 0 |
| Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.) | Less than 200 feet | (20 points) |
| | 200 feet or more, but less than 1000 feet | (10 points) |
| | 1000 feet or more | (0 points) 10 |
| Ranking Score (Total Points) | | 30 |

If this is a pit closure: (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if you are burying in place) onsite ☒ offsite ☐ If offsite, name of facility _____. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☒ Yes ☐ If yes, show depth below ground surface _____ ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

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| Additional Comments: |
| Below Grade Tank A |
| Maximum Practical Extent of Excavation Reached at 18' Depth, <u>Encountered Sandstone.</u> |
| BTEX Lab Analysis Attached. |
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| |

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Date: 3/2/06

Printed Name/Title Mr. Ed Hasely, Environmental Advisor

Signature [Signature]

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approved: Oil & Gas Inspector, Dist. IV

Printed Name/Title _____ Signature [Signature]

Date: MAR 06 2006

| | | |
|-------------------------------------|--|--|
| CLIENT: <u>Burlington Resources</u> | ENVIROTECH, INC. <small>ENVIRONMENTAL SCIENTISTS & ENGINEERS 5796 U.S. HIGHWAY 64-3014 FARMINGTON, NEW MEXICO 87401 PHONE: (505) 632-0615</small> | LOCATION NO: _____ C.O.C. NO: _____ |
|-------------------------------------|--|--|

| | |
|---|-------------------------------|
| FIELD REPORT: CLOSURE VERIFICATION | PAGE No: <u>1</u> of <u>1</u> |
|---|-------------------------------|

| | |
|---|---|
| LOCATION: NAME: <u>Nordhaus</u> WELL #: <u>5</u> PIT: _____ QUAD/UNIT: <u>M</u> SEC: <u>12</u> TWP: <u>31N</u> RNG: <u>9W</u> PM: <u>NMPM</u> CNTY: <u>SJ</u> ST: <u>NM</u> QTR/FOOTAGE: <u>850' FSL</u> <u>810' FWL</u> CONTRACTOR: <u>LOR</u> | DATE STARTED: <u>7/25/05</u> DATE FINISHED: <u>8/10/05</u> ENVIRONMENTAL SPECIALIST: <u>MPM</u> |
|---|---|

| |
|--|
| EXCAVATION APPROX. <u>28</u> FT. x <u>20</u> FT. x <u>18</u> FT. DEEP. CUBIC YARDAGE: <u>370</u> |
| DISPOSAL FACILITY: <u>Nordhaus No. 5</u> REMEDIATION METHOD: <u>Landfarm</u> |
| LAND USE: _____ LEASE: <u>SF-078508</u> FORMATION: _____ |

| | |
|----------------------------------|---|
| FIELD NOTES & REMARKS: | PIT LOCATED APPROXIMATELY <u>118'</u> FT. <u>355°</u> FROM WELLHEAD. DEPTH TO GROUNDWATER: <u>20</u> NEAREST WATER SOURCE: <u>0</u> NEAREST SURFACE WATER: <u>10</u> NMOC RANKING SCORE: <u>30</u> NMOC TPH CLOSURE STD: <u>100</u> PPM |
| SOIL AND EXCAVATION DESCRIPTION: | CHECK ONE: <input type="checkbox"/> PIT ABANDONED <input checked="" type="checkbox"/> STEEL TANK INSTALLED |

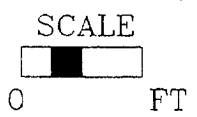
Two BGT's on-site.

7/25 BGT A. Visible contamination from 1.5' below BGT to 14' depth. Will need further excavation.

8/10. 18' depth is sandstone bottom. Soil landfarmed on-site. DTEX sample taken.

FIELD 418.1 CALCULATIONS

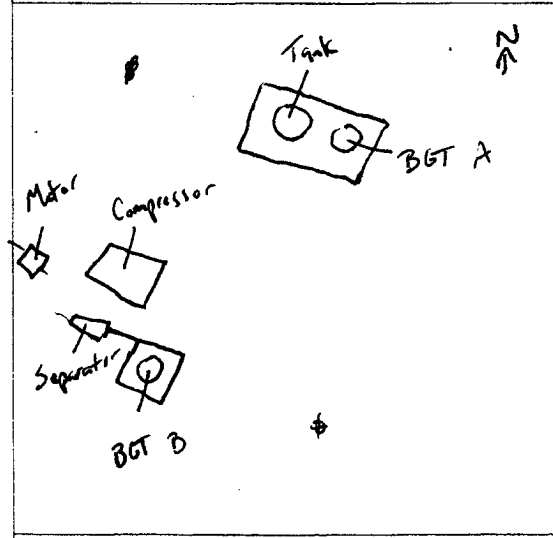
| TIME | SAMPLE I.D. | LAB No: | WEIGHT (g) | mL. FREON | DILUTION | READING | CALC. ppm |
|-----------|-------------|---------|------------|-----------|----------|---------|-----------|
| 8/10 1015 | Bottom 18' | 1 | 5 | 20 | 1 | 0.176 | 1220 |
| 8/10 1025 | 4 ft Wells | 1 | 5 | 20 | 1 | 0.004 | 27.2 |



PIT PERIMETER

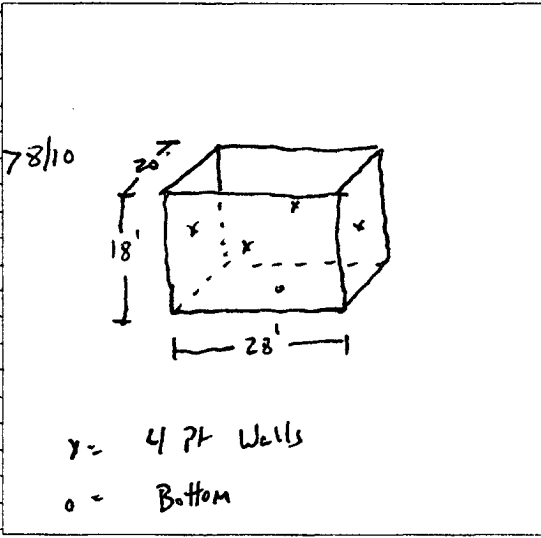
OVN RESULTS

PIT PROFILE



| SAMPLE ID | FIELD HEADSPACE PID (ppm) |
|-------------|---------------------------|
| 13' below | 1006 ppm |
| 24' TD | 779 ppm |
| 3 | |
| 4 18' Depth | 1083 |
| 54 ft Wells | 4 |

| LAB SAMPLES | | |
|-------------|----------|------|
| SAMPLE ID | ANALYSIS | TIME |
| | | |
| | | |
| | | |
| | | |
| | | |



| | | |
|---------------|----------------|---------------|
| TRAVEL NOTES: | CALLOUT: _____ | ONSITE: _____ |
|---------------|----------------|---------------|

**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client: Burlington Resources
Sample No.: 1
Sample ID: Bottom @ 18' depth
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

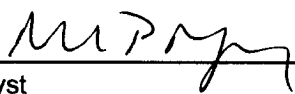
Project #: 92115-021-095
Date Reported: 8/11/2005
Date Sampled: 8/10/2005
Date Analyzed: 8/10/2005
Analysis Needed: TPH-418.1

| Parameter | Concentration (mg/kg) | Det. Limit (mg/kg) |
|------------------------------|--------------------------|--------------------------|
| Total Petroleum Hydrocarbons | 1,220 | 5.0 |

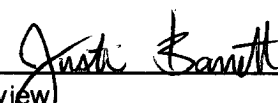
ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: Nordhaus No. 5, BGT A



Analyst



Review

**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

| | | | |
|----------------|-----------------------|------------------|---------------|
| Client: | Burlington Resources | Project #: | 92115-021-095 |
| Sample No.: | 2 | Date Reported: | 8/11/2005 |
| Sample ID: | Walls, 4 Pt Composite | Date Sampled: | 8/10/2005 |
| Sample Matrix: | Soil | Date Analyzed: | 8/10/2005 |
| Preservative: | Cool | Analysis Needed: | TPH-418.1 |
| Condition: | Cool and Intact | | |

| Parameter | Concentration (mg/kg) | Det. Limit (mg/kg) |
|------------------------------|--------------------------|--------------------------|
| Total Petroleum Hydrocarbons | 27.8 | 5.0 |

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: Nordhaus No. 5, BGT A



Analyst



Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

| | | | |
|--------------------|----------------------|---------------------|---------------|
| Client: | Burlington Resources | Project #: | 92115-021-095 |
| Sample ID: | 18' Bottom | Date Reported: | 08-12-05 |
| Laboratory Number: | 34031 | Date Sampled: | 08-10-05 |
| Chain of Custody: | 14380 | Date Received: | 08-10-05 |
| Sample Matrix: | Soil | Date Analyzed: | 08-12-05 |
| Preservative: | Cool | Date Extracted: | 08-11-05 |
| Condition: | Cool & Intact | Analysis Requested: | BTEX |

| Parameter | Concentration (ug/Kg) | Det. Limit (ug/Kg) |
|--------------|--------------------------|--------------------------|
| Benzene | ND | 2.1 |
| Toluene | 4.9 | 1.8 |
| Ethylbenzene | ND | 1.7 |
| p,m-Xylene | 49.2 | 1.5 |
| o-Xylene | 10.5 | 2.2 |
| Total BTEX | 64.6 | |

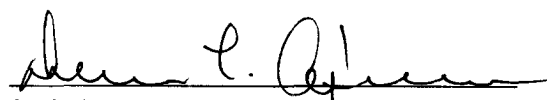
ND - Parameter not detected at the stated detection limit.

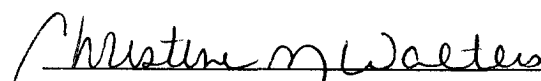
| Surrogate Recoveries: | Parameter | Percent Recovery |
|-----------------------|---------------------|------------------|
| | Fluorobenzene | 98.0 % |
| | 1,4-difluorobenzene | 98.0 % |
| | Bromochlorobenzene | 98.0 % |

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Nordhaus No. 5.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons


| | | | |
|----------------------|----------------------|---------------------|-----------------|
| Client: | Burlington Resources | Project #: | 92115-001-15463 |
| Sample ID: | Nordhaus #5 | Date Reported: | 02-18-06 |
| Laboratory Number: | 36253 | Date Sampled: | 02-15-06 |
| Chain of Custody No: | 15463 | Date Received: | 02-15-06 |
| Sample Matrix: | Soil | Date Extracted: | 02-16-06 |
| Preservative: | Cool | Date Analyzed: | 02-18-06 |
| Condition: | Cool and Intact | Analysis Requested: | 8015 TPH |

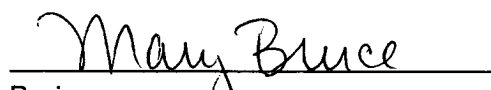
| Parameter | Concentration (mg/Kg) | Det. Limit (mg/Kg) |
|------------------------------|--------------------------|--------------------------|
| Gasoline Range (C5 - C10) | ND | 0.2 |
| Diesel Range (C10 - C28) | ND | 0.1 |
| Total Petroleum Hydrocarbons | ND | 0.2 |

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Landfarm (BGT 2005) PID 11.3**


Analyst


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