

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

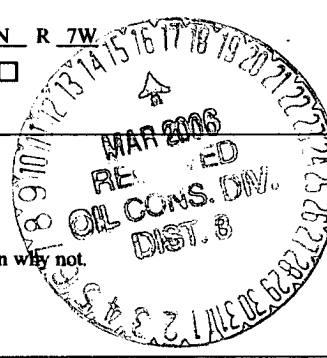
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

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>Elm Ridge Resources</u> Telephone: <u>(505) 632-3476</u> e-mail address: <u>amackey1@elmridge.net</u>		
Address: <u>#20 CR 5060, Bloomfield, New Mexico, 87413</u>		
Facility or well name: <u>Lybrook South No. 1</u> API #: <u>3003924537</u> U/L or Qtr/Qtr <u>B</u> Sec <u>14</u> T <u>23N</u> R <u>7W</u>		
County: <u>Rio Arriba</u> Latitude <u>36.230750</u> Longitude <u>-107.541600</u> NAD: 1927 <input checked="" type="checkbox"/> 1983 <input type="checkbox"/>		
Surface Owner: Federal <input type="checkbox"/> State <input type="checkbox"/> Private <input checked="" type="checkbox"/> Indian <input type="checkbox"/>		
<b>Pit</b> Type: Drilling <input type="checkbox"/> Production <input checked="" type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input type="checkbox"/> Unlined <input checked="" type="checkbox"/> Liner type: Synthetic <input type="checkbox"/> Thickness _____ mil Clay <input type="checkbox"/> Pit Volume _____ bbl	<b>Below-grade tank</b> Volume: _____ bbl Type of fluid: Construction material: Double-walled, with leak detection? Yes <input 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) 10	
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) 0	
	<b>Ranking Score (Total Points)</b> 10	

**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.

Additional Comments:
Soil from the separator pit tested clean, no soil remediation required

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: 3/9/06

Printed Name/Title Ms. Amy Mackey, Production Technician

Signature Amy Mackey

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.

DEPUTY OIL & GAS INSPECTOR, DIST. 8

Printed Name/Title \_\_\_\_\_

Signature Denny Felt

Date: MAR 16 2006


CLIENT: _____	<b>ENVIROTECH INC.</b> <small>ENVIRONMENTAL SCIENTISTS &amp; ENGINEERS          5796 U.S. HIGHWAY 64-3014          FARMINGTON, NEW MEXICO 87401          PHONE: (505) 632-0615</small>	LOCATION NO: _____  C.D.C. NO: _____
---------------	---	--

FIELD REPORT: CLOSURE VERIFICATION		PAGE No: <u>1</u> of <u>1</u>
LOCATION: NAME: <u>Lybrook South</u> WELL #: <u>1</u> PIT: <u>Sep</u> QUAD/UNIT: _____ SEC: <u>14</u> TWP: <u>23N</u> RNG: <u>7W</u> PM: <u>NMNM</u> CNTY: <u>RA</u> ST: <u>NM</u> QTR/FOOTAGE: <u>797FHL</u> <u>1680</u> FEL _____ CONTRACTOR: _____		DATE STARTED: <u>2/14/06</u> DATE FINISHED: <u>2/14/06</u> ENVIRONMENTAL SPECIALIST: <u>GWC</u>

EXCAVATION APPROX. _____ FT. x _____ FT. x _____ FT. DEEP.	CUBIC YARDAGE: <u>0</u>
DISPOSAL FACILITY: <u>N/A</u>	REMEDIALATION METHOD: <u>N/A</u>
LAND USE: _____	LEASE: <u>SF 078360</u> FORMATION: _____

FIELD NOTES & REMARKS:	PIT LOCATED APPROXIMATELY <u>146</u> FT. <u>80"</u> FROM WELLHEAD.	
DEPTH TO GROUNDWATER: <u>50-100</u>	NEAREST WATER SOURCE: <u>&gt;1000</u>	NEAREST SURFACE WATER: <u>&gt;1000</u>
NMOC D RANKING SCORE: <u>10</u>	NMOC D TPH CLOSURE STD: <u>1000</u> PPM	
SOIL AND EXCAVATION DESCRIPTION:		CHECK ONE: <input checked="" type="checkbox"/> PIT ABANDONED <input type="checkbox"/> STEEL TANK INSTALLED

*Soil tested clean, no soil remediation required*

36° 13.845' N  
 107° 32.496' W  
 SCALE  
  
 0 FT

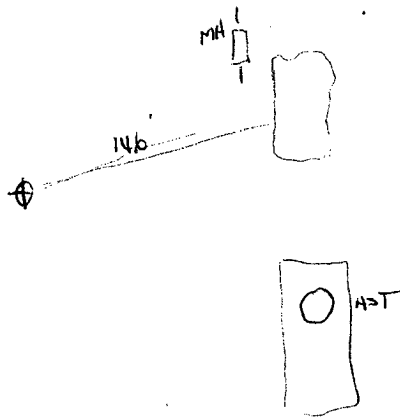

FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
<del>1145</del>	<u>Bottom</u>		<u>5.0</u>	<u>20</u>	<u>4</u>	<u>35</u>	<u>140</u>
<u>1155</u>	<u>Excavated material</u>		<u>5.0</u>	<u>20</u>	<u>4</u>	<u>16</u>	<u>64</u>

PIT PERIMETER

OVM RESULTS

PIT PROFILE

	<table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>SAMPLE ID</th> <th>FIELD HEADSPACE PID (ppm)</th> </tr> </thead> <tbody> <tr><td>1 <u>Bottom</u></td><td><u>0</u></td></tr> <tr><td>2 <u>Ex</u></td><td><u>0</u></td></tr> <tr><td>3</td><td></td></tr> <tr><td>4</td><td></td></tr> <tr><td>5</td><td></td></tr> </tbody> </table>	SAMPLE ID	FIELD HEADSPACE PID (ppm)	1 <u>Bottom</u>	<u>0</u>	2 <u>Ex</u>	<u>0</u>	3		4		5					
SAMPLE ID	FIELD HEADSPACE PID (ppm)																
1 <u>Bottom</u>	<u>0</u>																
2 <u>Ex</u>	<u>0</u>																
3																	
4																	
5																	
LAB SAMPLES																	
<table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>SAMPLE ID</th> <th>ANALYSIS</th> <th>TIME</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>			SAMPLE ID	ANALYSIS	TIME												
SAMPLE ID	ANALYSIS	TIME															

TRAVEL NOTES: CALLOUT: \_\_\_\_\_ ONSITE: \_\_\_\_\_

# ENVIROTECH INC.

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## Method 418.1 Analysis Log Total Petroleum Hydrocarbons

Date 2/14/06

Analyst G. Crabtree

Location South Lybrook #1

Instrument \_\_\_\_\_

Job No. 03056-040-024

Sample No.	Sample Description	Sample Wt. (g)	Volume Freon (mL)	Dilution Factor	Abs. Reading	TPH (mg/kg)	OVM (mg/kg)
1	Bottom g' BGS composite	5.0	20	4	35	140	0
2	Excavation Material	5.0	20	4	16	64	0

### Infrared Spectrophotometer Calibration

New Freon \_\_\_\_\_

Date Standards Prepared \_\_\_\_\_

Standard Concentration (mg/L)	Absorbance
100	_____
200	<u>188</u>
500	_____
1000	_____

I-CAL RF: \_\_\_\_\_

C-CAL RF: \_\_\_\_\_

RSD: \_\_\_\_\_ %

% Difference: \_\_\_\_\_ %

QA/QC Acceptance Criteria: I-CAL RSD +/- 20%

C-Cal Difference +/- 10%

EPA METHOD 418.1  
TOTAL PETROLEUM  
HYDROCARBONS

Client:	Elm Ridge Resources	Project #:	03056-040-024
Sample No.:	1	Date Reported:	2/14/2006
Sample ID:	Composite bottom sample at 3'	Date Sampled:	2/15/2006
Sample Matrix:	Soil	Date Analyzed:	2/15/2006
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
-----------	--------------------------	--------------------------

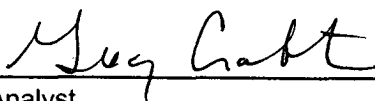
Total Petroleum Hydrocarbons	140.0	5.0
------------------------------	-------	-----

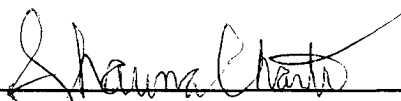
ND = Parameter not detected at the stated detection limit.

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

Comments: **Lybrook South No. 1**

Instrument calibration checked against 200 ppm standard. Zeroed before each sample

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Review

# ENVIROTECH INC.

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Elm Ridge Resources	Project #:	03056-040-024
Sample No.:	2	Date Reported:	2/14/2006
Sample ID:	Composite sample of Excavated Material	Date Sampled:	2/15/2006
Sample Matrix:	Soil	Date Analyzed:	2/15/2006
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
-----------	--------------------------	--------------------------

Total Petroleum Hydrocarbons	64.0	5.0
------------------------------	------	-----

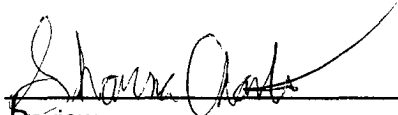
ND = Parameter not detected at the stated detection limit.

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

Comments: **Lybrook South No. 1**

Instrument calibration checked against 200 ppm standard. Zeroed before each sample

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Review