

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

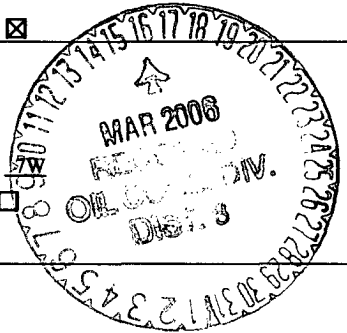
For drilling and production facilities, submit to appropriate NMOCD District Office.  
For downstream facilities, submit to Santa Fe office

**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: Elm Ridge Resources Telephone: (505) 632-3476 e-mail address: amackey1@elmridge.net  
Address: #20 CR 5060, Bloomfield, New Mexico, 87413  
Facility or well name: Candado No. 22 API #: 3003921739 U/L or Qtr/Qtr D Sec 4 T 26N R 7W  
County: Rio Arriba Latitude 36.512800 Longitude -107.585483 NAD: 1927 ☒ 1983 ☐  
Surface Owner: Federal ☒ State ☐ Private ☐ Indian ☐



<b>Pit</b>	<b>Below-grade tank</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	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) 0
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>		0

**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 Envirotech Landfarm #2. (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:
Approximately 10 cubic yards of contaminated soil was excavated and transported to Envirotech's NMED permitted landfarm

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.

Approval: Denny Date: MAR 16 2006  
Printed Name/Title DEPUTY OIL & GAS INSPECTOR, DIST. 3

CLIENT: <u>Elm Ridge</u>	<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.O.C. NO: _____
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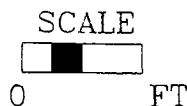
FIELD REPORT: CLOSURE VERIFICATION	PAGE No: <u>1</u> of <u>1</u>
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LOCATION: NAME: <u>CANDADO 22</u> WELL #: <u>22</u> PIT: _____ QUAD/UNIT: <u>NW/5W SEC: 4</u> TWP: <u>26N</u> RNG: <u>7W</u> PM: <u>NM/PM</u> CNTY: <u>RA</u> ST: <u>NM</u> QTR/FOOTAGE: _____ CONTRACTOR: _____	DATE STARTED: <u>1/4/06</u> DATE FINISHED: <u>1/13/06</u> ENVIRONMENTAL SPECIALIST: <u>GWC</u>
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EXCAVATION APPROX. <u>19</u> FT. x <u>16</u> FT. x <u>6</u> FT. DEEP.	CUBIC YARDAGE: <u>40</u>	
DISPOSAL FACILITY: <u>Envirotech Landfarm #2</u> REMEDIATION METHOD: <u>Landfarm</u>		
LAND USE: _____ LEASE: _____ FORMATION: _____		

FIELD NOTES & REMARKS:	PIT LOCATED APPROXIMATELY <u>70</u> FT. <u>110°</u> FROM WELLHEAD. DEPTH TO GROUNDWATER: <u>&gt;100</u> NEAREST WATER SOURCE: <u>&gt;1000</u> NEAREST SURFACE WATER: <u>&gt;1000</u> NMCD RANKING SCORE: <u>0</u> NMCD TPH CLOSURE STD: <u>5,000</u> PPM
SOIL AND EXCAVATION DESCRIPTION:	CHECK ONE: <input checked="" type="checkbox"/> PIT ABANDONED <input type="checkbox"/> STEEL TANK INSTALLED

Approximately 70 yd<sup>3</sup> of soil was excavation & hauled to Envirotech Landfarm #2



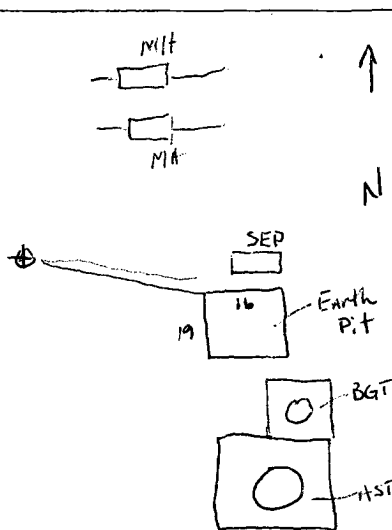
FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1235	Wall Composite		5.0	20	4	431	1724
1240	Pit Bottom Composite @ 6'		5.0	20	4	394	1576
1245	Pile		5.0	20	40	76	3040

PIT PERIMETER

OVM RESULTS

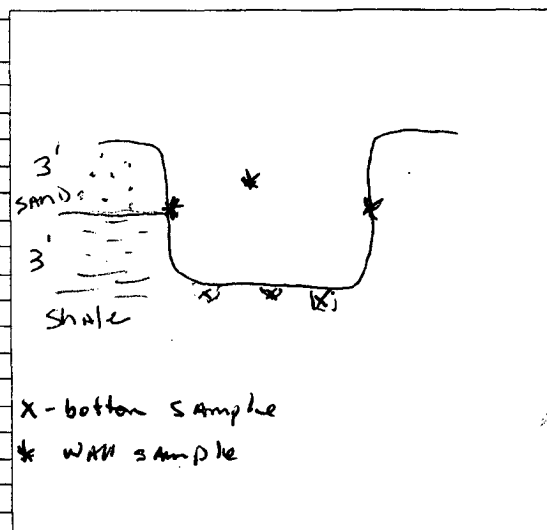
PIT PROFILE



SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 Sides	24
2 Bottom 6'	3
3 Pile	191
4	
5	

SAMPLE ID	ANALYSIS	TIME



TRAVEL NOTES:	CALLOUT: _____	ONSITE: _____
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# ENVIROTECH INC.

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## Method 418.1 Analysis Log Total Petroleum Hydrocarbons

Date 1/13/06

Analyst G. Crabtree

Location CANADO 22

Instrument Infracal

Job No. 03050-040-014

Sample No.	Sample Description	Sample Wt. (g)	Volume Freon (mL)	Dilution Factor	Abs. Reading	TPH (mg/kg)
1	Pit composite Prior to excavation	5.0	20	400	448	179,200
2	Wall composite	5.0	20	4	431	1724
3	Bottom composite 4+ 6' BGS	5.0	20	4	347	1576
4	Excavated material	5.0	20	40	76	3040

### Infrared Spectrophotometer Calibration

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

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

Standard Concentration (mg/L)	Absorbance
100	_____
200	<u>215</u>
500	_____
1000	_____

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

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

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

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

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

C-Cal Difference +/- 10%

# ENVIROTECH INC.

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Elm Ridge Resources	Project #:	03056-040-014
Sample No.:	2	Date Reported:	1/16/2006
Sample ID:	Composite sample of pit walls	Date Sampled:	1/13/2006
Sample Matrix:	Soil	Date Analyzed:	1/13/2006
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		


Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	1,720.0	20.0

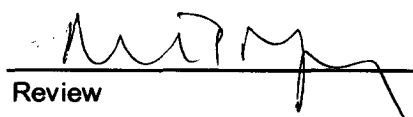
ND = Parameter not detected at the stated detection limit.

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

Comments: **Candado No. 22**

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

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Review

**EPA METHOD 418.1  
TOTAL PETROLEUM  
HYDROCARBONS**

Client:	Elm Ridge Resources	Project #:	03056-040-014
Sample No.:	3	Date Reported:	1/16/2006
Sample ID:	Composite sample of pit bottom @ 6'	Date Sampled:	1/13/2006
Sample Matrix:	Soil	Date Analyzed:	1/13/2006
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

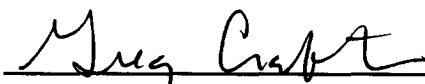
Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	1,580.0	20.0

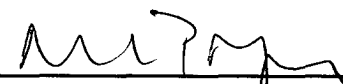
ND = Parameter not detected at the stated detection limit.

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

Comments: **Candado No. 22**

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

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Review