

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. 21 API #: 3003921667 U/L or Qtr/Qtr B Sec 4 T 26N R 7W
County: Rio Arriba Latitude 36.519250 Longitude -107.576767 NAD: 1927 ☒ 1983 ☐
Surface Owner: Federal ☒ State ☐ Private ☐ Indian ☐

Pit

Type: Drilling ☐ Production ☒ Disposal ☐

Workover ☐ Emergency ☐

Lined ☐ Unlined ☒

Liner type: Synthetic ☐ Thickness mil Clay ☐

Pit Volume bbl

Below-grade tank

Volume: bbl Type of fluid:

Construction material:

Double-walled, with leak detection? Yes ☐ 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

Ranking Score (Total Points)

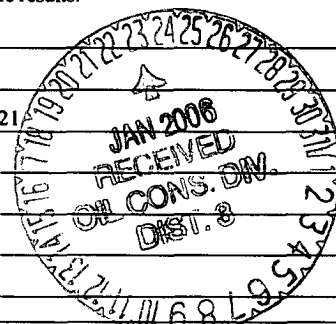
0

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 . (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:

The Soil sample passed method 418.1 analysis; the sample failed the field OVM headspace test. The sample passed method 8021

Results of BTEX analysis by USEPA method 8021 are attached



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: 1/20/06

Printed Name/Title Ms. Amy Mackey, Production Technician

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.

DEPUTY OIL & GAS INSPECTOR, DIST. 2

Printed Name/Title Denny Feag Signature [Signature]

Date: JAN 23 2006

CLIENT: <u>Elm Ridge</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: _____
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FIELD REPORT: CLOSURE VERIFICATION		PAGE No: <u>1</u> of <u>1</u>
LOCATION: NAME: <u>CANDADO</u> WELL #: <u>21</u> PIT: <u>Sep</u>		DATE STARTED: <u>1/9/06</u>
QUAD/UNIT: <u>B</u> SEC: <u>4</u> TWP: <u>26N</u> RNG: <u>7W</u> PM: <u>NMPM</u> CNTY: <u>RA</u> ST: <u>NM</u>		DATE FINISHED: <u>1/12/06</u>
QTR/FOOTAGE: <u>1030 FNL / 1470 FEL</u> CONTRACTOR: _____		ENVIRONMENTAL SPECIALIST: <u>GWC</u>

EXCAVATION APPROX. _____ FT. x _____ FT. x _____ FT. DEEP.	CUBIC YARDAGE: <u>0</u>
DISPOSAL FACILITY: _____	REMEDIAATION METHOD: _____
LAND USE: _____	LEASE: _____ FORMATION: _____

FIELD NOTES & REMARKS:	PIT LOCATED APPROXIMATELY <u>77</u> FT. <u>310'</u> FROM WELLHEAD.	
DEPTH TO GROUNDWATER: <u>0</u>	NEAREST WATER SOURCE: <u>0</u>	NEAREST SURFACE WATER: <u>0</u>
NMCD RANKING SCORE: <u>0</u>	NMCD TPH CLOSURE STD: <u>5,000</u> PPM	
SOIL AND EXCAVATION DESCRIPTION:		CHECK ONE : <input type="checkbox"/> PIT ABANDONED <input checked="" type="checkbox"/> STEEL TANK INSTALLED

Samples pass Method 418.1, failed field OVM headspace test.
 Bottom sample was tested for BTEX via method 8021, see attached results

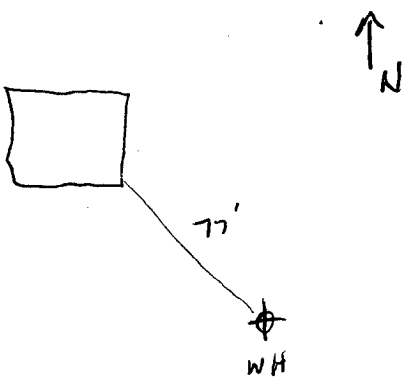
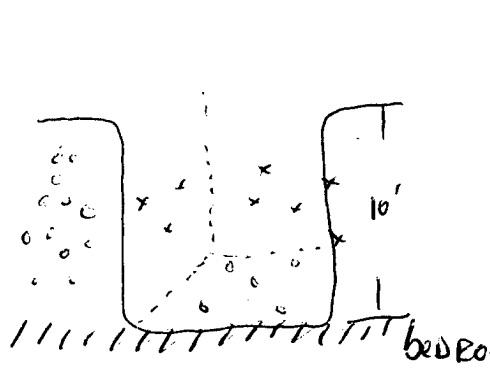
FIELD 418.1 CALCULATIONS							
TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1245	Side composite		5.0	20	4	N0	< 20
1250	Bottom @ 10'	35685	5.0	20	4	613	2452
1255	Excavated		5.0	20	4	190	760

SCALE

 0 FT

PIT PERIMETER

OVM RESULTS

PIT PROFILE

	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>SAMPLE ID</th><th>FIELD HEADSPACE PID (ppm)</th></tr> <tr><td>1 Side</td><td>11</td></tr> <tr><td>2 Bottom</td><td>393</td></tr> <tr><td>3 Excavated</td><td>305</td></tr> <tr><td>4</td><td></td></tr> <tr><td>5</td><td></td></tr> </table>	SAMPLE ID	FIELD HEADSPACE PID (ppm)	1 Side	11	2 Bottom	393	3 Excavated	305	4		5		 <p style="font-size: small;">x side sample locations o bottom sample locations</p>									
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TRAVEL NOTES:	CALLOUT: _____	ONSITE: _____
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EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Client:	Elm Ridge Resources	Project #:	03056-040-016
Sample No.:	1	Date Reported:	1/10/2006
Sample ID:	Composite sample of pit walls	Date Sampled:	1/9/2006
Sample Matrix:	Soil	Date Analyzed:	1/9/2006
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
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Total Petroleum Hydrocarbons	ND	20.0
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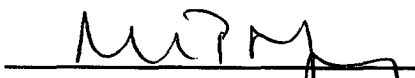
ND = Parameter not detected at the stated detection limit.

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

Comments: **Candado No.21**

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 #:	03056-040-016
Sample No.:	2	Date Reported:	1/10/2006
Sample ID:	Composite sample of bottom @10 feet	Date Sampled:	1/9/2006
Sample Matrix:	Soil	Date Analyzed:	1/9/2006
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		


Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	2,452.0	20.0

ND = Parameter not detected at the stated detection limit.

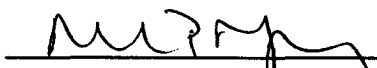
References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Candado No. 21**

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 #:	03056-040-016
Sample No.:	3	Date Reported:	1/10/2006
Sample ID:	Composite sample of Excavated Material	Date Sampled:	1/9/2006
Sample Matrix:	Soil	Date Analyzed:	1/9/2006
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		


Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	760.0	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. 21**

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



Analyst



Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Elm Ridge Resources	Project #:	03056-040
Sample ID:	Candado 21 Composite	Date Reported:	01-11-06
Laboratory Number:	35685	Date Sampled:	01-09-06
Chain of Custody:	15348	Date Received:	01-09-06
Sample Matrix:	Soil	Date Analyzed:	01-11-06
Preservative:	Cool	Date Extracted:	01-10-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	15.7	1.8
Toluene	48.7	1.7
Ethylbenzene	86.9	1.5
p,m-Xylene	763	2.2
o-Xylene	294	1.0
Total BTEX	1,210	

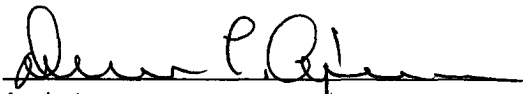
ND - Parameter not detected at the stated detection limit.

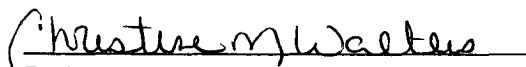
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

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: Rio Arriba County.


Analyst


Review