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

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

Form C-144
June 1, 2004

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: Jicarilla Apache "F" No. 8 API #: 3003982339 U/L or Qtr/Qtr C Sec 16 T 25N R 5W
County: Rio Arriba Latitude 36.404005 Longitude -107.37012 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: 20 bbl Type of fluid:
Construction material: Fiberglass
Double-walled, with leak detection? Yes ☐ If not, explain why not.
No, Tank in Place prior to rule 50

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) (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 No	(20 points) (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 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) (0 points)	20
	Ranking Score (Total Points)		40

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 your 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 130 cubic yards of contaminated soil was excavated and hauled to Envirotech's NMOCD permitted landfarm for remediation.

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: 5/24/06
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:
Printed Name/Title ____ Signature Denny Foust Date: MAY 25 2006

DEPUTY OIL & GAS INSPECTOR, DIST. #3

CLIENT: _____

ENVIROTECH INC.
ENVIRONMENTAL SCIENTISTS & ENGINEERS
5796 U.S. HIGHWAY 64-3014
FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615

LOCATION NO: _____
C.O.C. NO: _____

FIELD REPORT: CLOSURE VERIFICATION

PAGE No: 1 of 1

LOCATION: NAME: Jicarilla Apache F WELL #: 8 PIT: dehy
QUAD/UNIT: D SEC: 16 TWP: 25N RNG: 5W PM: NMPM CNTY: RA ST: NM
QTR/FOOTAGE: 1190 FNL 1190 FWL CONTRACTOR: Franks

DATE STARTED: 5/3/06
DATE FINISHED: 5/8/06
ENVIRONMENTAL SPECIALIST: GWC

EXCAVATION APPROX. 15 FT. x 12 FT. x 12 FT. DEEP. CUBIC YARDAGE: 130
DISPOSAL FACILITY: Envirotech Landfarm #2 REMEDIATION METHOD: Landfarm
LAND USE: _____ LEASE: _____ FORMATION: _____

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 440 FT. 330° FROM WELLHEAD.
DEPTH TO GROUNDWATER: <500 NEAREST WATER SOURCE: >1000 NEAREST SURFACE WATER: <200
NMOCD RANKING SCORE: 40 NMOCD TPH CLOSURE STD: 100 PPM

CHECK ONE:
X PIT ABANDONED
___ STEEL TANK INSTALLED

SOIL AND EXCAVATION DESCRIPTION:

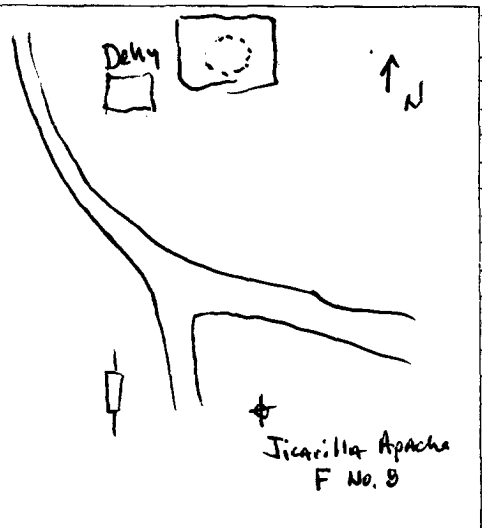
Approximately 130 cubic yards of hydrocarbon contaminated soil was transported to envirotech's Landfarm #2 for remediation.

FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1500	Bottom composite		5.0	20	4	283	1132
1509	Walls Composite		5.0	20	4	132	
	Std.					2	207

SCALE
0 FT

PIT PERIMETER



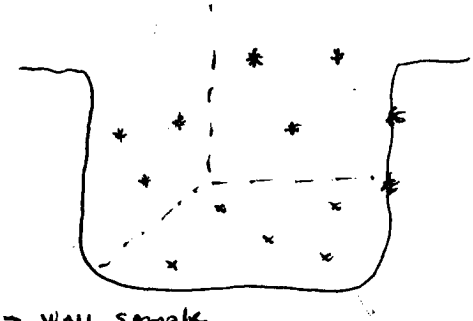
OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 Bottom	299
2 Walls	3
3	
4	
5	

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME

PIT PROFILE



* - wall sample
x - bottom sample

TRAVEL NOTES: CALLOUT: _____ ONSITE: _____

ENVIROTECH INC.

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Elm Ridge Resources	Project #:	03056-040-037
Sample No.:	1	Date Reported:	5/12/2006
Sample ID:	Bottom Composite at 6' BGS	Date Sampled:	5/3/2006
Sample Matrix:	Soil	Date Analyzed:	5/3/2006
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**1,132**	**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: **Jicarilla Apache "F" No. 8**

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

Analyst

Review

5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865

ENVIROTECH INC.

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Elm Ridge Resources	Project #:	03056-040-037
Sample No.:	2	Date Reported:	5/12/2006
Sample ID:	Wall Composite	Date Sampled:	5/3/2006
Sample Matrix:	Soil	Date Analyzed:	5/3/2006
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**528**	**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: **Jicarilla Apache "F" No. 8**

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

Analyst

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ENVIROTECH INC.

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Elm Ridge Resources	Project #:	03056-040-037
Sample No.:	1	Date Reported:	5/12/2006
Sample ID:	Bottom 5-point composite at 12' BGS	Date Sampled:	5/8/2006
Sample Matrix:	Soil	Date Analyzed:	5/8/2006
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**88**	**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: **Jicarilla Apache "F" No. 8**

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

Analyst

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ENVIROTECH INC.

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Elm Ridge Resources	Project #:	03056-040-037
Sample No.:	2	Date Reported:	5/12/2006
Sample ID:	Wall composite	Date Sampled:	5/8/2006
Sample Matrix:	Soil	Date Analyzed:	5/8/2006
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**32**	**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: **Jicarilla Apache "F" No. 8**

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

Analyst

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Elm Ridge Resources	Project #:	03056-040-037
Sample ID:	Bottom Composite	Date Reported:	05-10-06
Laboratory Number:	37081	Date Sampled:	05-08-06
Chain of Custody:	15950	Date Received:	05-08-06
Sample Matrix:	Soil	Date Analyzed:	05-10-06
Preservative:	Cool	Date Extracted:	05-09-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**6.7**	**1.8**
Toluene	**73.0**	**1.7**
Ethylbenzene	**8.2**	**1.5**
p,m-Xylene	**302**	**2.2**
o-Xylene	**120**	**1.0**
Total BTEX	**510**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**97.0 %**
	1,4-difluorobenzene	**97.0 %**
	Bromochlorobenzene	**97.0 %**

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: **Jicarilla Apache F #8.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Elm Ridge Resources	Project #:	03056-040-037
Sample ID:	Wall Composite	Date Reported:	05-10-06
Laboratory Number:	37082	Date Sampled:	05-08-06
Chain of Custody:	15950	Date Received:	05-08-06
Sample Matrix:	Soil	Date Analyzed:	05-10-06
Preservative:	Cool	Date Extracted:	05-09-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**23.2**	**1.8**
Toluene	**459**	**1.7**
Ethylbenzene	**65.3**	**1.5**
p,m-Xylene	**560**	**2.2**
o-Xylene	**87.7**	**1.0**
Total BTEX	**1,200**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**99.0 %**
	1,4-difluorobenzene	**99.0 %**
	Bromochlorobenzene	**99.0 %**

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: **Jicarilla Apache F #8.**

Analyst

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