

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

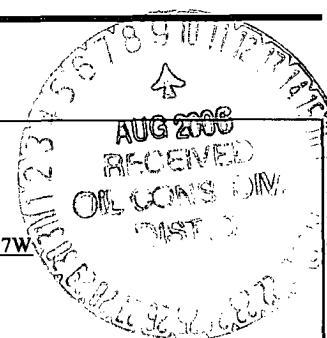
For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

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: P.O. Box 156, Bloomfield, New Mexico, 87413
Facility or well name: Beth Geiger No. 1 API #: 3003924036 U/L or Qtr/Qtr A Sec 17 T 23N R 7W
County: Rio Arriba Latitude 36.231939 Longitude -107.59157 NAD: 1927 ☒ 1983 ☐
Surface Owner: Federal ☒ State ☐ Private ☐ Indian ☐



<u>Pit</u>	<u>Below-grade tank</u>	
Type: Drilling ☐ Production ☒ Disposal ☐ Workover ☐ Emergency ☐ Lined ☐ Unlined ☒ Liner type: Synthetic ☐ Thickness _____ mil Clay ☐ Pit Volume _____ bbl	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) 10
Ranking Score (Total Points)		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 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 20 cubic yards of contaminated soil were excavated from the separator pit.

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: 8/8/06

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: ENVIRONMENTAL & GAS INSPECTOR, DIST. 00
Printed Name/Title Beth Geiger Signature Beth Geiger

Date: AUG 09 2006

CLIENT:

ENVIROTECH INC.
ENVIRONMENTAL SCIENTISTS & ENGINEERS
5796 U.S. HIGHWAY 64-3014
FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0815

LOCATION NO:
C.O.C. NO:

FIELD REPORT: CLOSURE VERIFICATION

PAGE No: 1 of 1

LOCATION: NAME: Beth Geiger WELL #: 1 PIT: Sep
QUAD/UNIT: A SEC 17 TWP: 23N RNG: 7W PM: CNTY: ST:
QTR/FOOTAGE: CONTRACTOR: Franks

DATE STARTED: 7/7/06
DATE FINISHED: 7/13/06
ENVIRONMENTAL SPECIALIST: GWC

EXCAVATION APPROX. 16 FT. x 16 FT. x 5 FT. DEEP. CUBIC YARDAGE: 20
DISPOSAL FACILITY: Envirotech Landfarm REMEDIATION METHOD: Landfarm
LAND USE: grazing LEASE: FORMATION:

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 120' FT. 85' FROM WELLHEAD.
DEPTH TO GROUNDWATER: >106' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: 200-1000'
NMOC Ranking Score: 10 NMOC TPH CLOSURE STD: 1,000 PPM

CHECK ONE:
☐ PIT ABANDONED
☒ STEEL TANK INSTALLED

SOIL AND EXCAVATION DESCRIPTION:

Approximately 20 cubic yards of contaminated soil was excavated and hauled to Envirotech's Landfarm #2

SCALE
0 FT

FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1100	Bottom Comp	1' BGS	5.0	20	4	1579	6316
1130	Bottom Comp	5' BGS	5.0	26	4	182	728
1140	WALLS		5.0	20	4	7	28

PIT PERIMETER

OVm RESULTS

PIT PROFILE

Diagram of pit perimeter with labels: Sep Pit, Sep, 20 bbl AST, TB Pit

Diagram of pit profile showing depth and sample locations (x for bottom, o for wall)

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 Bottom	17
2 Bottom	3
3 WALLS	2
4	
5	

LAB SAMPLES		
SAMPLE ID	ANALYSIS	TIME

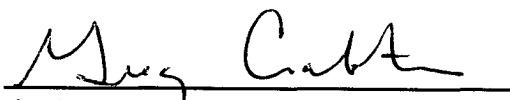
TRAVEL NOTES: CALLOUT: ONSITE:

CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 7-Jul-06

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	197
	200	
	500	
	1000	

The accepted percent relative deviation (%RSD) of the calibration factor is less than 20% over the working range.


Analyst

7/14/06
Date


Review

24-July-06
Date

EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Client:	Elm Ridge Resources	Project #:	03056-040-041
Sample No.:	1	Date Reported:	7/14/2006
Sample ID:	Composite of bottom of pit	Date Sampled:	7/7/2006
Sample Matrix:	Soil	Date Analyzed:	7/7/2006
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

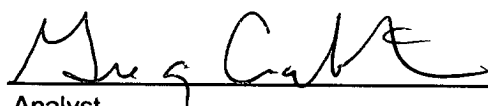
Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	6,320.0	5.0

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: **Beth Geiger No. 1 Seperator Pit**

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


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

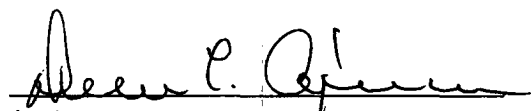
Client:	Elm Ridge	Project #:	03056-040-041
Sample ID:	Pit #2	Date Reported:	07-11-06
Laboratory Number:	37727	Date Sampled:	07-07-06
Chain of Custody No:	1175	Date Received:	07-07-06
Sample Matrix:	Soil	Date Extracted:	07-10-06
Preservative:	Cool	Date Analyzed:	07-11-06
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

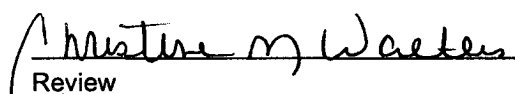
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	15.8	0.2
Diesel Range (C10 - C28)	2,240	0.1
Total Petroleum Hydrocarbons	2,260	0.2

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: **Beth Geiger No. 1**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	07-11-06 QA/QC	Date Reported:	07-11-06
Laboratory Number:	37723	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-11-06
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept. Range
Gasoline Range C5 - C10	02-04-05	9.9900E+002	1.0000E+003	0.10%	0 - 15%
Diesel Range C10 - C28	02-04-05	9.9781E+002	9.9981E+002	0.20%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

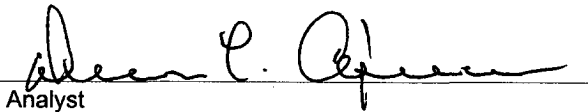
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

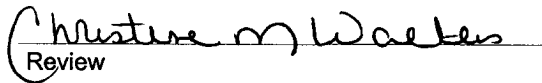
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	250	100.0%	75 - 125%
Diesel Range C10 - C28	ND	250	250	100.0%	75 - 125%

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: QA/QC for Samples 37723 - 37725, 37727, 37733 - 37735.


Analyst


Review

1175

ENVIROTECH Inc.

5796 U.S. Highway 64
Farmington, New Mexico 87401
(505) 632-0615

EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Client:	Elm Ridge Resources	Project #:	03056-040-041
Sample No.:	2	Date Reported:	7/14/2006
Sample ID:	Composite 5' below pit bottom	Date Sampled:	7/13/2006
Sample Matrix:	Soil	Date Analyzed:	7/13/2006
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
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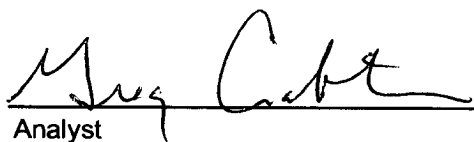
Total Petroleum Hydrocarbons	728.0	5.0
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ND = Parameter not detected at the stated detection limit.

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

Comments: **Beth Geiger No. 1 Seperator Pit**

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 #:	03056-040-041
Sample No.:	3	Date Reported:	7/14/2006
Sample ID:	Composite sample of walls	Date Sampled:	7/13/2006
Sample Matrix:	Soil	Date Analyzed:	7/13/2006
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
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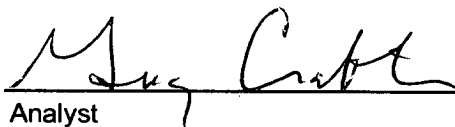
Total Petroleum Hydrocarbons	28.0	5.0
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ND = Parameter not detected at the stated detection limit.

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

Comments: **Beth Geiger No. 1 Seperator Pit**

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



Analyst

Review

ENVIROTECH INC.

Bill of Lading

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

MANIFEST #

0052

DATE _____

JOB #

JOB # 0356-64644

[illegible]

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

NAME

7-11-68

COMPANY

SIGNATURE

COMPANY CONTACT

PHONE

DATE _____

2016

18

ENTERED JUL 1 9 2006

SECRET

RECEIVED JUL 18 2006

7/20/00