

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: Burlington Resources Telephone: (505) 326-9841 e-mail address: LHasely@br-inc.com
Address: 3401 East 30th Street, Farmington, New Mexico, 87402
Facility or well name: Huerfano Unit Com No. 133 API #: 30045271790000 U/L or Qtr/Qtr J Sec 16 T 26N R 9W
County: San Juan Latitude 36.48574 Longitude -107.79165 NAD: 1927 ☒ 1983 ☐
Surface Owner: Federal ☐ State ☐ Private ☒ Indian ☐

<u>Pit</u>	<u>Below-grade tank</u>	
Type: Drilling <input type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input type="checkbox"/> Thickness _____ mil Clay <input type="checkbox"/> Pit Volume _____ bbl	Volume: <u>60</u> bbl Type of fluid: <u>Produced Water and Incidental Oil</u> Construction material: <u>Fiberglass</u> Double-walled, with leak detection? Yes <input checked="" 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) 10
Ranking Score (Total Points)		20

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 LF #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:

Potassium permanganate / urea nitrate solution applied to 2 walls with higher concentrations of TPH. See Figure 3

Could not excavate^{all} due to equipment / lines, so excavated both sides of lines and treated walls.

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: 5/19/05

Printed Name/Title Mr. Ed Hasely, Environmental Advisor

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.

Approval DEPUTY OIL & GAS INSPECTOR, DIST. 50

Printed Name/Title _____ Signature [Signature]

Date: MAY 24 2005

CLIENT: <u>Burlington Resources</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: _____
-------------------------------------	---	--

FIELD REPORT: CLOSURE VERIFICATION	PAGE No: <u>1</u> of <u>1</u>
---	-------------------------------

LOCATION: NAME: <u>Huerfano Unit Com</u> WELL #: <u>133</u> PIT: _____ QUAD/UNIT: <u>J</u> SEC: <u>16</u> TWP: <u>26N</u> RNG: <u>9W</u> PM: <u>NMPM</u> CNTY: <u>SJ</u> ST: <u>NM</u> QTR/FOOTAGE: _____ CONTRACTOR: <u>L&R / Bailey's Welding</u>	DATE STARTED: <u>2/1/05</u> DATE FINISHED: <u>3/18/05</u> ENVIRONMENTAL SPECIALIST: <u>NPM</u>
---	--

EXCAVATION APPROX. _____ FT. x _____ FT. x _____ FT. DEEP. CUBIC YARDAGE: <u>5702</u>
DISPOSAL FACILITY: <u>Envirotech LF #2</u> REMEDIATION METHOD: _____
LAND USE: _____ LEASE: _____ FORMATION: _____

FIELD NOTES & REMARKS:	PIT LOCATED APPROXIMATELY <u>55</u> FT. <u>215°</u> FROM WELLHEAD. DEPTH TO GROUNDWATER: <u>10</u> NEAREST WATER SOURCE: <u>0</u> NEAREST SURFACE WATER: <u>10</u> NMOC D RANKING SCORE: <u>20</u> NMOC D TPH CLOSURE STD: <u>100</u> PPM
------------------------	---

SOIL AND EXCAVATION DESCRIPTION:	CHECK ONE : <input type="checkbox"/> PIT ABANDONED <input checked="" type="checkbox"/> STEEL TANK INSTALLED
----------------------------------	---

BGT removal initially started with an L&R crew. It was determined excavation requirements would need other equipment. Bailey's Welding completed remaining excavations. The larger excavation needed the eastern wall treated and the smaller excavation needed the western wall treated. It was necessary to treat because of separator piping dividing the 2 excavated areas. Both walls were treated with a potassium permanganate / urea nitrate solution.

FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
	SEE		FIGURE 3				

SCALE



0 FT

PIT PERIMETER

OVM RESULTS

PIT PROFILE

	<table border="1" style="width:100%"> <thead> <tr> <th>SAMPLE ID</th> <th>FIELD HEADSPACE PID (ppm)</th> </tr> </thead> <tbody> <tr><td>1</td><td></td></tr> <tr><td>2</td><td></td></tr> <tr><td>3</td><td style="text-align:center">SEE FIGURE 3</td></tr> <tr><td>4</td><td></td></tr> <tr><td>5</td><td></td></tr> <tr><td> </td><td></td></tr> <tr><td> </td><td></td></tr> <tr><td> </td><td></td></tr> <tr><td> </td><td></td></tr> <tr><td> </td><td></td></tr> <tr><td> </td><td></td></tr> <tr><td> </td><td></td></tr> <tr><td> </td><td></td></tr> </tbody> </table>	SAMPLE ID	FIELD HEADSPACE PID (ppm)	1		2		3	SEE FIGURE 3	4		5																		<p style="text-align:center; font-size: 2em;">SEE FIGURE 3</p>
SAMPLE ID	FIELD HEADSPACE PID (ppm)																													
1																														
2																														
3	SEE FIGURE 3																													
4																														
5																														
<table border="1" style="width:100%"> <thead> <tr> <th colspan="3">LAB SAMPLES</th> </tr> <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> <tr><td> </td><td></td><td></td></tr> <tr><td> </td><td></td><td></td></tr> </tbody> </table>			LAB SAMPLES			SAMPLE ID	ANALYSIS	TIME																						
LAB SAMPLES																														
SAMPLE ID	ANALYSIS	TIME																												

TRAVEL NOTES:	CALLOUT: _____	ONSITE: _____
---------------	----------------	---------------

3/17/05 + 3/18/05

CLIENT Burlington
R

ENVIROTECH INC.

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

LOCATION NO.

CITY, STATE

FIELD REPORT: CLOSURE VERIFICATION PAGE NO. 8 OF 8LOCATION: NAME HuerfanoWELL #. 133

PIT.

DATE STARTED 2/1/05DATE FINISHED 3/18/05

QUAD/UNIT: SEC: TWP: RNG: PM: CNTY: ST:

QTR/FOOTAGE:

CONTRACTOR Bailey's WellboringENVIRONMENTAL
SPECIALIST D. YoungEXCAVATION APPROX. FT. x FT. x FT. DEEP CUBIC YARDAGE: 5702DISPOSAL FACILITY: Envirotech LF #2 REMEDIATION METHOD:

LAND USE: LEASE: FORMATION:

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY FT. FROM WELLHEAD.

DEPTH TO GROUNDWATER: NEAREST WATER SOURCE: NEAREST SURFACE WATER:

NMOC RANKING SCORE: NMOC TPH CLOSURE STD: 100 PPM

CHECK ONE:

PIT ABANDONED

STEEL TANK INSTALLED

SOIL AND EXCAVATION DESCRIPTION:

Final area sampled, passed <100 ppm. Area near meter sprayed with $KMnO_4$ and treated with urea nitrate. Ready for backfill.

FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
16:00	N composite		5.0	20	1	7	28 ppm
16:00	S composite		5.0	20	1	10	40 ppm
16:00	E composite		5.0	20	1	3	12 ppm
16:00	Bottom comp.		5.0	20	1	4	16 ppm

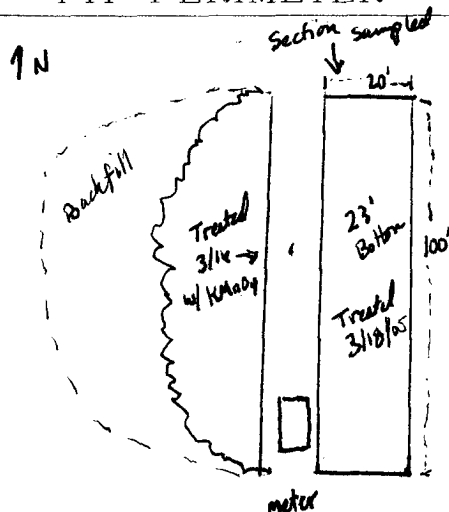
SCALE

0 FT

PIT PERIMETER

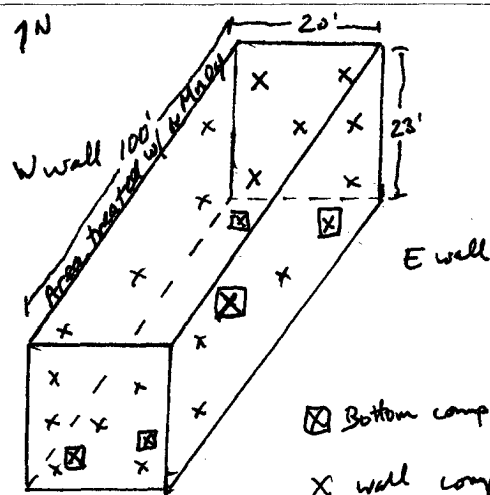
RESULTS

PIT PROFILE



SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 N composite	2 ppm
2 S composite	2 ppm
3 E composite	7 ppm
4 W composite	303 ppm
5 Bottom comp.	4 ppm

SAMPLE ID	ANALYSIS	TIME



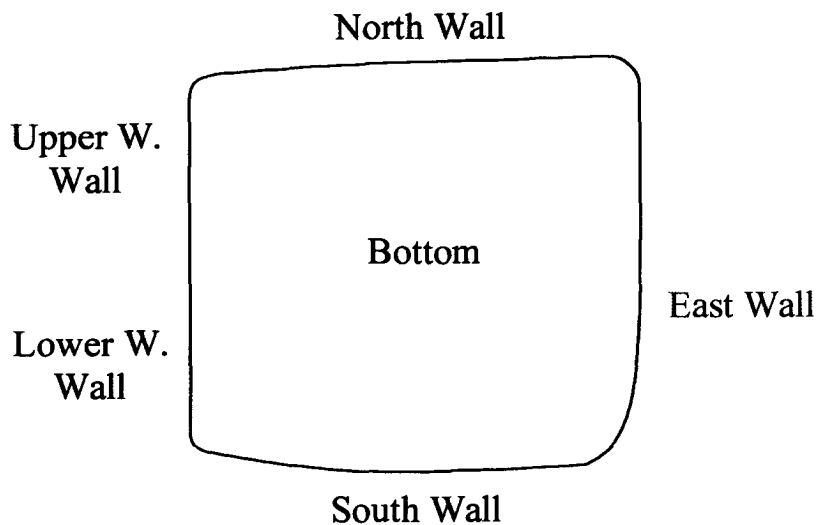
⊠ Bottom comp. Samples
X well comp. samples

TRAVEL NOTES

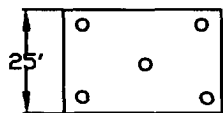
CALLOUT:

ONSITE:

Original Excavation

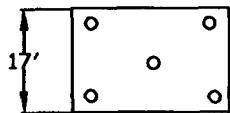


North Wall



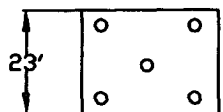
TPH 40.3 ppm
OVM 12 ppm

South Wall



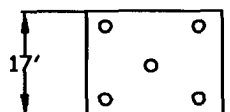
TPH 23.6 ppm
OVM 1 ppm

Upper West Wall



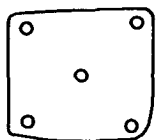
TPH 79.1 ppm
OVM 27 ppm

Lower West Wall



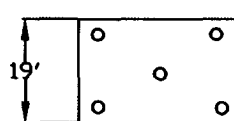
TPH 11.1 ppm
OVM 4 ppm

Bottom



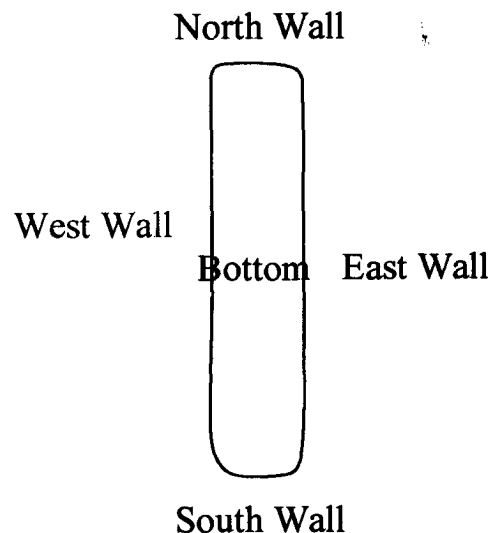
TPH 65.2 ppm
OVM 19 ppm

East Wall

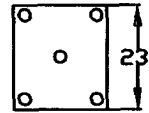


TPH 4052 ppm
OVM 1524

2nd Excavation

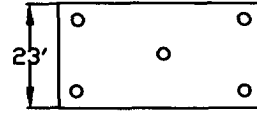


North Wall



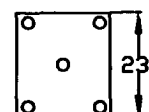
TPH 28 ppm
OVM 2 ppm

East Wall



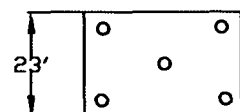
TPH 12 ppm
OVM 7 ppm

South Wall



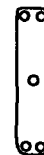
TPH 40 ppm
OVM 2 ppm

West Wall



TPH 1160 ppm
OVM 303 ppm

Bottom



TPH 16 ppm
OVM 4 ppm

Legend

☐ Wall treated with Potassium Permanganate

Sample Locations

ENVIROTECH INC.

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

Huerfano Unit Com Well No. 133
Sec 16, Township 26N, Range 09W

REVISIONS

BY _____ DATE _____
BY _____ DATE _____

Project No.
92115-021-015

DATE 04/11/05

DRAWN MPM

FIGURE

SCALE NTS

APPROVED KPK

3

**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	Burlington Resources	Project #:	92115-021-015
Sample No.:	4	Date Reported:	5/4/2005
Sample ID:	Bottom, 5 Point Composite	Date Sampled:	3/11/2005
Sample Matrix:	Soil	Date Analyzed:	3/11/2005
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

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

Total Petroleum Hydrocarbons	65.2	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: **Huerfano Unit Com No. 133**


Analyst


Review

**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	Burlington Resources	Project #:	92115-021-015
Sample No.:	13	Date Reported:	5/4/2005
Sample ID:	2nd Excavation, Bottom 5	Date Sampled:	3/17/2005
Sample Matrix:	Soil	Date Analyzed:	3/17/2005
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

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

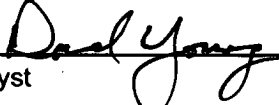
Total Petroleum Hydrocarbons	16.0	5.0
-------------------------------------	-------------	------------

ND = Parameter not detected at the stated detection limit.

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

Comments:

Instrument callibrated to 200 ppm standard. Zeroed before each sample


Analyst


Review