

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: <u>Burlington Resources</u> Telephone: <u>(505) 326-9841</u> e-mail address: <u>LHasely@br-inc.com</u>	
Address: <u>3401 East 30<sup>th</sup> Street, Farmington, New Mexico, 87402</u>	
Facility or well name: <u>Mangum No. 5</u> API #: <u>30045257370000</u> U/L or Qtr/Qtr: <u>K</u> Sec <u>10</u> T <u>28N</u> R <u>11W</u>	
County: <u>San Juan</u> Latitude <u>36.67521</u> Longitude <u>-107.9939</u> NAD: 1927 <input checked="" type="checkbox"/> 1983 <input type="checkbox"/>	
Surface Owner: Federal <input type="checkbox"/> State <input type="checkbox"/> Private <input type="checkbox"/> Indian <input checked="" type="checkbox"/>	
<b>Pit</b> 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	<b>Below-grade tank</b> Volume: <u>95</u> bbl Type of fluid: <u>Produced Water and Incidental Oil</u> Construction material: <u>Fiberglass</u> Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not. <u>No. Tank in place prior to Rule 50.</u>
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) 20
Ranking Score (Total Points) 30	

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:

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: \_\_\_\_\_

Printed Name/Title Paul Hasely, Env. Advisor 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. III  
Printed Name/Title \_\_\_\_\_

Signature \_\_\_\_\_

MAY 24 2005  
Date: \_\_\_\_\_

CLIENT: <u>Burlington Resources</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>2</u>
LOCATION: NAME: <u>Mangum</u> WELL #: <u>5</u> PIT: _____ QUAD/UNIT: <u>K</u> SEC: <u>10</u> TWP: <u>28N</u> RNG: <u>11W</u> PM: <u>NMPM</u> CNTY: <u>SJ</u> ST: <u>NM</u> QTR/FOOTAGE: _____ CONTRACTOR: <u>L&amp;R</u>		DATE STARTED: <u>3/9/05</u> DATE FINISHED: <u>3/17/05</u> ENVIRONMENTAL SPECIALIST: <u>NPM</u>

EXCAVATION APPROX. _____ FT. x _____ FT. x _____ FT. DEEP.	CUBIC YARDAGE: <u>520</u>
DISPOSAL FACILITY: <u>Envirotech LF # 2</u>	REMEDIAATION METHOD: _____
LAND USE: _____	LEASE: _____ FORMATION: _____

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>65'</u> FT. <u>285°</u> FROM WELLHEAD.		
DEPTH TO GROUNDWATER: <u>10</u>	NEAREST WATER SOURCE: <u>0</u>	NEAREST SURFACE WATER: <u>20</u>
NMOC D RANKING SCORE: <u>30</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

There was alot of water underneath pit in rock in the secondary liaser. There was a layer of contamination under pit. Bottom cleaned up at 9' TD. Fabian was instructed by Les Hepler to dig for the day. At end of day there was still contamination remaining. Will shut it in and move on.

SCALE

0 FT

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1047	3' Below At		5	20	1	0.032	222 ppm
1110	9' TD		5	20	1	0.0122	85 ppm

<p style="text-align: center;">PIT PERIMETER</p>	<p style="text-align: center;">OVM RESULTS</p> <table border="1" style="width:100%"> <thead> <tr> <th>SAMPLE ID</th> <th>FIELD HEADSPACE PID (ppm)</th> </tr> </thead> <tbody> <tr><td>1 3' Below</td><td>47 ppm</td></tr> <tr><td>2 9' TD</td><td>6 ppm</td></tr> <tr><td>3</td><td></td></tr> <tr><td>4</td><td></td></tr> <tr><td>5</td><td></td></tr> </tbody> </table> <p style="text-align: center;">LAB SAMPLES</p> <table border="1" style="width:100%"> <thead> <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> </tbody> </table>	SAMPLE ID	FIELD HEADSPACE PID (ppm)	1 3' Below	47 ppm	2 9' TD	6 ppm	3		4		5		SAMPLE ID	ANALYSIS	TIME													<p style="text-align: center;">PIT PROFILE</p> <p style="text-align: center;">See final dimensions on page 2</p>
SAMPLE ID	FIELD HEADSPACE PID (ppm)																												
1 3' Below	47 ppm																												
2 9' TD	6 ppm																												
3																													
4																													
5																													
SAMPLE ID	ANALYSIS	TIME																											

TRAVEL NOTES: _____	CALLOUT: _____	ONSITE: _____
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CLIENT: <u>Burlington</u> <u>Resources</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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<b>FIELD REPORT: CLOSURE VERIFICATION</b>	PAGE No: <u>2</u> of <u>2</u>
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LOCATION: NAME: <u>Mangum</u> WELL #: <u>5</u> PIT: _____ QUAD/UNIT: <u>K</u> SEC: <u>10</u> TWP: <u>28N</u> RNG: <u>11W</u> PM: <u>NMPM</u> CNTY: <u>SJ</u> ST: <u>NM</u> QTR/FOOTAGE: _____ CONTRACTOR: <u>M&amp;M</u>	DATE STARTED: <u>3/9/05</u> DATE FINISHED: <u>3/17/05</u> ENVIRONMENTAL SPECIALIST: <u>MPM</u>
--	--

EXCAVATION APPROX. _____ FT. x _____ FT. x _____ FT. DEEP.	CUBIC YARDAGE: <u>520</u>
DISPOSAL FACILITY: <u>Envirotech LF #2</u> REMEDIATION METHOD: _____	
LAND USE: _____ LEASE: _____ FORMATION: _____	

FIELD NOTES & REMARKS:	PIT LOCATED APPROXIMATELY _____ FT. _____ FROM WELLHEAD.	
DEPTH TO GROUNDWATER: <u>10</u>	NEAREST WATER SOURCE: <u>0</u>	NEAREST SURFACE WATER: <u>20</u>
NMOCB RANKING SCORE: <u>30</u>	NMOCB 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

Jerry Montoya had finished excavation. Took 5 separate samples for analysis. No visible signs of contamination remaining.

SCALE

0 FT

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1335	4 Pt Comp	1	5	20	1	0.0134	93
1345	Bottom	1	5	20	1	0.0088	41.1

PIT PERIMETER

OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 N. Wall	2 ppm
2 E. Wall	0 ppm
3 S. Wall	2 ppm
4 W. Wall	14 ppm
5 Bottom	3 ppm
4 Pt	16 ppm

PIT PROFILE

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME

x = Walls  
o = Bottom

TRAVEL NOTES:	CALLOUT: _____	ONSITE: _____
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**EPA METHOD 418.1  
TOTAL PETROLEUM  
HYDROCARBONS**

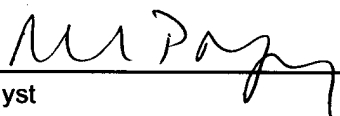
Client:	Burlington Resources	Project #:	92115-021-031
Sample No.:	1	Date Reported:	3/23/2005
Sample ID:	Discrete, 3' Below BG Tank	Date Sampled:	3/9/2005
Sample Matrix:	Soil	Date Analyzed:	3/9/2005
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	222	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: **Mangum No. 5**

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Review

**EPA METHOD 418.1  
TOTAL PETROLEUM  
HYDROCARBONS**

Client:	Burlington Resources	Project #:	92115-021-031
Sample No.:	2	Date Reported:	3/23/2005
Sample ID:	Discrete 9' Depth	Date Sampled:	3/9/2005
Sample Matrix:	Soil	Date Analyzed:	3/9/2005
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

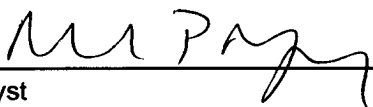
Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	84.7	5.0

ND = Parameter not detected at the stated detection limit.

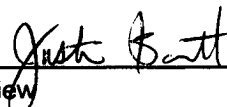
References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: Mangum No. 5

Analyst



Review



**EPA METHOD 418.1  
TOTAL PETROLEUM  
HYDROCARBONS**

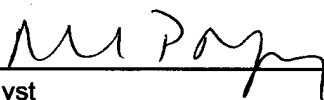
Client:	Burlington Resources	Project #:	92115-021-031
Sample No.:	3	Date Reported:	3/23/2005
Sample ID:	4 Pt Composite of Walls	Date Sampled:	3/17/2005
Sample Matrix:	Soil	Date Analyzed:	3/17/2005
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

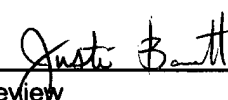
Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	93.0	5.0

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: Mangum No. 5

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Review

**EPA METHOD 418.1  
TOTAL PETROLEUM  
HYDROCARBONS**

Client: Burlington Resources  
Sample No.: 4  
Sample ID: Bottom @ 15' depth  
Sample Matrix: Soil  
Preservative: Cool  
Condition: Cool and Intact

Project #: 92115-021-031  
Date Reported: 3/23/2005  
Date Sampled: 3/17/2005  
Date Analyzed: 3/17/2005  
Analysis Needed: TPH-418.1

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

**61.1**

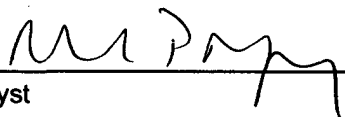
**5.0**

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: **Mangum No. 5**

Analyst



Review

