

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: Louis.E.Hasely@conocophillips.com
Address: 3401 East 30th Street, Farmington, New Mexico, 87402
Facility or well name: Huerfano Unit # 4E API #: 30004526245 U/L or Qtr/Qtr K Sec 24 T 26N R 10W
County: San Juan Latitude 36.471485 Longitude -107.85177 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: 60 bbl Type of fluid: Produced Water and Incidental Oil
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	(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
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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:

Laboratory results attached Soil tested ok - no excavation necessary

RCVD APR27'07

OIL CONS. DIV.

DIST. 3

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: 3/30/07

Printed Name/Title Mr. Ed Hasely, Environmental Advisor

Signature Ed Hasely

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 [Signature]

Date: JUL 25 2007

Deputy Oil & Gas Inspector,
District #3

CLIENT: _____	ENVIROTECH INC. <small>ENVIRONMENTAL SCIENTISTS & ENGINEERS</small> 5796 U.S. HIGHWAY 64-3014 FARMINGTON, NEW MEXICO 87401 PHONE: (505) 632-0615	LOCATION NO: _____ C.O.C. NO: _____
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FIELD REPORT: CLOSURE VERIFICATION	PAGE No: <u>1</u> of <u>1</u>
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LOCATION: NAME: <u>Huerfano</u> WELL #: <u>4E</u> PIT: <u>Sep</u> QUAD/UNIT: <u>R</u> SEC: <u>24</u> TWP: <u>26N</u> RNG: <u>10W</u> PM: <u>NMPM</u> CNTY: <u>SAN JUAN ST NM</u> QTR/FOOTAGE: _____ CONTRACTOR: <u>Caulder</u>	DATE STARTED: <u>2/21/07</u> DATE FINISHED: <u>2/21/07</u> ENVIRONMENTAL SPECIALIST: <u>GW</u>
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EXCAVATION APPROX <u>0</u> FT. x <u>0</u> FT. x <u>0</u> FT. DEEP	CUBIC YARDAGE: <u>N/A</u>	
DISPOSAL FACILITY: <u>N/A</u>	REMEDATION METHOD: <u>N/A</u>	
LAND USE: _____	LEASE: _____	FORMATION: _____

FIELD NOTES & REMARKS:	PIT LOCATED APPROXIMATELY <u>65'</u> FT. <u>295'</u> FROM WELLHEAD. DEPTH TO GROUNDWATER: <u>0</u> NEAREST WATER SOURCE: <u>0</u> NEAREST SURFACE WATER: <u>0</u> NMDCD RANKING SCORE: <u>0</u> NMDCD TPH CLOSURE STD: <u>5,000</u> PPM
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SOIL AND EXCAVATION DESCRIPTION:	CHECK ONE: <input type="checkbox"/> PIT ABANDONED <input checked="" type="checkbox"/> STEEL TANK INSTALLED
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Crew from Caulder Already placed steel tank in excavated area. Tank was moved slightly so sample could be obtained from beneath former BGT. Sample failed field screening so sample was turned in for 8015/8021. See Attached results

FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC ppm
	<u>bottom 3' BGS</u>		<u>5.0</u>	<u>20</u>	<u>4</u>	<u>.84</u>	<u>5,830</u>

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 <u>bottom</u></td><td><u>1473</u></td></tr> <tr><td>2</td><td></td></tr> <tr><td>3</td><td></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> </table>	SAMPLE ID	FIELD HEADSPACE PID (ppm)	1 <u>bottom</u>	<u>1473</u>	2		3		4		5												
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TPH 2200 ppm
BTEX 21,000 ppb

TRAVEL NOTES.	CALLOUT: _____	ONSITE: _____
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Client:	Burlington Resources	Project #:	92115-121-047
Sample No.:	1	Date Reported:	2/22/2007
Sample ID:	Bottom @ 3' Below BGT	Date Sampled:	2/21/2007
Sample Matrix:	Soil	Date Analyzed:	2/21/2007
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

5,830

5.0

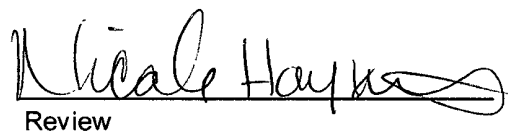
ND = Parameter not detected at the stated detection limit.

418.1 Method
Passed 8015 Test

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

Comments: Huerfano Unit 4E


Analyst


Review

EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS
QUALITY ASSURANCE REPORT

Client:		Project #:	92115-121-025
Sample ID:	QA/QC	Date Reported:	2/22/2007
Laboratory Number:	01-24-TPH.QA/QC	Date Sampled:	N/A
Sample Matrix:	Freon-113	Date Analyzed:	2/21/2007
Preservative:	N/A	Date Extracted:	2/21/2007
Condition:	N/A	Analysis Needed:	TPH

Calibration	I-Cal Date	C-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept. Range
	05-22-04	2/21/2007	1,735	1,786	2.9%	+/- 10%

Blank Conc. (mg/Kg)	Concentration	Detection Limit
TPH	ND	5.0


Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
TPH	2,471	2,352	4.8%	+/- 30%

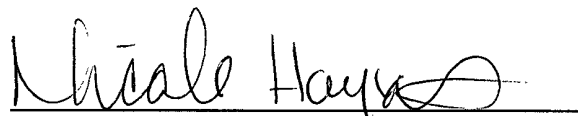
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
TPH	2,471	2,000	5,030	112.5%	80 - 120%

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: QA/QC for Huerfano Unit # 4E


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Burlington	Project #:	92115-121-047
Sample ID:	Bottom 3' Below	Date Reported:	02-23-07
Laboratory Number:	40157	Date Sampled:	02-21-07
Chain of Custody:	2117	Date Received:	02-21-07
Sample Matrix:	Soil	Date Analyzed:	02-22-07
Preservative:	Cool	Date Extracted:	02-22-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	336	1.8
Toluene	3,100	1.7
Ethylbenzene	904	1.5
p,m-Xylene	12,440	2.2
o-Xylene	5,190	1.0
Total BTEX	21,970	


ND - Parameter not detected at the stated detection limit.

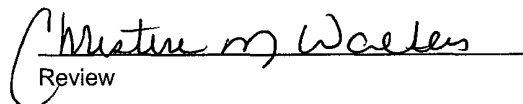
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

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: Huerfano Unit 4E


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	02-22-BTEX QA/QC	Date Reported:	02-23-07
Laboratory Number:	40148	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	02-22-07
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff	Blank Conc	Detect. Limit
		Accept. Range	0 - 15%		
Benzene	2.5017E+007	2.5067E+007	0.2%	ND	0.2
Toluene	3.5308E+007	3.5379E+007	0.2%	ND	0.2
Ethylbenzene	1.5948E+007	1.5980E+007	0.2%	ND	0.2
p,m-Xylene	6.7786E+007	6.7922E+007	0.2%	ND	0.2
o-Xylene	2.8410E+007	2.8466E+007	0.2%	ND	0.1


Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff	Accept Range	Detect. Limit
Benzene	ND	ND	0.0%	0 - 30%	1.8
Toluene	3.4	3.4	0.0%	0 - 30%	1.7
Ethylbenzene	5.6	5.6	0.0%	0 - 30%	1.5
p,m-Xylene	13.3	13.2	0.8%	0 - 30%	2.2
o-Xylene	12.9	12.9	0.0%	0 - 30%	1.0

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	50.0	49.9	99.8%	39 - 150
Toluene	3.4	50.0	53.3	99.8%	46 - 148
Ethylbenzene	5.6	50.0	55.6	100.0%	32 - 160
p,m-Xylene	13.3	100	113	99.8%	46 - 148
o-Xylene	12.9	50.0	62.8	99.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 40148 - 40155, 40157


Analyst


Review

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

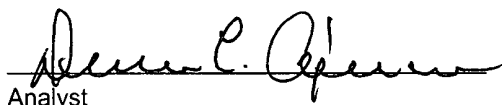
Client:	Burlington	Project #:	92115-121-047
Sample ID:	Bottom 3' Below	Date Reported:	02-23-07
Laboratory Number:	40157	Date Sampled:	02-21-07
Chain of Custody No:	2117	Date Received:	02-21-07
Sample Matrix:	Soil	Date Extracted:	02-22-07
Preservative:	Cool	Date Analyzed:	02-22-07
Condition:	Cool and Intact	Analysis Requested:	8015 TPH


Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1,290	0.2
Diesel Range (C10 - C28)	910	0.1
Total Petroleum Hydrocarbons	2,200	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: **Huerfano Unit 4E**


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:	02-22-07 QA/QC	Date Reported:	02-23-07
Laboratory Number:	40148	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	02-22-07
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept. Range
Gasoline Range C5 - C10	07-11-05	1.0026E+003	1.0036E+003	0.10%	0 - 15%
Diesel Range C10 - C28	07-11-05	1.0056E+003	1.0076E+003	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%

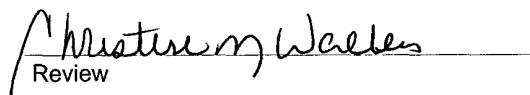
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	250	100.0%	75 - 125%
Diesel Range C10 - C28	ND	250	250	100.0%	75 - 125%

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 40148 - 40157


Analyst


Review

CHAIN OF CUSTODY RECORD

2117

Client / Project Name BURLINGTON			Project Location HUERFANO UNIT 4E		ANALYSIS / PARAMETERS								
Sampler: GWC			Client No. 92115-121-047		No. of Containers	8021	8015					Remarks	
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix									
BOTTOM 3' BELOW	02/21/07	1030	40157		1	✓	✓						
Relinquished by: (Signature) <i>Nicolas Hays</i>			Date 02/21/07	Time 1200	Received by: (Signature) <i>Don P. Quinn</i>					Date 2/21/07	Time 1200		
Relinquished by: (Signature)					Received by: (Signature)								
Relinquished by: (Signature)					Received by: (Signature)								
ENVIROTECH INC. 5796 U.S. Highway 64 Farmington, New Mexico 87401 (505) 632-0615										Sample Receipt			
											Y	N	N/A
										Received Intact	<i>X</i>		
										Cool - Ice/Blue Ice	<i>X</i>		