

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: XTO ENERGY INC. Telephone: (505)-324-1090 e-mail address: \_\_\_\_\_  
Address: 2700 FARMINGTON AVE.. BLDG. K. SUITE 1. FARMINGTON. NM 87401  
Facility or well name: SULLIVAN, R. B. #4 API #: 30-045- 32300 U/L or Qtr/Qtr H Sec 11 T 27N R 10W  
County: SAN JUAN Latitude 36.59215 Longitude 107.85830 NAD: 1927 ☐ 1983 ☒ Surface Owner Federal ☐ State ☐ Private ☒ Indian ☐

**Pit**

Type: Drilling ☐ Production ☐ Disposal ☒ FLARE (VENT)

Workover ☐ Emergency ☐

Lined ☐ Unlined ☒

Liner type: Synthetic ☐ Thickness \_\_\_\_\_ mil Clay ☐

Pit Volume \_\_\_\_\_ bbl

**Below-grade tank**

Volume: \_\_\_\_\_ bbl Type of fluid: \_\_\_\_\_

Construction material: N/A

Double-walled, with leak detection? Yes ☐ No ☒ If no, 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)

**10**

100 feet or more

( 0 points)

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)

**10**

1000 feet or more

( 0 points)

**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: PIT LOCATED APPROXIMATELY 123 FT. N72W FROM WELL HEAD.

PIT EXCAVATION: WIDTH 20 ft., LENGTH 20 ft., DEPTH 1 ft.

PIT REMEDIATION: CLOSE AS IS: ☐, LANDFARM: ☒, COMPOST: ☐, STOCKPILE: ☐, OTHER ☐ (explain)

Cubic yards: 12

*Vent portion of Only Pit Only*

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 alternative OCD-approved plan ☒.

Date: 02/10/05

Printed Name/Title Jeff Blagg - P.E. # 11607

Signature *Jeff Blagg*

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. #  
Printed Name/Title *Denny Faint*

Signature *Denny Faint*

Date: FEB 15 2005

CLIENT: <u>XTO</u>	<b>BLAGG ENGINEERING, INC.</b> <b>P.O. BOX 87, BLOOMFIELD, NM 87413</b> <b>(505) 632-1199</b>	LOCATION NO: _____ COCR NO: <u>13382</u>
<b>FIELD REPORT: PIT CLOSURE VERIFICATION</b>		PAGE No: <u>1</u> of <u>1</u>
LOCATION: NAME: <u>SULLIVAN, R.B.</u> WELL #: <u>4</u> TYPE: <u>FLARE (VENT)</u> QUAD/UNIT: <u>H</u> SEC: <u>11</u> TWP: <u>27N</u> RNG: <u>10W</u> PM: <u>NM</u> CNTY: <u>ST</u> ST: <u>NM</u> QTR/FOOTAGE: <u>1750' N / 665' E</u> <u>SE/2E</u> CONTRACTOR: <u>HDI (HEBER)</u>		DATE STARTED: <u>2/9/05</u> DATE FINISHED: _____ ENVIRONMENTAL SPECIALIST: <u>NV</u>
EXCAVATION APPROX. <u>20</u> FT. x <u>20</u> FT. x <u>1</u> FT. DEEP. CUBIC YARDAGE: <u>12</u>		
DISPOSAL FACILITY: <u>ENVIRTECH LANDFARM</u> REMEDIATION METHOD: <u>LANDFARM</u>		
LAND USE: <u>RANGE</u> LEASE: <u>FEE</u> FORMATION: <u>DK</u>		
FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>123</u> FT. <u>N72W</u> FROM WELLHEAD.		
DEPTH TO GROUNDWATER: <u>&lt;100'</u> NEAREST WATER SOURCE: <u>&gt;1000'</u> NEAREST SURFACE WATER: <u>&lt;1000'</u>		
NMOC D RANKING SCORE: <u>20</u> NMOC D TPH CLOSURE STD: <u>100</u> PPM		
SOIL AND EXCAVATION DESCRIPTION:		
SOIL TYPE: <u>SAND</u> / SILTY SAND / SILT / SILTY CLAY / CLAY / GRAVEL / OTHER SOIL COLOR: <u>PALE YELL. ORANGE</u> ( <u>3.5-4'</u> BELOW GRADE) <u>OR. YELL. BROWN</u> ( <u>1-3'</u> BELOW GRADE) COHESION (ALL OTHERS): <u>NON COHESIVE</u> / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVE CONSISTENCY (NON COHESIVE SOILS): <u>LOOSE</u> / <u>FIRM</u> / DENSE / VERY DENSE PLASTICITY (CLAYS): <u>NON PLASTIC</u> / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC DENSITY (COHESIVE CLAYS & SILTS): <u>SOFT</u> / FIRM / STIFF / VERY STIFF / HARD MOISTURE: <u>DRY</u> / SLIGHTLY MOIST / <u>MOIST</u> / WET / SATURATED / <u>SUPER SATURATED</u> - @ PIT SURFACE DISCOLORATION/STAINING OBSERVED: <u>YES</u> / NO EXPLANATION - <u>@ PIT SURFACE (OIL (PARAFFIN))</u> HC ODOR DETECTED: <u>YES</u> / NO EXPLANATION - <u>OIL / PARAFFIN IMPACTED SOIL</u> SAMPLE TYPE: <u>GRAB</u> / COMPOSITE - # OF PTS. <u>1</u> ADDITIONAL COMMENTS:		
<div style="float: right; border: 1px solid black; padding: 5px; width: fit-content;">         OVM CALIB. READ. = _____ ppm          OVM CALIB. GAS = _____ ppm          TIME: _____ am/pm DATE: _____       </div>		
<div style="float: right; border: 1px solid black; border-radius: 50%; padding: 10px; width: 100px; text-align: center;"> <b>CLOSED</b> </div>		

FIELD 418.1 CALCULATIONS							
SAMP. TIME	SAMP. ID	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. (ppm)

**PIT PERIMETER**

TO WELL HEAD

**OVM READING**

SAMPLE ID	FIELD HEADSPACE (ppm)
1 @	
2 @	
3 @	
4 @	
5 @	
TIME	
# 1 @ 3'	1200
# 2 @ 3.5-4'	1205

**LAB SAMPLES**

SAMPLE ID	ANALYSIS	TIME
#1 & #2	TPH (80158)	
"	STEX (80218)	
"	ANION/CATION	
<b>PASSED</b>		

**PIT PROFILE**

NOT APPLICABLE

P.D. = PIT DEPRESSION; B.G. = BELOW GRADE; B = BELOW  
 T.H. = TEST HOLE; ~ = APPROX.; T.B. = TANK BOTTOM

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

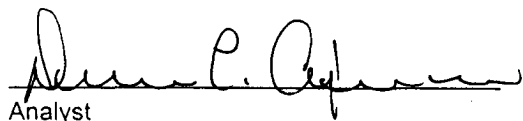
Client:	Blagg / XTO Energy	Project #:	94034-010
Sample ID:	1 @ 3'	Date Reported:	02-10-05
Laboratory Number:	32127	Date Sampled:	02-09-05
Chain of Custody No:	13382	Date Received:	02-09-05
Sample Matrix:	Soil	Date Extracted:	02-10-05
Preservative:	Cool	Date Analyzed:	02-10-05
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

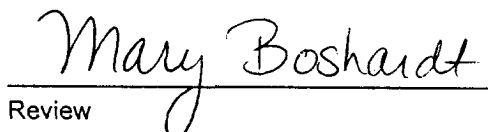
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

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: Sullivan, R. B. #4 Flare (Vent) Pit D.Y.B. 3 Pt. Composite Sample.

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / XTO Energy	Project #:	94034-010
Sample ID:	#1 @ 3'	Date Reported:	02-10-05
Laboratory Number:	32127	Date Sampled:	02-09-05
Chain of Custody:	13382	Date Received:	02-09-05
Sample Matrix:	Soil	Date Analyzed:	02-10-05
Preservative:	Cool	Date Extracted:	02-10-05
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	2.1
Toluene	ND	1.8
Ethylbenzene	ND	1.7
p,m-Xylene	ND	1.5
o-Xylene	ND	2.2
Total BTEX	ND	

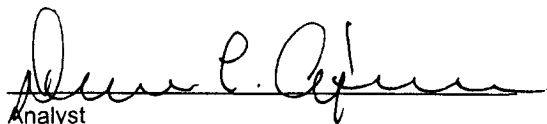
ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

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: Sullivan, R.B. #4 Flare (Vent) Pit D.Y.B. 3 Pt. Composite Sample.

  
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# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

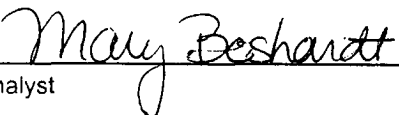
## CATION / ANION ANALYSIS


Client:	Blagg / XTO Energy	Project #:	94034-010
Sample ID:	#1 @ 3'	Date Reported:	02-10-05
Laboratory Number:	32127	Date Sampled:	02-09-05
Chain of Custody:	13382	Date Received:	02-09-05
Sample Matrix:	Soil Extract	Date Extracted:	02-10-05
Preservative:	Cool	Date Analyzed:	02-10-05
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		Units
pH	6.40	s.u.		
Conductivity @ 25° C	310	umhos/cm		
Total Dissolved Solids @ 180C	202	mg/L		
Total Dissolved Solids (Calc)	205	mg/L		
SAR	2.6	ratio		
Total Alkalinity as CaCO3	86.8	mg/L		
Total Hardness as CaCO3	63.2	mg/L		
Bicarbonate as HCO3	86.8	mg/L	1.42	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	0.2	mg/L	0.00	meq/L
Nitrite Nitrogen	0.003	mg/L	0.00	meq/L
Chloride	24.0	mg/L	0.68	meq/L
Fluoride	0.56	mg/L	0.03	meq/L
Phosphate	1.3	mg/L	0.04	meq/L
Sulfate	53.8	mg/L	1.12	meq/L
Iron	<0.001	mg/L	0.00	meq/L
Calcium	25.3	mg/L	1.26	meq/L
Magnesium	<0.01	mg/L	0.00	meq/L
Potassium	<0.01	mg/L	0.00	meq/L
Sodium	46.7	mg/L	2.03	meq/L
Cations			3.29	meq/L
Anions			3.29	meq/L
Cation/Anion Difference			0.01%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.  
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Sullivan, R. B. #4 Flare (Vent) Pit D.Y.B. 3 Pt. Composite Sample.

  
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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

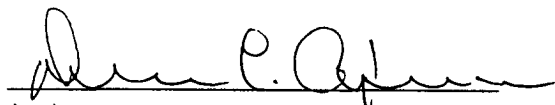
Client:	Blagg / XTO Energy	Project #:	94034-010
Sample ID:	#2 @ 3.5' - 4'	Date Reported:	02-10-05
Laboratory Number:	32128	Date Sampled:	02-09-05
Chain of Custody No:	13382	Date Received:	02-09-05
Sample Matrix:	Soil	Date Extracted:	02-10-05
Preservative:	Cool	Date Analyzed:	02-10-05
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

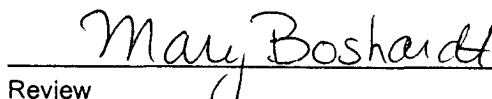
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

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: Sullivan, R. B. #4 Flare (Vent) Pit P.Y.O. 3 Pt. Composite Sample.

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / XTO Energy	Project #:	94034-010
Sample ID:	#2 @ 3.5' - 4'	Date Reported:	02-10-05
Laboratory Number:	32128	Date Sampled:	02-09-05
Chain of Custody:	13382	Date Received:	02-09-05
Sample Matrix:	Soil	Date Analyzed:	02-10-05
Preservative:	Cool	Date Extracted:	02-10-05
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	2.1
Toluene	5.9	1.8
Ethylbenzene	14.4	1.7
p,m-Xylene	48.3	1.5
o-Xylene	5.0	2.2
Total BTEX	73.6	

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: Sullivan, R.B. #4 Flare (Vent) Pit P.Y.O. 3 Pt. Composite Sample.

  
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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

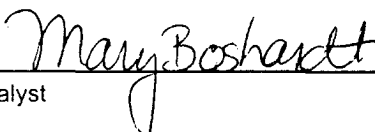
## CATION / ANION ANALYSIS

Client:	Blagg / XTO Energy	Project #:	94034-010
Sample ID:	#2 @ 3.5' - 4'	Date Reported:	02-10-05
Laboratory Number:	32128	Date Sampled:	02-09-05
Chain of Custody:	13382	Date Received:	02-09-05
Sample Matrix:	Soil Extract	Date Extracted:	02-10-05
Preservative:	Cool	Date Analyzed:	02-10-05
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		Units
pH	6.22	s.u.		
Conductivity @ 25° C	243	umhos/cm		
Total Dissolved Solids @ 180C	152	mg/L		
Total Dissolved Solids (Calc)	158	mg/L		
SAR	1.8	ratio		
Total Alkalinity as CaCO3	68.8	mg/L		
Total Hardness as CaCO3	58.0	mg/L		
Bicarbonate as HCO3	68.8	mg/L	1.13	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	0.8	mg/L	0.01	meq/L
Nitrite Nitrogen	0.041	mg/L	0.00	meq/L
Chloride	14.4	mg/L	0.41	meq/L
Fluoride	0.40	mg/L	0.02	meq/L
Phosphate	1.7	mg/L	0.05	meq/L
Sulfate	44.0	mg/L	0.92	meq/L
Iron	0.002	mg/L	0.00	meq/L
Calcium	23.2	mg/L	1.16	meq/L
Magnesium	<0.01	mg/L	0.00	meq/L
Potassium	<0.01	mg/L	0.00	meq/L
Sodium	31.7	mg/L	1.38	meq/L
Cations			2.54	meq/L
Anions			2.54	meq/L
Cation/Anion Difference			0.07%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.  
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Sullivan, R. B. #4 Flare (Vent) Pit D.Y.B. 3 Pt. Composite Sample.

  
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