

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
March 12, 2004

For drilling and production facilities, submit to appropriate NMOC 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. Building K, Suite 1, Farmington, NM 87401
Facility or well name: Bolack C 19 API #: 3004531911 U/L or Qtr/Qtr O Sec 31 T 27N R 8W
County: San Juan Latitude 36°31'32" N Longitude 107°43'7" W NAD: 1927 ☐ 1983 ☐ Surface Owner Federal ☐ State ☐ Private ☐ Indian ☐

Pit

Type: Drilling ☒ Production ☐ Disposal ☐
Workover ☐ Emergency ☐

Lined ☒ Unlined ☐

Liner type: Synthetic ☒ Thickness 12 mil Clay ☐ Volume
4000 bbl

Below-grade tank

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) 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:

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.

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: July 7, 2004

Printed Name/Title Jeffrey C. Blagg, Agent, NMPE 11607

Signature Jeffrey C. 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:

Date:

JUL 12 2004

Printed Name/Title DEPUTY OIL & GAS INSPECTOR, DIST. III

Signature Denny Reut

50 045 31911

36° 31' 32" N 107° 43' 7" W

CLIENT: XTO
BLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199

LOCATION NO: _____

COCR NO: 12146**FIELD REPORT: PIT CLOSURE VERIFICATION**PAGE No: 1 of 1LOCATION: NAME: BOLACK C WELL #: 19 TYPE: RESERVEDATE STARTED: 5-14-04

DATE FINISHED: _____

QUAD/UNIT: 0 SEC: 31 TWP: 27N RNG: 8W PM: NM CNTY: SJ ST: NMENVIRONMENTAL SPECIALIST: JCB

QTR/FOOTAGE: _____

CONTRACTOR: RUSEBAMEXCAVATION APPROX. NA FT. x NA FT. x NA FT. DEEP. CUBIC YARDAGE: 0DISPOSAL FACILITY: NA REMEDIATION METHOD: CLOSE AS ISLAND USE: RANGE LEASE: SF-079232 FORMATION: _____**FIELD NOTES & REMARKS:**PIT LOCATED APPROXIMATELY 63 FT. N28°E FROM WELLHEAD.DEPTH TO GROUNDWATER: >50 NEAREST WATER SOURCE: >1000 NEAREST SURFACE WATER: <1000NMOCD RANKING SCORE: 20 NMOCD TPH CLOSURE STD: 100 PPM**SOIL AND EXCAVATION DESCRIPTION:**
OVM CALIB. READ. = _____ ppm
OVM CALIB. GAS = _____ ppm RF = 0.52
TIME: _____ am/pm DATE: _____

SOIL TYPE: SAND / SILTY SAND / SILT / SILTY CLAY / CLAY / GRAVEL / OTHER _____

SOIL COLOR: _____

COHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVE

CONSISTENCY (NON COHESIVE SOILS): LOOSE / FIRM / DENSE / VERY DENSE

PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC

DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD

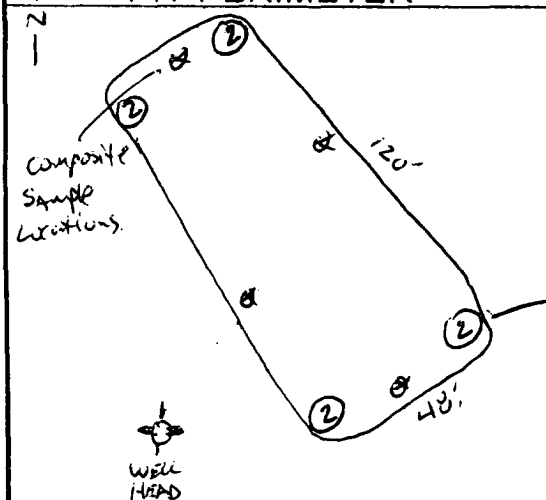
MOISTURE: DRY / SLIGHTLY MOIST / MOIST / WET / SATURATED / SUPER SATURATEDDISCOLORATION/STAINING OBSERVED: YES / NO EXPLANATION: _____HC ODOR DETECTED: YES / NO EXPLANATION: _____SAMPLE TYPE: GRAB / COMPOSITE # OF PTS. 4ADDITIONAL COMMENTS: 120' x 48' x 4' deep lined Reserve Pit. Collect 4 Point Composite w/ Sample SPAD.**FIELD 418.1 CALCULATIONS**

SCALE



0 FT

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

PIT PERIMETER**PIT PROFILE****OVM READING**

SAMPLE ID	FIELD HEADSPACE (ppm)
1 @	
2 @	
3 @	
4 @	
5 @	

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
4-Pt	TPH	1501
	BTEX	
	CL	
	8 RUA	

② 6-8-04 Composite sample locations.
 10:45 AM
 Test for CL, SAR, EC, ESP
 Resample 6/28/04
 For SAR, EC, ESP, CL

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

TRAVEL NOTES:

CALLOUT: 5-12-04ONSITE: 5-14-046-8-04

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

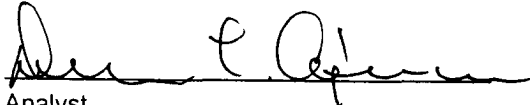
Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	Bolack C #19	Date Reported:	05-18-04
Laboratory Number:	28705	Date Sampled:	05-14-04
Chain of Custody No:	12146	Date Received:	05-17-04
Sample Matrix:	Solid	Date Extracted:	05-17-04
Preservative:	Cool	Date Analyzed:	05-18-04
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

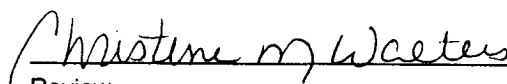
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	126	0.2
Diesel Range (C10 - C28)	2,970	0.1
Total Petroleum Hydrocarbons	3,100	0.2

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: **Reserve Pit 4 - Point Comp.**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	Bolack C #19	Date Reported:	05-18-04
Laboratory Number:	28705	Date Sampled:	05-14-04
Chain of Custody:	12146	Date Received:	05-17-04
Sample Matrix:	Solid	Date Analyzed:	05-18-04
Preservative:	Cool	Date Extracted:	05-17-04
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	24.5	1.8
Toluene	172	1.7
Ethylbenzene	349	1.5
p,m-Xylene	528	2.2
o-Xylene	518	1.0
Total BTEX	1,590	

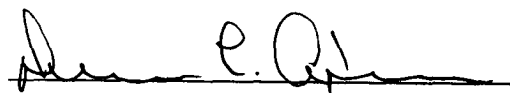
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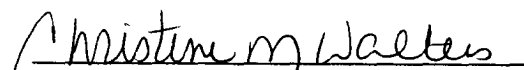
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99 %
	1,4-difluorobenzene	99 %
	Bromochlorobenzene	99 %

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: Reserve Pit 4 - Point Comp.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	Bolack C #19	Date Reported:	05-18-04
Laboratory Number:	28705	Date Sampled:	05-14-04
Chain of Custody:	12146	Date Received:	05-17-04
Sample Matrix:	Solid	Date Analyzed:	05-18-04
Preservative:	Cool	Date Digested:	05-17-04
Condition:	Cool & Intact	Analysis Needed:	RCRA Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.008	0.001	5.0
Barium	1.27	0.001	100
Cadmium	ND	0.001	1.0
Chromium	ND	0.001	5.0
Lead	ND	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	0.002	0.001	1.0
Silver	ND	0.001	5.0


ND - Parameter not detected at the stated detection limit.

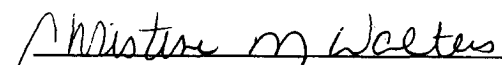
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C
section 261.24, August 24, 1998.

Comments: **Reserve Pit 4-Point Comp.**


Analyst


Review

12456

san juan reproduction 578-125

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

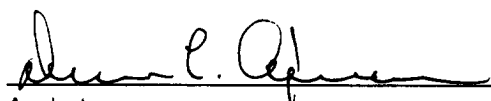
EC, SAR, ESP, Cl Analysis

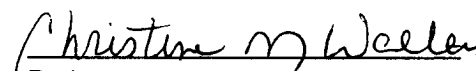
Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	0% Gyp	Date Reported:	06-30-04
Laboratory Number:	29349	Date Sampled:	06-28-04
Chain of Custody:	12456	Date Received:	06-29-04
Sample Matrix:	Soil	Date Extracted:	06-29-04
Preservative:	Cool	Date Analyzed:	06-30-04
Condition:	Cool & Intact		

Parameter	Analytical Result	Units
Conductivity @ 25° C	1.615	mmhos/cm
Calcium	50.4	mg/Kg
Magnesium	0.05	mg/Kg
Sodium	266	mg/Kg
Sodium Absorption Ratio (SAR)	10.3	ratio
Exchangeable Sodium Percent (ESP)	12.1	percent
Chloride	973	mg/Kg

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.

Comments: **Bolack C #19 4-Pt. Composite.**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

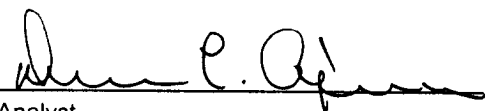
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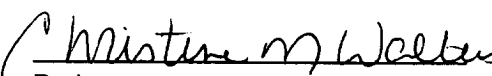
Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	1% Gyp	Date Reported:	06-30-04
Laboratory Number:	29350	Date Sampled:	06-28-04
Chain of Custody:	12456	Date Received:	06-29-04
Sample Matrix:	Soil	Date Extracted:	06-29-04
Preservative:	Cool	Date Analyzed:	06-30-04
Condition:	Cool & Intact		

Parameter	Analytical Result	Units
Conductivity @ 25° C	1.726	mmhos/cm
Calcium	92.8	mg/Kg
Magnesium	0.05	mg/Kg
Sodium	266	mg/Kg
Sodium Absorption Ratio (SAR)	7.6	ratio
Exchangeable Sodium Percent (ESP)	9.0	percent
Chloride	817	mg/Kg

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.

Comments: **Bolack C #19 4-Pt. Composite.**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

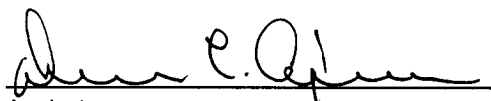
EC, SAR, ESP, CI Analysis

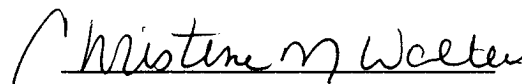
Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	2% Gyp	Date Reported:	06-30-04
Laboratory Number:	29351	Date Sampled:	06-28-04
Chain of Custody:	12456	Date Received:	06-29-04
Sample Matrix:	Soil	Date Extracted:	06-29-04
Preservative:	Cool	Date Analyzed:	06-30-04
Condition:	Cool & Intact		

Parameter	Analytical Result	Units
Conductivity @ 25° C	1.702	mmhos/cm
Calcium	109	mg/Kg
Magnesium	0.05	mg/Kg
Sodium	263	mg/Kg
Sodium Absorption Ratio (SAR)	6.9	ratio
Exchangeable Sodium Percent (ESP)	8.2	percent
Chloride	734	mg/Kg

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.

Comments: **Bolack C #19 4-Pt. Composite.**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EC, SAR, ESP, CI Analysis


Client: Blagg / XTO
Sample ID: 5% Gyp
Laboratory Number: 29352
Chain of Custody: 12456
Sample Matrix: Soil
Preservative: Cool
Condition: Cool & Intact

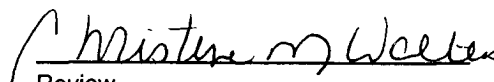
Project #: 94034-010
Date Reported: 06-30-04
Date Sampled: 06-28-04
Date Received: 06-29-04
Date Extracted: 06-29-04
Date Analyzed: 06-30-04

Parameter	Analytical Result	Units
Conductivity @ 25° C	1.654	mmhos/cm
Calcium	137	mg/Kg
Magnesium	0.05	mg/Kg
Sodium	216	mg/Kg
Sodium Absorption Ratio (SAR)	5.1	ratio
Exchangeable Sodium Percent (ESP)	5.8	percent
Chloride	667	mg/Kg

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.

Comments: **Bolack C #19 4-Pt. Composite.**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

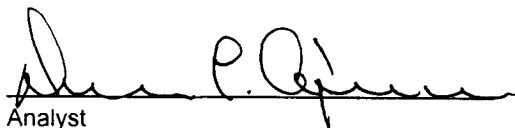
EC, SAR, ESP, CI Analysis

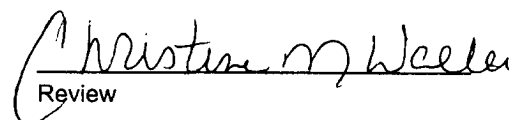
Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	10% Gyp	Date Reported:	06-30-04
Laboratory Number:	29353	Date Sampled:	06-28-04
Chain of Custody:	12456	Date Received:	06-29-04
Sample Matrix:	Soil	Date Extracted:	06-29-04
Preservative:	Cool	Date Analyzed:	06-30-04
Condition:	Cool & Intact		

Parameter	Analytical Result	Units
Conductivity @ 25° C	1.480	mmhos/cm
Calcium	156	mg/Kg
Magnesium	0.06	mg/Kg
Sodium	174	mg/Kg
Sodium Absorption Ratio (SAR)	3.8	ratio
Exchangeable Sodium Percent (ESP)	4.2	percent
Chloride	497	mg/Kg

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.

Comments: **Bolack C #19 4-Pt. Composite.**


Analyst


Review

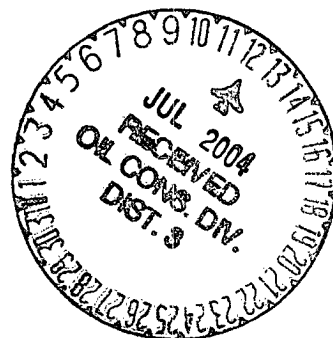
BLAGG ENGINEERING, INC.

P.O. Box 87, Bloomfield, New Mexico 87413

Phone: (505)632-1199 Fax: (505)632-3903

July 7, 2004

Mr. Denny Foust
New Mexico Oil Conservation Div.
1000 Rio Brazos Rd
Aztec, New Mexico 87410




Re: XTO Energy Inc.
Request for Closure of Lined Drilling Reserve Pit
Bolack C 19, (O) Sec. 31 - T27N - R8W, San Juan County, NM

Dear Mr. Foust:

Referencing correspondence dated June 18, 2004 requesting closure of a lined reserve drilling pit at the subject location, XTO Energy Inc. has requested that Blagg Engineering, Inc. (BEI) conduct additional sampling of the pit contents to validate parameters and conduct a bench scale study of mixing gypsum to reduce salt content. Based on this additional sampling XTO Energy is requesting NMOCD approval to close in place the lined drilling reserve pit at the Bolack C 19 well. The additional sampling at the site conducted on June 28, 2004 indicates that current SAR, EC and ESP test results are within NMOCD closure guidelines, last published May 28, 2004. Additionally, the bench scale study indicates that the addition of gypsum to the pit contents is successful at reducing salt content.

Pursuant to section VII (A) (3) (a) (iii) of the NMOCD guidelines, XTO is requesting approval to close the pit in place by mixing clean soil in the pit contents to provide physical stability and backfilling with a minimum of 3 feet of clean soil. A completed Form C-144, a field sampling report (with diagram of pit and sampling locations) and laboratory analytical test results are attached for your review. XTO will wait for NMOCD approval before proceeding with the pit closure. Please contact myself at (505)632-1199, or XTO regulatory compliance representatives Jeff Clement or Brenda Waller at (505)324-1090 if you need additional information.

Respectfully submitted,
Blagg Engineering, Inc.


Jeffrey C. Blagg, President
NMPE 11607

Attachments: Site Map, lab data summary

cc: Ms. Brenda Waller - XTO Farmington
Mr. Jeff Clement - XTO Farmington
Mr. Terry Matthews - XTO Farmington