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

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Form C-144

March 12, 2004

Pit or Below-Grade	Tank Registration of	<u>r Closure</u>

Is pit or below-grade tan Type of action: Registration of a pit of	ak covered by a "general plan"? Yes 📈 No or below-grade tank 🔲 Closure of a pit or below-grade	□ de tank <b>⊠</b>
Operator: XTO Energy, Inc.	Telephone: (505)324-1090	e-mail address:
Address: 2700 Farmington Ave, Building K, Suite 1, Farmington		
Facility or well name: Bolack C 19 API #: 3004:		<u> 27N R 8W</u>
County: San Juan Latitude 36°31'32" N Longitude		
Pit	Below-grade tank	
Type: Drilling Production Disposal	Volume:bbl Type of fluid:	
Workover   Emergency	Construction material:	
Lined 🔀 Unlined 🗌	Double-walled, with leak detection? Yes  If not	, explain why not.
Liner type: Synthetic Thickness 12 mil Clay Volume	_	
4000 bbl +		
	Less than 50 feet	(20 points)
Depth to ground water (vertical distance from bottom of pit to seasonal	50 feet or more, but less than 100 feet	(10 points) 10
high water elevation of ground water.)	100 feet or more	( 0 points)
Wellhead protection area: (Less than 200 feet from a private domestic	Yes	(20 points)
water source, or less than 1000 feet from all other water sources.)	No	( 0 points) 0
	Less than 200 feet	(20 points)
Distance to surface water: (horizontal distance to all wetlands, playas,	200 feet or more, but less than 1000 feet	(10 points) 10
irrigation canals, ditches, and perennial and ephemeral watercourses.)	1000 feet or more	( 0 points)
	1000 feet of more	( o points)
	Ranking Score (Total Points)	20
f this is a pit closure: (1) attach a diagram of the facility showing the pit's nsite of offsite If offsite, name of facility		
ate. (4) Groundwater encountered: No XYes 🔲 If yes, show depth belo	ow ground surfaceft. and attach sample	e results. (5) Attach soil sample results and a
liagram of sample locations and excavations.		
I hereby certify that the information above is true and complete to the best has been/will be constructed or closed according to NMOCD guidelin Date:  June 17, 2004	nes 🕱, a general permit 🗌, or an (attached) alterna	ative OCD-approved plan 🔲.
Printed Name/Title Jeffrey C. Blagg, Agent, NMPE 11607	SignatureLffy_	C- Slog
Your certification and NMOCD approval of this application/closure does otherwise endanger public health or the environment. Nor does it relieve regulations.	not relieve the operator of liability should the contents the operator of its responsibility for compliance with	s of the pit or tank contaminate ground water or any other federal, state, or local laws and/or
Approval:	. ^	
Date:	1600111	fourt
Printed Name/Title	SignatureSignature	
	′ ` //	
	$\nu$	

## BLAGG ENGINEERING, INC.

P.O. Box 87, Bloomfield, New Mexico 87413 Phone: (505)632-1199 Fax: (505)632-3903

June 18, 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:

On behalf of XTO Energy Inc., Blagg Engineering, Inc. (BEI) is requesting NMOCD approval to close in place a lined drilling reserve pit at the referenced well. This pit was used to capture drilling muds and fluids during drilling and completion operations. Composite samples of the pit contents collected on May 14, 2004 and June 8, 2004 indicate there are salt constituents in excess of NMOCD guidelines, last published May 28, 2004.

Pursuant to section VII (A) (3) (a) (iv) 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 support, placing a 40-mil synthetic liner over the pit, then backfilling with a minimum of 3 feet of clean soil. The synthetic liner cap will overlap the underlying pit area by a minimum of 3 feet in all directions.

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

File: xto.bolackc19.wpd

50 045 31911 36° 31'32'N= 107°43 7'W				
	G ENGINEERING, INC. 37, BLOOMFIELD, NM 87413	LOCATION NO:		
()	505) 632-1199	COCR NO: 12146		
FIELD REPORT: PIT CLO	OSURE VERIFICATION	PAGE No: 1 of 1		
LOCATION: NAME: BOLACK C	WELL#: 19 TYPE: RESERVE	DATE STARTED: 5-14-04		
QUAD/UNIT: O SEC: 31 TWP: 27N RNG:		DATE FINISHED:		
	CONTRACTOR: RUSENBAM	SPECIALIST: JUS		
EXCAVATION APPROX FT. x	A FT. X NA FT. DEEP. CUBIC	YARDAGE:		
	REMEDIATION METHOD:	CLUSE AS 13		
		RMATION:		
	TED APPROXIMATELY <u>63</u> FT. <u>N28</u>			
\	TER SOURCE: 7000 NEAREST SURFACE	DE WATER:		
NMOCD RANKING SCORE: 20 NMOCD TPH C	CLOSURE STD: 100 PPM			
SOIL AND EXCAVATION DESCRIPTI	ON: OVM CALIB. READ			
		am/pm DATE:		
SOIL TYPE: SAND / SILTY SAND / SILT / SILTY C SOIL COLOR:	LAY / CLAY / GRAVEL / OTHER			
COHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY				
CONSISTENCY (NON COHESIVE SOILS): LOOSE / FIRM / PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTI				
DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STI				
MOISTURE: DRY / SLIGHTLY MOIST (MOIST / WET) SATI DISCOLORATION/STAINING OBSERVED: (YES) NO EXP				
HC ODOR DETECTED: YES NO EXPLANATION -	DAATION -			
SAMPLE TYPE: GRAB COMPOSITE # OF PTS. 4	-x 4'1 Deep lined Resource P.	4. Collect 4 Paint		
	Sauple SPADE.			
•	FIELD 418.1 CALCULATIONS			
SCALE SAMP. TIME SAMP. ID	LAB NO. WEIGHT (g) mL FREON DIL	UTIONREADING CALC (ppm)		
		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
0 FT				
↑ PIT PERIMETER		HT PROFILE		
7	OVM READING			
	SAMPLE FIELD HEADSPACE			
	1 @			
composite of to- Sample Livitions.	2 @ 3 @			
Saufle \	5 @	6-8-cel Composite Sample 10 celluls. 1:45 AM		
		sautle locations.		
\a	7.	st For CL, SAR, EC, ESP		
2 20	LAB SAMPLES  SAMPLE ANALYSIS TIME			
well itead	4-Pt TA/ 1501			
1949	BIEX			
P.D. = PIT DEPRESSION; B.G. = BELOW GRADE; B = BELOW T.H. = TEST HOLE: ~ = APPROX.; T.B. = TANK BOTTOM	& RUPA			
TRAVEL NOTES: CALLOUT: 5-11-04	5-11-04			
CALLOUT: J-12-09	ONSITE: 5-14-04			



### EC, SAR, ESP, CI Analysis

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	4 - Pt. Comp.	Date Reported:	06-10-04
Laboratory Number:	28983	Date Sampled:	06-08-04
Chain of Custody:	12259	Date Received:	06-09-04
Sample Matrix:	Solid	Date Extracted:	06-09-04
Preservative:	Cool	Date Analyzed:	06-10-04
Condition:	Cool & Intact		

	Analytical	
Parameter	Result	Units

Conductivity @ 25° C	29.1	mmhos/cm
Calcium	2,920	mg/Kg
Magnesium	117	mg/Kg
Sodium	2,150	mg/Kg
Sodium Absorption Ratio (SAR)	15.0	ratio
Exchangeable Sodium Percent (ESP)	17.2	percent
Chloride	9,740	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.

Analyst C. Queen

(Mistine m Walters
Review



# 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 Colonia

Mister my Walters Review



# 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)	
Ramana	04.5	4.0	
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		

ND - Parameter not detected at the stated detection limit.

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 C. C.

Mistine m Walters
Review



#### **Total Chloride**

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

**Parameter** 

Concentration (mg/Kg)

**Total Chloride** 

28,430

Reference:

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Reserve Pit 4-Point Comp.

Analyst Malles

Review



### 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 Emmision

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

/ Mustine m Walters
Review