OIL CONS. DIV. DIST. 3

Form 3160 -3 (April 2004)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0137 Expires March 31, 2007

5. Lease Serial No.

APPLICATION FOR PERMIT TO	DRILL OR REENTER	6 If Indian, Allot RECEIVED HUNNEPA	tee or Tribe Name AH		
la. Type of work: ✓ DRILL REENT	-12 21 21 2 1. 3 1.5 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	77. If Unit or CA Agreement, Name and No.			
lb. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other	8. Lease Name an HUN NE PA				
2. Name of Operator XTO ENERGY INC.		9. API Well No. 30-045- 3c	+292-		
3a. Address 2700 FARMINGTON AVE., BLDG. K-1 FARMINGTON, NM 87401	3b. Phone No. (include area code) (505) 324-1090	10. Field and Pool,	or Exploratory LJC Mcanco		
4. Location of Well (Report location clearly and in accordance with an At surface 660' FNL & 1960' FWL At proposed prod. zone SAME	1 ny State requirements.*)	11. Sec., T. R. M. of	r Blk. and Survey or Area V NMPM		
Distance in miles and direction from nearest town or post office* 19 AIR MILES SOUTH OF BLOOMFIELD		12. County or Paris SAN JUAN	h 13. State NM		
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any) 660' 16 No. of acres in lease 17. Spacing Unit line (4.15) 160 (320 in CA) MANCOS					
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1,626' (HNP #1)	19 Proposed Depth 6,150'	20. BLM/BIA Bond No. on file BIA NATIONWIDE 10-	BIA Bond No. on file NATIONWIDE 104312789		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6,422' GL	22 Approximate date work will sta 07/20/2007	rt* 23. Estimated dura 4 WEEKS	ition		
	24. Attachments				
The following, completed in accordance with the requirements of Onsho 1. Well plat certified by a registered surveyor. 2. A Dulling Plan. 3. A Surface Use Plan (if the location is on National Forest System	4. Bond to cover t Item 20 above).	he operations unless covered by	an existing bond on file (see		
SUPO shall be filed with the appropriate Forest Service Office).		specific information and/or plans	s as may be required by the		
25. Signature	Name (Printed/Typed) BRIAN WOOD		Date 04/29/2007		
Title CONSULTANT	PHONE: (505) 466-8120	FAX: (505) 466-9682			
Approved by (Signature) Name (Printed/Typed) Date 12/11/5					
Title AFM Office					
Application approval does not warrant or certify that the applicant hole conduct operations thereon. Conditions of approval, if any, are attached.	ds legal or equitable title to those righ	its in the subject lease which wou	ld entitle the applicant to		
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a c States any false, fictitious or fraudulent statements oppopresentations as	rime for any person knowingly and to any matter within its jurisdiction.	willfully to make to any departmen	nt or agency of the United		
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a c States any false, fictitious or fraudulent statements opportunitions as *(Instructions on page 2)	AZTEC =				
"OR TO	O CASU OCD 2	AVID SEE AT	TACUED FOR		

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED JERAL REQUIREMENTS*.

NMOCD DEC 1 3 2007 This action is subject to technical and procedural review pursuant to 43 CFR 3165 3 and appear pursuant to 43 CFR 3165.4

DISTRICT I 1625 N. French Dr., Hobbs, N.M. 88240

1301 W. Grond Ave , Artesia, N.M. 88210

1000 Río Brazos Rd., Aztec. N.M. 87410

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION

1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-102 Revised October 12, 2005 Mery 1 Submit to Appropriate District Office Fee Lease - 3 Copies

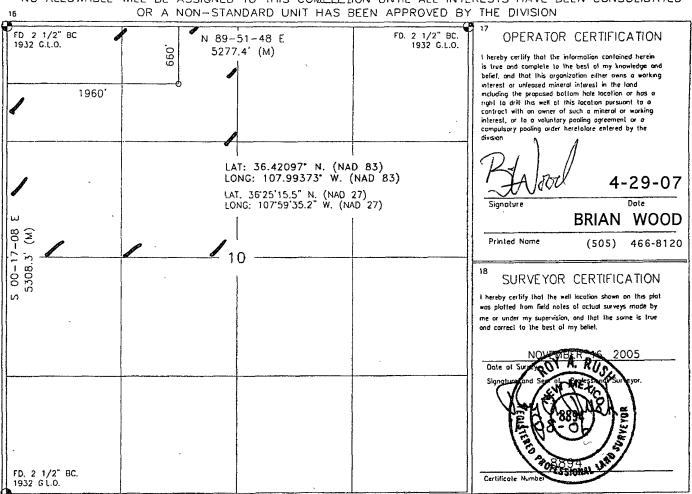
RECEIVED ☐ AMENDED REPORT BLIT

DISTRICT IV 1220 South St. Francis Dr., Santo Fe, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT Pool Code Pool Name 30-045- ² 232 WC BASIN MANCOS Property Code ³Property Name Well Number 22748 HUN NE PAH 1 F OGRID No *Operator Name * Elevation XTO ENERGY INC. 6422

1670675380 ¹⁰ Surface Location UL or lot no. Feet from the Section Township North/South line Ronge Lot Idn East/West line Feet from the C 10 ' NORTH 25-N 11-W 660 1960 WEST SAN JUAN "Bottom Hole" Location If Different From Surface UL or lot no. Section Township Lot 1dn Feet from the North/South tine Feet from the East/West line County ² Dedicated Acres ³ Joint or Infill 14 Consolidation Code 15 Order No. 160

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED



Form C-102

DISTRICT I 1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II 1301 W. Grand Ave., Artesia, N.M. 88210

DISTRICT III 1000 Rio Brazos Rd., Aztec, N.M. 87410

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION

Revised October 12, 2005 2007 1973 Stote Ceose - 4 Copies

1220 South St. Francis Dr. Santa Fe, NM 87505

Fee Lease - 3 Copies

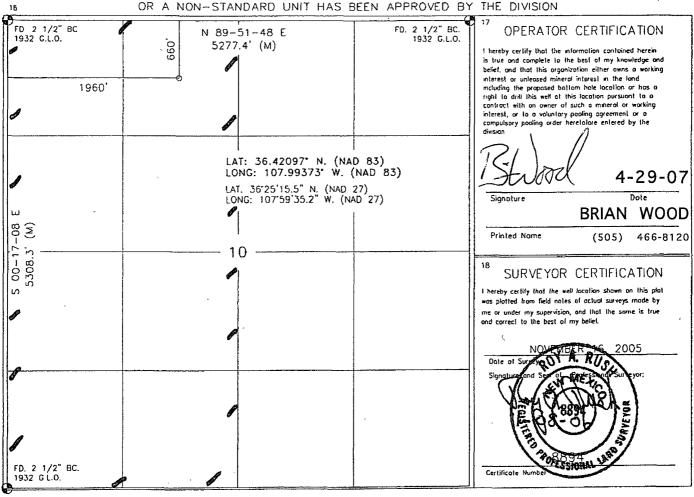
AMENDED REPORT

DISTRICT IV 1220 South St. Francis Dr., Santa Fe, NM 87505

	WELL LOCATION AND AC	REAGE DEDICATION PLAT	
1API Number 30-045-3	71599	3Pool Nome 3ASIN DAKOTA	
*Property Code	⁵ Property No	me	⁵ Well Number
•	• HUN NE	PAH	1F=
OGRID No	^B Operator N	* Elevation	
167067	XTO ENERGY	INC.	6422

16/06/ ¹⁰ Surface Location UL or lot no. Section Township Feet from the North/South line Ronge Lot Ido Feet from the East/West line County C 10 25-N NORTH 660 1960 WEST SAN JUAN 11 - W"Bottom Hole" Location If Different From Surface UL or lot no. Section Lot 1dn Feet from the North/South line Feet from the East/West line Ronge County 12 Dedicated Acres 14 Consolidation Code 15 Order No. 13 Joint or Infill 320 C

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



Submit 3 Copies To Appropriate District Office	State of New Mexico	Form C-103
District I	Energy, Minerals and Natural Resources	May 27, 2004
1625 N. French Dr., Hobbs, NM 88240 District II		WELL API NO. 30-045- 3439
1301 W Grand Ave , Artesia, NM 88210	OIL CONSERVATION DIVISION	5. Indicate Type of Lease
<u>District III</u> 1000 Rio Brazos Rd , Aztec, NM 87410	1220 South St. Francis Dr.	STATE FEE
<u>District IV</u> 1220 S St. Francis Dr, Santa Fe, NM	Santa Fe, NM 87505	6State Oil & Gas Lease No. NOO-C-14-20-3609
87505 SLINDRY NOT	TICES AND REPORTS ON WELLS	7. Lease Name or Unit Agreement Name
(DO NOT USE THIS FORM FOR PROPO	OSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A ICATION FOR PERMIT" (FORM C-101) FOR SUCH	HUN NE PAH
1. Type of Well: Oil Well	Gas Well Other	8. Well Number 1-F
2. Name of Operator		9. OGRID Number 167067
XTO ENERGY INC.		
3. Address of Operator 2700 FARMINGTON AVE., BLD	og. K-1, Farmington, nm 87401	10. Pool name or Wildcat WC BASIN MANCOS & BASIN DAKOTA
4. Well Location		
Unit Letter: C	660' FNL & 1960' FWL	
Section 10	Township 25 N Range 11 W	NMPM SAN JUAN County
	11. Elevation (Show whether DR, RKB, RT, GR, etc. 6,422° GL	(c.)
Pit or Below-grade Tank Application	or Closure 🗌	
Pit type: <u>DRILLING</u> Depth to Groundw	rater: >30 Distance from nearest fresh water well: >1,000' Dist	ance from nearest surface water: ≥\$00'
Pit Liner Thickness: 12 mil	Below-Grade Tank: Volume bbls; Co	onstruction Material
12. Che	eck Appropriate Box to Indicate Nature of No	otice, Report or Other Data
NOTICE OF I	NTENTION TO: SU	JBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK	PLUG AND ABANDON 🔲 REMEDIAL WO	
TEMPORARILY ABANDON		DRILLING OPNS. P AND A
PULL OR ALTER CASING	MULTIPLE COMPL CASING/CEME	ENT JOB
OTHER: DRILLING PIT	OTHER:	П
	oleted operations. (Clearly state all pertinent details, as	nd give pertinent dates, including estimated date of
starting any proposed work	c). SEE RULE 1103. For Multiple Completions: Atta	
recompletion.		
•		
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•		,
~		
<u> </u>		
I hereby certify that the information has been/will be constructed or closed accordance	above is true and complete to the best of my knowled; ording to NMOCD guidelines 🗔, a general permit 🗌 or an (att	ge and belief. I further certify that any pit or below-grade tank tached) alternative OCD-approved plan \square .
SIGNATURE / WOO	TITLE: CONSULTANT	DATE: APRIL 29, 2007
Type or print name: BRIAN WOOD	E-mail address: brian@permitswest.com	Telephone No.: (505) 466-8120
For State Use Only	Deputy Oil & G	Can Inannatar
APPROVED BY:	TITLE District	
Conditions of Approval (if any):	` \(\cdot \)	

Drilling Program

1. ESTIMATED FORMATION TOPS

Formation Name	GL Depth	KB Depth	<u>Elevation</u>
Nacimiento	000'	5'	+6,422'
Ojo Alamo	422'	434'	+6,000'
Fruitland Coal	1,372'	1,384'	+5,050'
Pictured Cliffs	1,422'	1,434'	+5,000'
Lewis Shale	1,522'	1,534'	+4,900'
Mesa Verde	2,272'	2,284'	+4,150'
Gallup	4,897'	4,909'	+1,525'
Greenhorn	5,772'	5,784'	+650'
Dakota .	5,932'	5,944'	+490'
Total Depth (TD)*	6,150'	6,162'	+272'

2. NOTABLE ZONES

Gas & Oil Zones	Water Zones	<u>Coal Zone</u>
Fruitland	Nacimiento	Fruitland
Pictured Cliffs	Ojo Alamo	
Gallup	Fruitland	,
Dakota		

Water zones will be protected with casing, cement, and weighted mud. Fresh water found while drilling will be recorded. Oil or gas shows will be tested for commercial potential based on the geologist's recommendations.



3. PRESSURE CONTROL

The drilling contract has not yet been awarded, thus the exact BOP model to be used is not yet known. (A typical 2,000 psi model is on PAGE 3.) An 8-5/8" x 11" 2,000 pound double ram BOP system with a choke manifold and mud cross will be tested to 200 psi and then to 1,000 psi. Upper and lower Kelly cocks with valve handle and subs to fit all drill string connections which are in use will be available on the rig floor.

Tests will be run when:

- 1) installed
- 2) anytime a pressure seal is broken (test only affected equipment)
- 3) at least every 30 days
- 4) blind & pipe rams will be activated each trip, but no more than daily

BOP systems will be consistent with API RP 53. Blowout preventers will be installed and tested before drilling surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated daily to ensure good mechanical working order and this inspection recorded on the daily drilling report. Preventers and casing will be pressure tested before drilling casing cement plugs. Maximum expected bottom hole pressure is $\approx 2,800$ psi. BOP and mud system will control pressure.

4. CASING & CEMENT

<u>Hole Size</u>	<u>O. D.</u>	Weight (lb/ft)	<u>Grade</u>	<u>Age</u>	<u>Connections</u>	Setting Depth
12-1/4"	8-5/8"	24	J-55	New	ST&C	360'
7-7/8"	5-1/2"	15.5	J-55	New	ST&C	6,150'

Surface casing will be cemented to the surface with ≈ 375 cubic feet (≈ 270 sacks) Type V cement + 1/4 pound per sack cello-flake + 2% CaCl₂. Yield = 1.39 cubic feet per sack. Weight = 14.5 pounds per gallon. Excess: >100%.



Centralizers will be set on the bottom two joints of the surface casing and every fourth joint to the surface.

Production casing will be cemented to the surface with \approx 50% excess as follows. DV tool will be set @ \approx 4,250'.

First stage lead will consist of ≈ 302 cubic feet (≈ 150 sacks) of Type III (or its equivalent) + 2% CaCl₂ + 1/4 pound per sack cello flake + 0.2% dispersant + 0.5% fluid loss control + 2% LCM additives mixed at 12.5 pounds per gallon and 2.01 cubic feet per sack.

First stage tail will consist of \approx 222 cubic feet (\approx 150 sacks) Type III (or its equivalent) + 5% bonding additive + 1/4 pound per sack cello flake + 0.3% dispersant + 0.2% fluid loss control + 2% LCM additives mixed at 14.2 pounds per gallon and 1.48 cubic feet per sack.

Second stage lead will consist of ≈ 975 cubic feet (≈ 375 sacks) Type III (or its equivalent) + 1/4 pound per sack cello flake + 8% gel + 2% LCM mixed at 11.9 pounds per gallon and 2.6 cubic feet per sack.

Second stage tail will consist of ≈ 139 cubic feet (≈ 100 sacks) Type III Neat mixed at 14.5 pounds per gallon and 1.39 cubic feet per sack.

Centralizers will be set on the bottom two joints, every second joint to $\approx 5,000$ ', and every fourth joint from $\approx 2,000$ ' to the surface.

5. MUD PROGRAM

<u>RAN</u>	<u>GE</u>	MUD TYPE	<u>WEIGHT</u>	VISCOSITY	WATER LOSS	<u>ADDITIVES</u>
	0' - 360'	Fresh-Spud	8.6-9.0	28-32	NC	Gel, lime
3	60' - 2,500	'Fresh-Poly	8.4-8.8	28-32	NC	Gel, lime sweeps
2,50	00' - TD	Fresh Water	8.6-9.2	45-60	8-10 cc	Gel, soda ash, LCM



6. CORES, TESTS, & LOGS

No cores or drill stem tests are planned. Mud logger will arrive at $\approx 3,000$ ' and collect samples every ≈ 10 ' from there to TD. These open hole logs will be run:

Array Induction/SFL/GR/SP from TD to ≈360' Neutron/Lithodensity/Pe/GR/Cal from TD to ≈3,000'

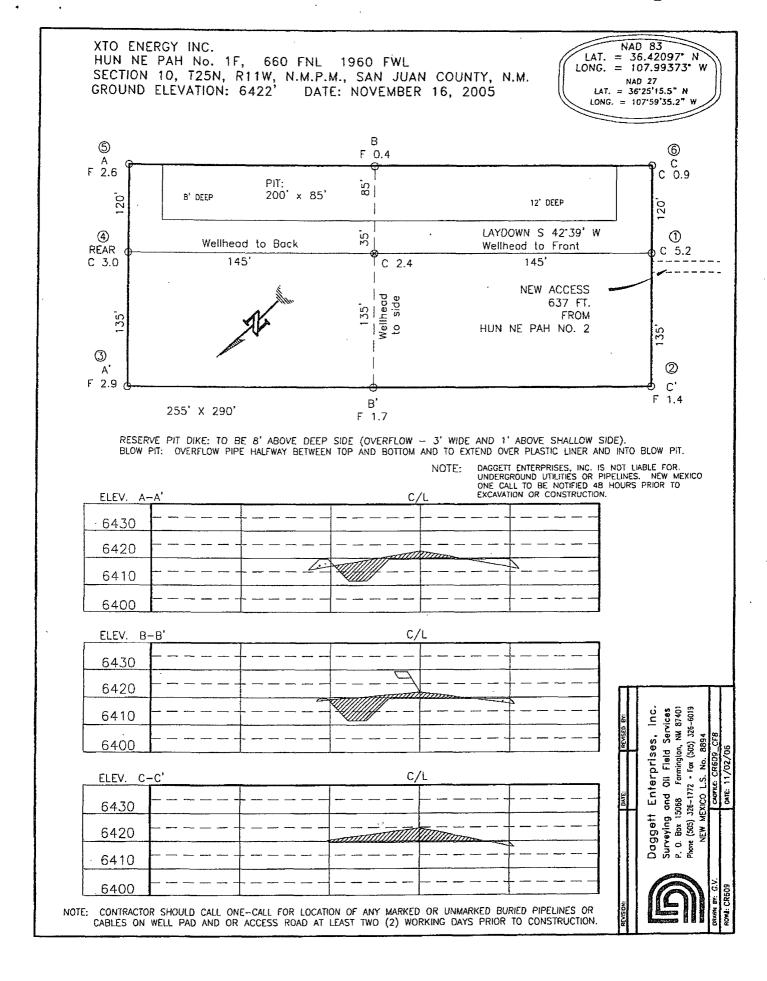
7. DOWN HOLE CONDITIONS

No abnormal pressures, temperatures, nor hydrogen sulfide are expected. Maximum expected bottom hole pressure will be $\approx 2,460$ psi.

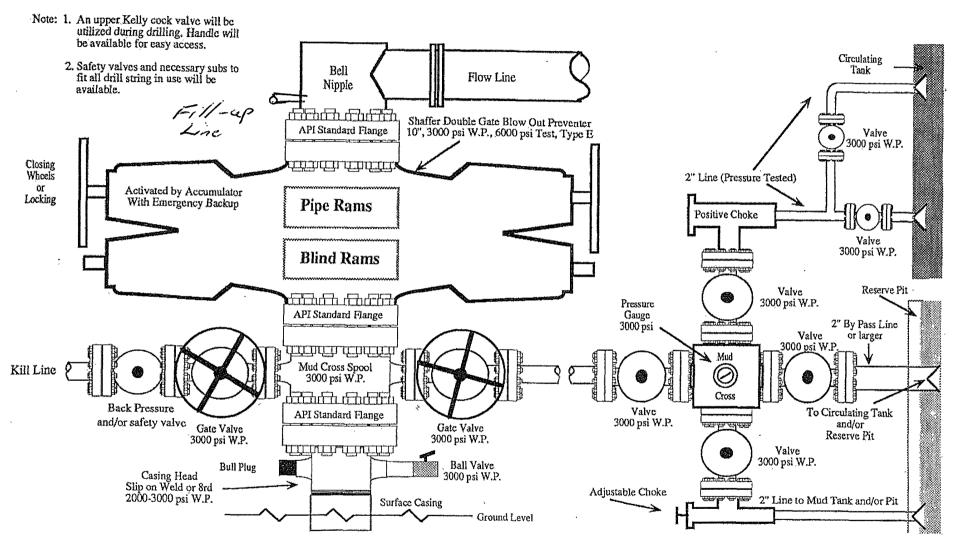
8. OTHER INFORMATION

The anticipated spud date is upon approval. It is expected it will take about four weeks to drill and complete the well.





2,000 PSI BOP SYSTEM



Note: This equipment is designed to meet requirements for a 2-M rating standard per 43 CFR part 3160 (amended). Proper operation and testing of equipment will be carried out per standard, 2,000 psi equipment can be substituted in the drawing to meet minimum requirements per standard.