PRIOR TO CASING & CEMENT NOTIFY AZTEC OCD 24 HRS.

RECEIVE

FORM APPROVED OMB No 1004-0137 Expires July 31, 2010

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

JUN 02 2011

5. Lease Serial No. NMNM-\$16467

6 If Indian, Allotee or Tribe Name

APPLI	CATION FOR PE	KIVIII TO DRIL	L UK KEENII.		NAVAJO NATION	(SURFACE)
la. Type of work:	RILL	REENTER	=====================================	yton Field Office Land Managem	er7 If Unit or CA Agre	ement, Name and No.
lb. Type of Well: O	ıl Well 🔽 Gas Well [Other	Single Zone	Multiple Zone	8. Lease Name and V	Vell No
2. Name of Operator XTO	ENERGY, INC.			-	9. API Well No. 30-045- 3528	9
3a. Address 382 ROAD 3	8100	3b P	hone No. (include are	a code)	10. Field and Pool, or I	
AZTC, NM 8	7410	505	333-3159		GALLEGOS GALL	UP, BASIN DAKOTA
4. Location of Well (Report	location clearly and in ac	cordance with any State	requirements.*)		11. Sec., T. R. M. or B	lk. and Survey or Area
At surface 1905' FNL	& 937' FWL			E	SWNW 1-25N-11V	V NMPM
At proposed prod zone	SAME					
4 Distance in miles and directly 19 AIR MILES SOUTH		•			12 County or Parish SAN JUAN	13 State NM
15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig. unit	735' line, 1f any)	16 160	No of acres in lease .39	1	ng Unit dedicated to this v S2NW4 (80 ac.); Dal	
18 Distance from proposed lo	cation* , 739' (9 E)	19	Proposed Depth	20. BLM/	BIA Bond No. on file	
to nearest well, drilling, co applied for, on this lease,	impicted,	6,40	00' MD	BLM NA	ATIONWIDE UTB-00	0138
	er DF, KDB, RT, GL, etc		Approximate date wo	rk will start*	23. Estimated duratio	n
6,413' UNGRADED	action is subject to tech	ilicologed 11/	01/2011		4 WEEKS	
proce	soural review pursuant	10 43 CFH 3165.324	Attachments		DRILLING OPE	RATIONS AUTHORIZED A
The following, completed in a	ccordance with the require	ments of Onshore Oil	and Gas Order No.1,	must be attached to the	nis form. SUBJECT 10 t GENERAL RE	QUIREMENTS".
Well plat certified by a reg A Drilling Plan.			4 Bond		GE 10 E 1 1 1 1 1 1	existing bond on file (see
3. A Surface Use Plan (if th SUPO must be filed with t			. , .	tor certification other site specific inf	ormation and/or plans as	may be required by the
25. Signature	-/ / //		Name (Printed/Typ	ed)		Date
	HILLOU		BRIAN WOOD	(505 466-812	0)	05/30/2011
itle CONSULTANT				FAX 505 466-968	(2)	
Approved by (Signuture)	100 /		Name (Printed/Typ	·		Date
spproved by (signifility)	Mantee	Los	rume (17mea/1)p			5/23/17
Title 1	AFN		Office FE	5 0		, , , , , ,
Application approval does no onduct operations thereon. Conditions of approval, if any	•	e applicant holds lega	lor equitable title to	those rights in the su	bject lease which would o	entitle the applicant to
itle 18 U.S.C. Section 1001 an states any false, fictitious or fi		presentations as to any	matter within its juris		make to any department of	or agency of the United
(Continued on page 2))		Dil Cons. Div District III	,	*(Inst	ructions on page 2)

SEE ATTACHED FOR

CONDITIONS OF APPROVAL

MAY 3 0 2012

ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

BLM'S APPROVAL OR ACCEPTANCE OF THIS

NMOCD P

ca JUN 1 4 2012

DISTRICT 1 1625 N. Fench Or., Hobbs, N.M. 88240

DISTRICT III

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

State of New Mexico

OIL CONSERVATION DIVISION UN 02 28 philit to Appropriate District Office State Lease - 4 Copies

Form C-102 Revised October 12, 2005 Instructions on back

POFESSIONAL

Certificate Number

1000 Rio Brazos Rd DISTRICT IV 1220 South St. Froi			505	1: S	220 South anta Fe, N	St. NM 87	Froncis Dr. 7504-2088 Farmi l Bu reau o	ngton	Field Officed Manager	j. me₁ □	_	ose - 3 Copies IDED REPORT
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DISTRICT 1 1625 N. Fench Dr., Hobbs, N.M. 88240

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised October 12, 2005 Instructions on back

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

Submit to Appropriate District Office State Lease — 4 Copies Fee Lease — 3 Copies

DISTRICT III 1000 Rio Brazos Rd., Aztec, N.M. 87410 OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87504-2088

☐ AMENDED REPORT

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

30-045-3	Number 5.799	² Pool Code 26980			3 Pool Name							
Property Cod	<u> </u>		J	20900	980 GALLEGOS GALLUP 5 Property Name 6 Well Number					ell Number		
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OGRID No.	<u> </u>	<u></u>	⁸ Operator Name								⁹ Elevation	
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Drilling Program

1. ESTIMATED FORMATION TOPS

Formation Name	<u>GL Depth</u>	KB Depth	<u>Elevation</u>
Nacimiento	0'	12'	+6,413'
Ojo Alamo	568'	580'	+5,845'
Kirtland	723'	735'	+5,690'
Fruitland	1,303'	1,315'	+5,110'
Pictured Cliffs	1,578'	1,590'	+4,835'
Lewis shale	1,648'	1,660'	+4,765'
Mesa Verde	2,363'	2,375'	+4,060'
Point Lookout	4,073'	4,085'	+2,340'
Mancos Shale	4,448'	4,460'	+1,965'
Gallup	5,073'	5,085'	+1,340'
Sanostee	5,588'	5,600'	+825'
Greenhorn	5,958'	5,970'	+455'
Dakota	6,073'	6,085'	+340'
Total Depth (TD)	6,400'	6,412'	+13'

2. NOTABLE ZONES

Gas & Oil Zones	<u>Water Zones</u>	<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 $\approx 1,000$ 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 will be $\approx 2,771$ psi. BOP and mud system will control pressure.

4. CASING & CEMENT

<u>Hole Size</u>	<u>O. D.</u>	<u>Weight (lb/ft)</u>	<u>Grade</u>	<u>Age</u>	<u>Connections</u>	<u>Setting Depth</u>
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	6,400'

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 @ $\approx 4,650$ ' (at least 200' into Mancos shale).

First stage lead will consist of \approx 281 cubic feet (\approx 140 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 207 cubic feet (\approx 140 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 $\approx 1,079$ cubic feet (≈ 415 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>RANGE</u>	<u>MUD TYPE</u>	<u>WEIGHT</u>	<u>VISCOSITY</u>	WATER LOSS	<u>ADDITIVES</u>
0' - 360'	Fresh-Spud	8.6-9.0	28-32	NC	Gel, lime
360' - 2,500'	'Fresh-Poly	8.4-8.8	28-32	NC	Gel, lime sweeps
2,500' - 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 $\approx 2,771$ 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.

XTO will plug and abandon the Canyon 9 E before producing the Canyon 9 F. The Canyon 9 E has a mechanical problem which prevents production.

The April 13, 2011 on site inspection was attended by Bertha Spencer (BIA), Esther Kee (Tribal Project Review), Rita Whitehorse (Tribal EPA), Charles Black (Permits West), and Malia Villers, Charlyne Charlie, Brent Beaty, & Jerry Lacy (all XTO).



Surface Use Plan

1. <u>DIRECTIONS & EXISTING ROADS</u> (See PAGES 10 - 12)

From Bloomfield ...

Go SE \approx 14 miles on US 550 to the equivalent of Mile Post 140.7 on US 550 ... Go SW \approx 7 miles on paved County Road 7150 to the Carson Trading Post Then turn left and go SE 3-1/4 miles on dirt County Road 7300 Then turn right and go South \approx 150 yards to the South corner of the 9 E pad Then turn right and go Southwest \approx 413' cross country to the 9 F pad

Roads will be maintained to at least equal their present condition.

2. ROAD TO BE BUILT OR UPGRADED (See PAGES 11 & 12)

The final \approx 413' of road will be built to BLM Gold Book standards. This will consist of crowning and ditching with a \approx 14' wide running surface. Maximum disturbed width = 20'. Road crown = 0.03' to 0.05' per foot. Topsoil will initially be windrowed beside the road. Borrow ditch inside slope will be \approx 4:1. Borrow ditch outside slope will be \approx 2:1. Ditch bottom will be a smooth V with no vertical cut and ditch depth will be \approx 1 foot. Once the ditch is complete, topsoil will be pulled back onto the cut slopes so there is no berm. One 24" O. D. culvert will be installed. There will be at least 36" of cover over the Beeline BMG pipeline crossing. Maximum cut or fill = 3'. Maximum grade = 9%. No upgrade, vehicle turn out, or cattle guard is needed.

3. EXISTING WELLS (See PAGE 11)

There are 10 oil or gas wells and 2 plugged wells within a mile radius. There are no water or injection wells within a mile.



4. PROPOSED PRODUCTION FACILITIES (See PAGES 11 & 12)

A \approx 60 barrel fiberglass open top tank, \approx 300 barrel steel closed top tank, meter run, and separator will be installed on the pad. All surface equipment will be painted a flat juniper green color.

Williams Four Corners, LLC will bury a 1,075.8' long steel 4.5" O. D. gas pipeline. Wall thickness = 0.156". Williams will apply for its own 40' wide right-of-way.

5. WATER SUPPLY

Water will be trucked from the Hilltop Store.

6. CONSTRUCTION MATERIALS & METHODS

NM One Call (1-800-321-ALERT) and Beeline (505 634-1144) will be called \geq 72 hours before construction starts. Topsoil and brush will be piled south of the pad. Pit subsoil will be piled east of the pit. The southwest corner of the pad will be trimmed to avoid an a drainage. Slopes will be no steeper than 3 to 1. A diversion ditch will be cut on the east and north sides of the pad. A 20 mil liner will be used for the reserve pit. It will be fenced with 36" high hog wire topped with barbed wire.

7. WASTE DISPOSAL

All trash will be placed in a portable trash cage. It will be hauled to the county landfill. There will be no trash burning. Once dry, contents of the reserve pit will be buried in place. Human waste will be disposed of in chemical toilets and hauled to an approved dump station.



8. ANCILLARY FACILITIES

There will be no air strip or camp. Camper trailers will be on location for the company man, tool pusher, or mud logger.

9. WELL SITE LAYOUT

See Pages 13 and 14 for drawings of the well pad, cross section, cut and fill diagram, reserve pit, trash cage, access onto the location, parking, living facilities, and rig orientation.

10. RECLAMATION

Reclamation starts once the reserve pit is dry, at which point it will be back filled. The pad and filled pit will be contoured to a natural shape and disturbed areas ripped or harrowed. A BLM approved seed mix will be drilled at a depth and time to be determined by BLM. If broadcast, the rate will be increased as determined by BLM. A harrow or cable will be dragged over the area to assure seed cover. If the well is a producer, then the reserve pit and any other areas not needed for work overs or driving will be reclaimed as previously described.

11. SURFACE OWNER

All construction will be on lease (issued September 1, 1972). Surface owner is the Navajo Nation. Their address is P. O. Box 1480, Window Rock, AZ 86515. Their phone number is (928) 871-6447.



12. OTHER INFORMATION

The nearest hospital is a $\approx 3/4$ hour drive away in southwest Farmington.

13. REPRESENTATION & CERTIFICATION

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U. S. C. 1001 for the filing of false statements. Executed this 30th day of May, 2011.

Brian Wood, Consultant

Permits West, Inc.

37 Verano Loop, Santa Fe, NM 87508

(505) 466-8120

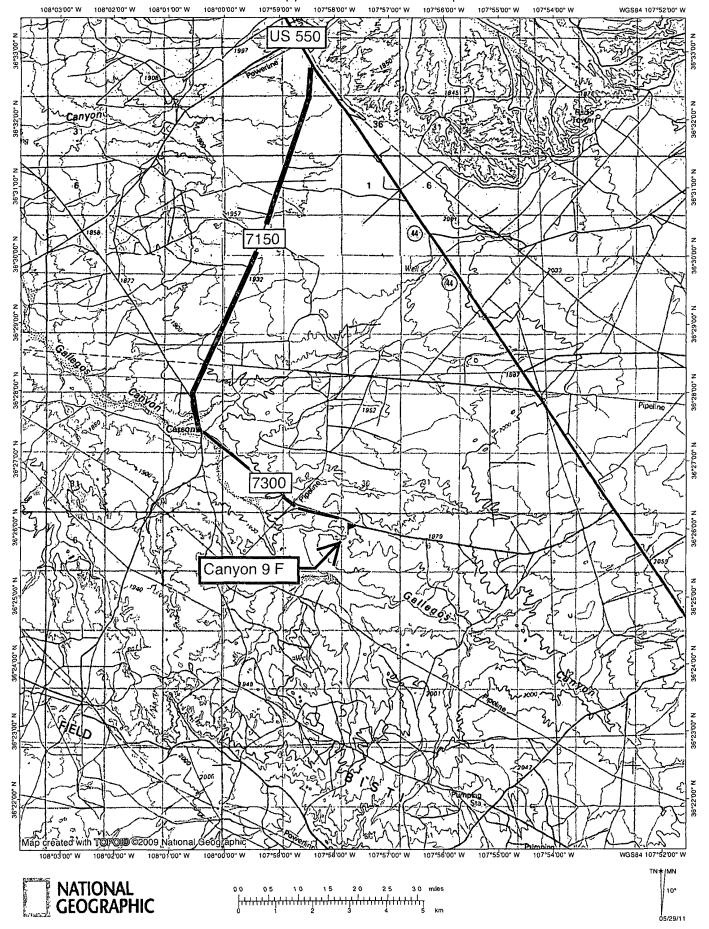
FAX: (505) 466-9682

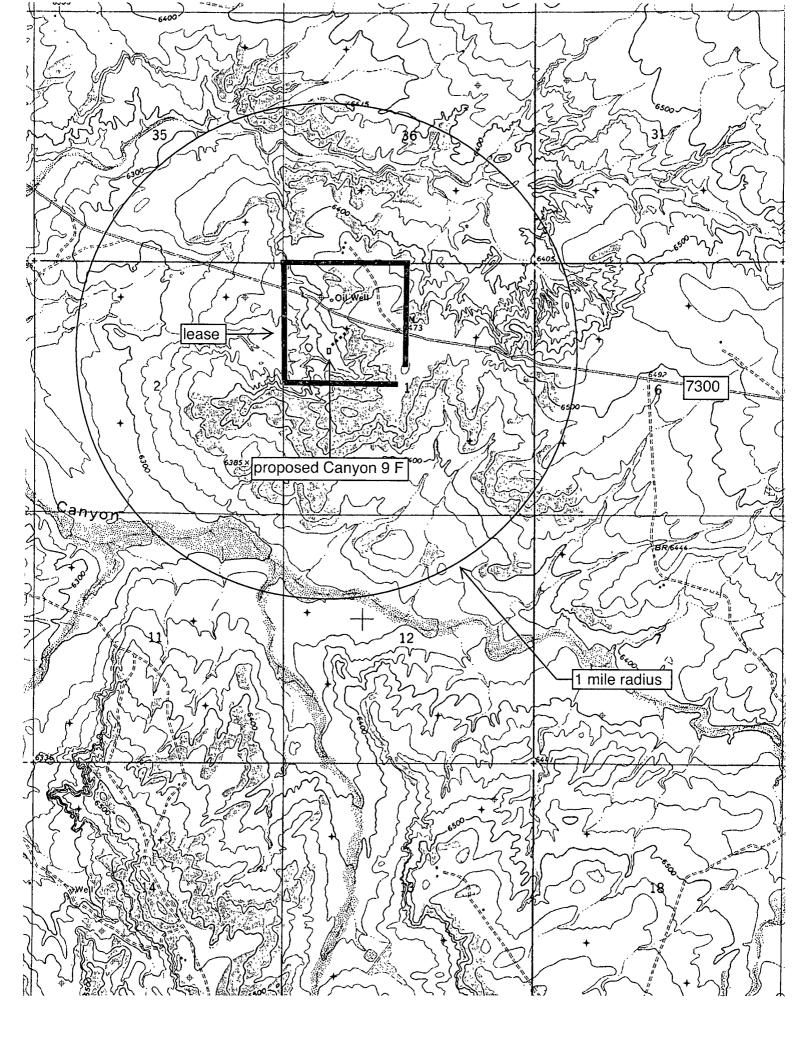
Cellular: (505) 699-2276

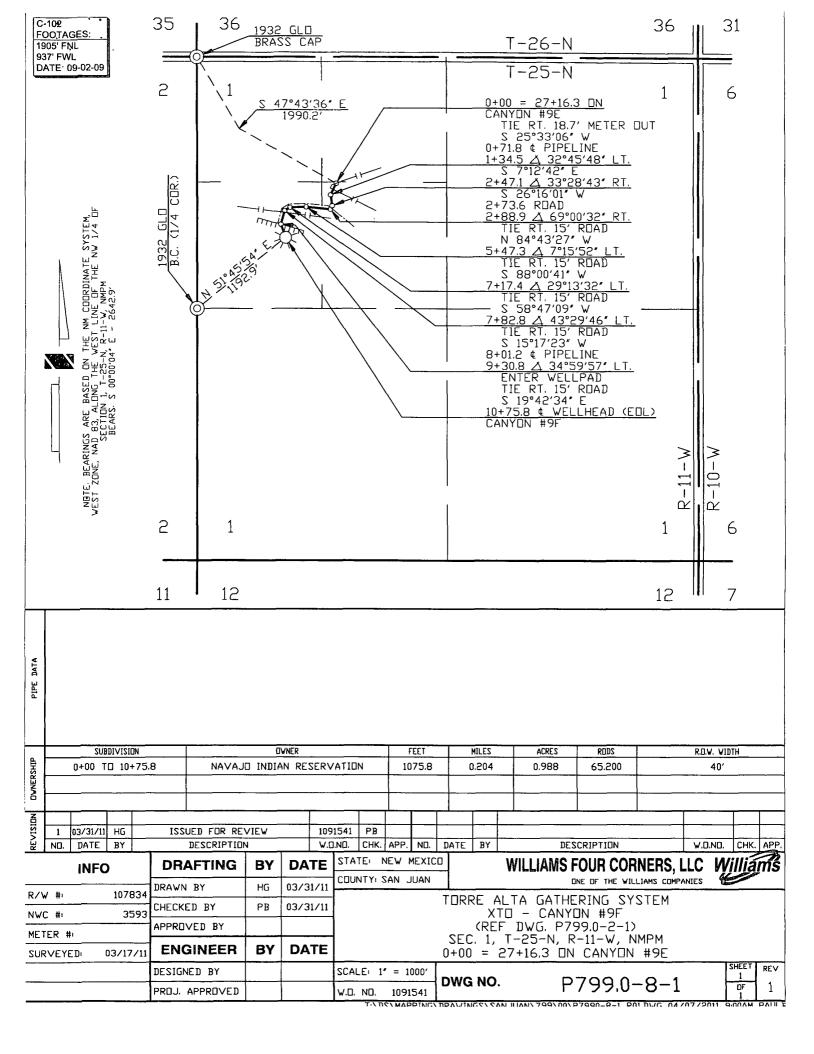
The field representative will be: Malia Villers XTO Energy Inc. 382 Road 3100, Aztec, NM 87410 (505) 333-3698

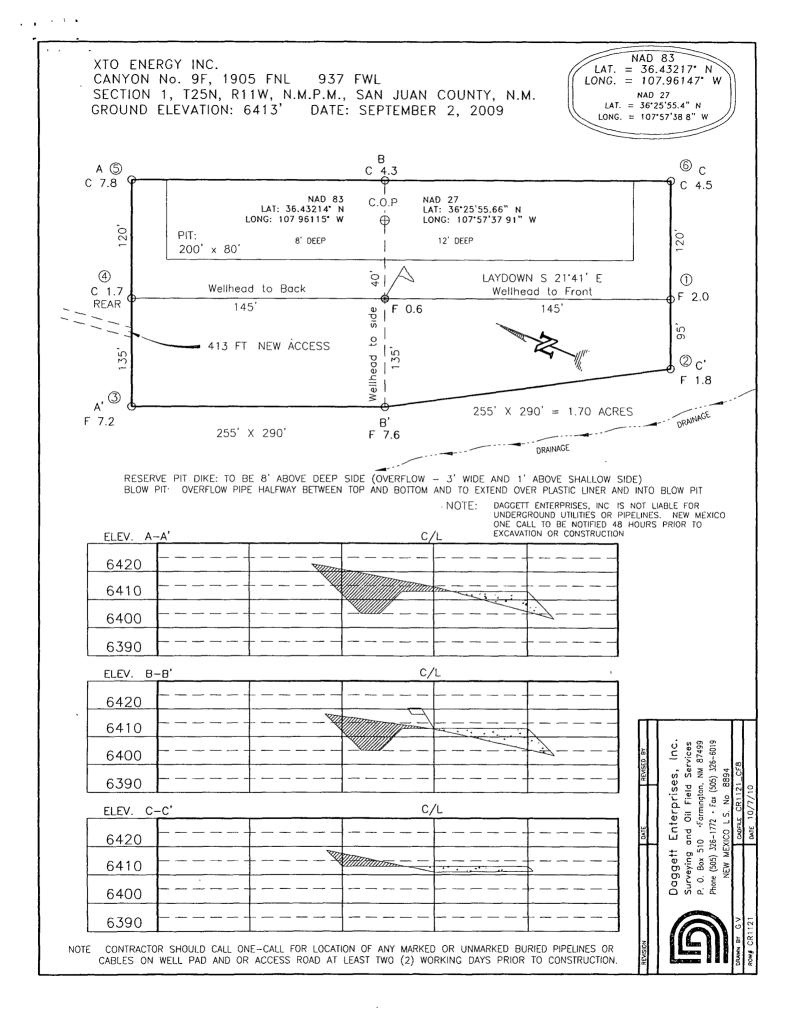


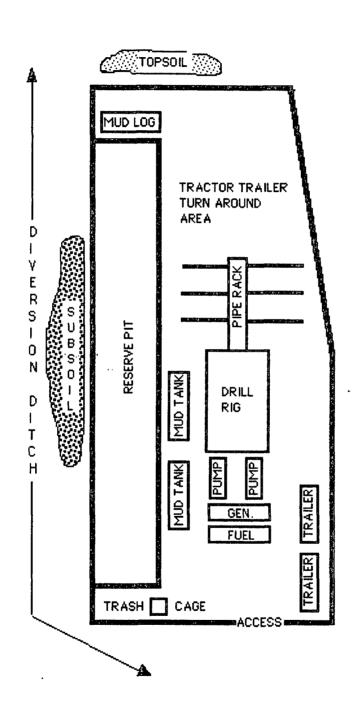
TOPO! map printed on 05/29/11 from "Untitled.tpo"













DRILLING CONDITIONS OF APPROVAL

Operator: XTO Energy Inc.
Lease No.: NMNM-16467
Well Name: Canyon #9F

Well Location: Sec.1, T25N, R11W; 1905' FNL & 937' FWL

To meet minimal requirements, XTO is to pressure test the surface casing to 600psi for 30 minutes with a drop of no more than 60psi in that time frame. XTO shall also pressure test the production casing to 1500psi or greater for 30 minutes with a drop of no more than 150psi in that time frame.

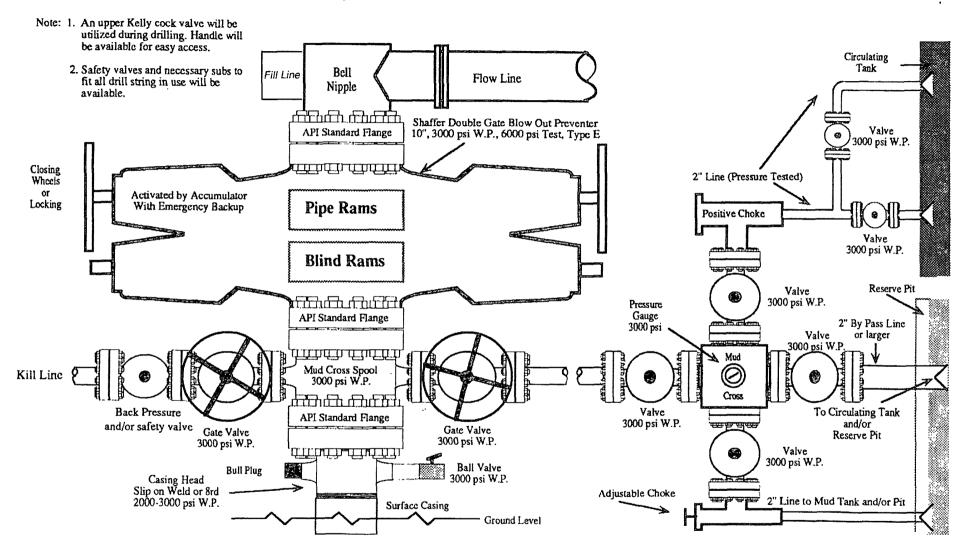
In reference to Onshore Order No.2 III.B.1.h





After hour contact: Troy Salyers 505-360-9815

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.

