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JUN 03 2010

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Bureau of Land Management
Farmington Field Office

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM 030555A
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator XTO Energy Inc.		7. If Unit or CA Agreement, Name and No. N/A
3a. Address 382 CR 3100 Aztec, NM 87410	3b. Phone No. (include area code) 505/ 333-3100	8. Lease Name and Well No. FIVE OF DIAMONDS #90H
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 505' FNL x 1055' FWL At proposed prod. zone 700' FSL x 993' FWL		9. API Well No. 30-045-35167
14. Distance in miles and direction from nearest town or post office* Approx. 7.35 miles North of the Farmington, NM Post Office.		10. Field and Pool, or Exploratory BASIN FRUITLAND COAL
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 505'	16. No. of acres in lease 320	11. Sec., T. R. M. or Blk. and Survey or Area (D) Sec 10, T30N, R13W
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 351'	19. Proposed Depth 1662' TVD / 5381' MD	12. County or Parish SAN JUAN
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5657' Ground Elevation	22. Approximate date work will start* 06/15/2010	13. State NM
20. BLM/BIA Bond No. on file UTB000138		17. Spacing Unit dedicated to this well FC: W/2 320
23. Estimated duration 2 Weeks		24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).

- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature *Malia Villers* Name (Printed/Typed) **Malia Villers** Date **06/02/2010**

Title **Permitting Tech.**

Approved by (Signature) *[Signature]* Name (Printed/Typed) **[Name]** Date **6/10/2010**

Title **AFM** Office **FFO**

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on page 2)



H₂S POTENTIAL EXIST

Hold C104
for Directional Survey
and "As Drilled" plat

NOTIFY AZTEC OCD 24-HRS
PRIOR TO CASING & CEMENT

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

JUN 24 2010

NMOCD

APD/ROW

REC'D JUN 14 10
OIL GAS DIV.
DIST. 2

RECEIVED

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

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

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Francis
Santa Fe, NM 87505

JUN 03 2010

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-35167	² Pool Code 71629	³ Pool Name Basin Fruitland CM1
⁴ Property Code 38194	⁵ Property Name FIVE OF DIAMONDS	⁶ Well Number 90H
⁷ OGRO No. 5380	⁸ Operator Name XTO ENERGY INC.	⁹ Elevation 5657'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	10	30-N	13-W		505	NORTH	1055	WEST	SAN JUAN

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	10	30-N	13-W		700	SOUTH	993	WEST	SAN JUAN

¹² Dedicated Acres W/2 320	¹³ Joint or in fill	¹⁴ Consolidation Code	¹⁵ Order No.
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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

<p>FD. 3 1/4" BC. 2001 B.L.M.</p> <p>1055'</p> <p>S 01°36'05" W 2616.16' (M)</p> <p>N 01°15'04" E 2614.56' (M)</p> <p>505'</p> <p>S.H.L.</p>	<p>N 89°33'04" E 2613.34' (M)</p> <p>SURFACE: LAT: 36.83326° N. (NAD 83) LONG: 108.19770° W. (NAD 83) LAT: 36°49'59.7" N. (NAD 27) LONG: 108°11'49.5" W. (NAD 27)</p>	<p>FD. 3 1/4" BC. 1952 B.L.M.</p>	<p>17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Malina Villers</i> Signature Date</p> <p>Malina Villers Printed Name</p>
<p>993'</p> <p>B.H.L.</p> <p>700'</p> <p>FD. 3 1/4" BC. 1952 B.L.M.</p> <p>N 89°25'33" E 2639.97' (M)</p> <p>FD. NAIL IN PILE OF STONES</p>	<p>BOTTOM HOLE: LAT: 36.82221° N. (NAD 83) LONG: 108.19825° W. (NAD 83) LAT: 36°49'19.9" N. (NAD 27) LONG: 108°11'51.4" W. (NAD 27)</p>	<p>PRELIMINARY B.H.L. B.H.L. FOOTAGES ARE APPROXIMATE AND PROVIDED BY XTO ENERGY INC. CLIENT</p>	<p>18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge & belief.</p> <p>Date of Survey Signature and Seal of Professional Land Surveyor</p> <p><i>Malina Villers</i> 8894 19-10 CERTIFIED PROFESSIONAL LAND SURVEYOR</p> <p>Certificate Number</p>

XTO ENERGY INC.

Five of Diamonds #90 H

APD Data

May 25, 2010

Location: 505' FNL x 1055' FWL Sec 10, T30N, R13W County: San Juan
Bottomhole Location: 700' FSL x 993' FWL Sec 10, T30N, R13W

State: New Mexico

GREATEST PROJECTED TVD: 1662'
GREATEST PROJECTED MD: 5381'
OBJECTIVE: Fruitland Coal

APPROX GR ELEV: 5657'
Est KB ELEV: 5669' (12' AGL)

1. MUD PROGRAM:

INTERVAL	0' to 225'	225' to 2075'	2075' to TD
HOLE SIZE	12.25"	8.75"	6.125"
MUD TYPE	FW/Spud Mud	FW/Polymer	Polymer/ Mud
WEIGHT	8.6-9.0	8.4-8.8	NA
VISCOSITY	28-32	28-32	NA
WATER LOSS	NC	NC	NC

Remarks: Use fibrous materials as needed to control seepage and lost circulation. Pump high viscosity sweeps as needed for hole cleaning. Raise viscosity at TD for logging. Reduce viscosity after logging for cementing purposes.

2. CASING PROGRAM:

Surface Casing: 9.625" casing to be set at $\pm 225'$ in a 12-1/4" hole filled with 9.20 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll ¹	SF Burst ²	SF Ten ³
0'-225'	225'	36.0#	J-55	ST&C	2020	3520	394	8.921	8.765	18.76	30.19	48.6

Intermediate Casing: 7" casing to be set at $\pm 2075'$ MD, 1662' TVD in 8.75" hole filled with 9.20 ppg mud.

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll ¹	SF Burst ²	SF Ten ³
0'-2075	2075'	23.0#	J-55	ST&C	3270	4360	284	6.276	6.151	4.11	5.31	5.95

Production Casing: 4.5" casing to be set at $\pm 5381'$ MD, 1645' TVD in 6.125" hole filled with 8.4 ppg mud.

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll ¹	SF Burst ²	SF Ten ³
2015'-5381'	3366'	10.5	J-55	ST&C	4010	4790	132	4.052	3.927	5.52	6.60	3.73

¹Collapse SF is based on evacuated annulus and hydrostatic at TVD.

²Burst SF is based on evacuated casing and hydrostatic at TVD.

³Tensile SF is based on hanging air weight of casing in a vertical hole at measured depth.

3. WELLHEAD:

- A. Casing Head: WHI QDF System (or equivalent), 9-5/8" x 7", 3,000 psig WP (4,000 psig test) with 9-5/8" 8rnd thread ST&C pin end on bottom and 4-1/2" slips on top.
- B. Tubing Head: WHI W2F (or equivalent), 7.063" nominal, 5,000 psig WP (5,000 psig test), 5-1/2" slip-on or weld-on.

4. CEMENT PROGRAM (Slurry design may change slightly, but the plan is to circulate cement to surface on both casing strings):

- A. Surface: 9.625", 36.0#, J-55, ST&C casing to be set at $\pm 225'$ in 12-1/4" hole.

102 sx of Type III cement (or equivalent) typically containing accelerator and LCM, mixed at 14.5 ppg, 1.39 ft³/sk, & 6.70 gal wtr/sk.

Total slurry volume is 141 ft³, 100% excess of calculated annular volume to 225'.

- B. Production Casing: 7", 23#/ft, J-55, ST&C casing to be set at $\pm 20755'$ MD, 1662' TVD in 8.75" hole.

LEAD:

± 126 sx of Premium Lite FM or CBM Lite typically containing accelerator, LCM, dispersant, and fluid loss additives at 12.1 ppg, 2.22 ft³/sk, & 12.04 gal wtr/sk.

TAIL:

± 100 sx of Type III or V cement typically containing accelerator, LCM, dispersant, and fluid loss additives at 14.2 ppg, 1.48 ft³/sk, & 7.34 gal wtr/sk.

Total estimated slurry volume for the 7" production casing is 426 ft³.

- C. Production Liner: 4.5", 10.5#/ft, J-55, ST&C casing is to be set at 5381' MD, 1645' TVD in 6.125" hole.

The production liner will be set using an uncemented liner hanger. The liner may be tied back to surface during the completion of the well.

Note: The slurry design may change slightly based upon actual conditions. Final cement volumes will be determined from the caliper logs (if available) plus 40%. It will be attempted to circulate cement to the surface.

5. LOGGING PROGRAM:

- A. Mud Logger: A geologic consultant or unmanned mud logging unit will begin logging the well once the surface shoe is drilled out and remain on the well to TD.
- B. Open Hole Logs as follows: Logs will be provided via LWD.

6. **FORMATION TOPS:**

See attached Directional Program.

**** Maximum anticipated BHP should be <2,000 psig (<0.30 psi/ft) ****

7. **COMPANY PERSONNEL:**

Name	Title	Office Phone	Home Phone
Justin Niederhofer	Drilling Engineer	505-333-3199	505-320-0158
Bobby Jackson	Drilling Superintendent	505-333-3224	505-486-4706
Brian Henthorne	Project Geologist	817-885-2800	--

JDN
5/25/10



Well Name: Five of Diamonds #90H

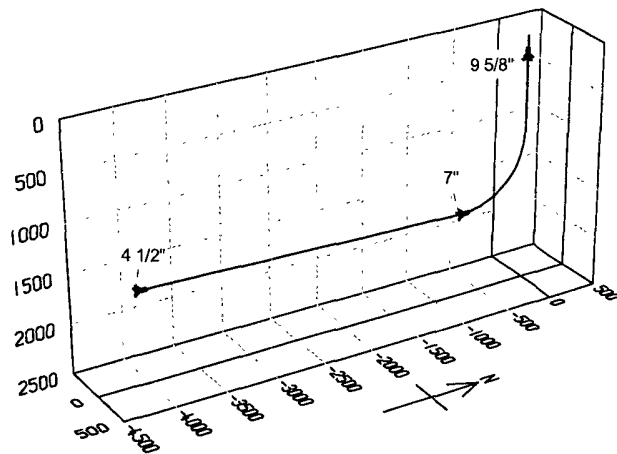
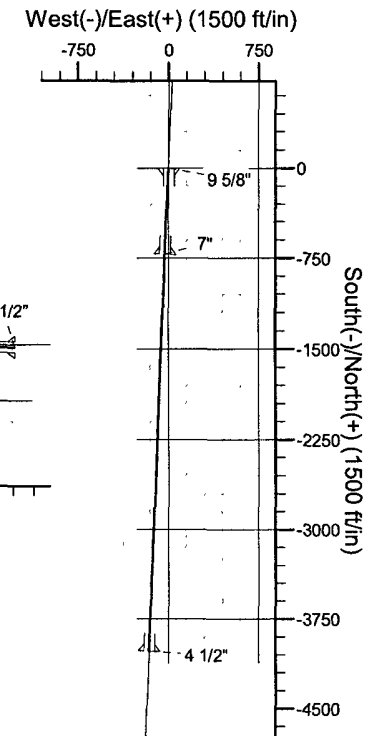
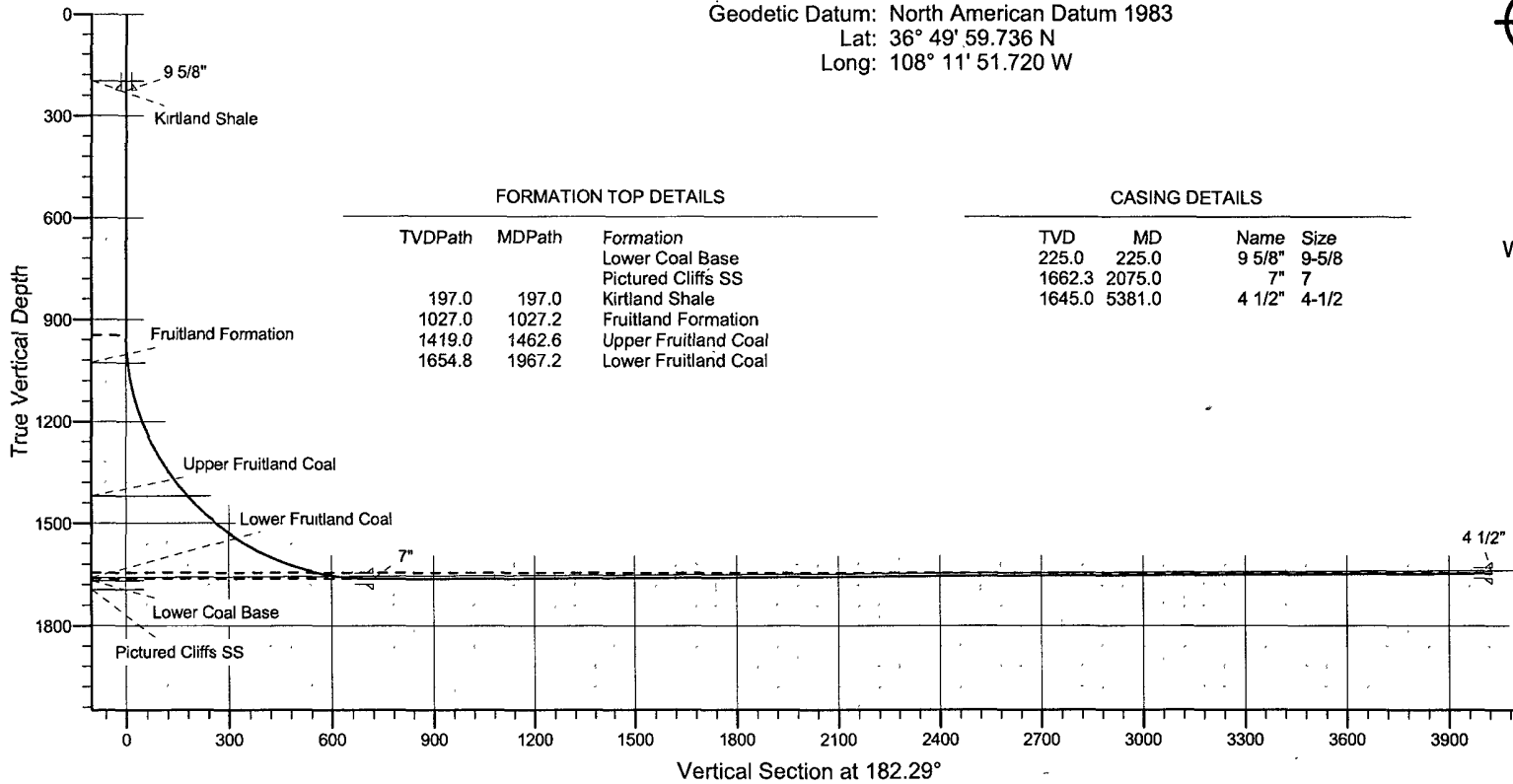
San Juan Division
Drilling Department

Calculation Method: Minimum Curvature
Geodetic Datum: North American Datum 1983
Lat: 36° 49' 59.736 N
Long: 108° 11' 51.720 W



Azimuths to True North
Magnetic North: 10.25°

Magnetic Field
Strength: 50909.0nT
Dip Angle: 63.51°
Date: 12/31/2009
Model: IGRF200510



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	946.1	0.00	0.00	946.1	0.0	0.0	0.00	0.00	0.0	
3	2074.9	90.30	182.29	1662.3	-719.4	-28.8	8.00	182.29	719.9	
4	5381.1	90.30	182.29	1645.0	-4022.9	-161.0	0.00	0.00	4026.1	Proposed BHL -- Five of Diamonds #90H

CHOKE MANIFOLD SCHEMATIC FOR DRILLING OPERATIONS CLASS 1 (2M) NORMAL PRESSURE

1. Stake all lines from choke manifold to pit.
2. Pressure test choke manifold after installation.
3. Pressure test manifold at the same time with the BOP Stack. Test manifold to the same test pressures.

TESTING PROCEDURE

