

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

RECEIVED

Form C-101
May 27, 2004

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

JUN 06 2008
Submit to appropriate District Office

HOBBS OGD
AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address XTO Energy Inc. 200 N. Lorraine St., St. 800 Midland, TX 79701		OGRID Number 5380
Property Code 301587	Property Name North Vacuum ABO Unit	API Number 30-025-29611
Proposed Pool 1 North Vacuum ABO		Well No. 301
Proposed Pool 2		

Surface Location

UL or lot no. 0	Section 3	Township 17S	Range 34E	Lot Idn	Feet from the 790	North/South line South	Feet from the 1980	East/West line East	County Lea
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Proposed Bottom Hole Location If Different From Surface

UL or lot no. I	Section 3	Township 17S	Range 34E	Lot Idn	Feet from the 1600	North/South line South	Feet from the 319	East/West line East	County Lea
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Additional Well Information

Work Type Code F	Well Type Code O	Cable/Rotary R	Lease Type Code S	Ground Level Elevation 4055'
Multiple	Proposed Depth 10500'	Formation ABO	Contractor C.C. Forbes	Spud Date ASAP
Depth to Groundwater 95'		Distance from nearest fresh water well >1000		Distance from nearest surface water >1000
Pit: Liner: Synthetic <input checked="" type="checkbox"/> 12 mils thick Clay <input type="checkbox"/> Pit Volume: 20000 bbls Drilling Method: Fresh Water <input checked="" type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				
Closed-Loop System <input type="checkbox"/>				

Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17-1/2"	13-3/8"	48# H40 STC	412	500	Surf
12-1/4"	9-5/8"	53.5# N80 LTC	5000	2400	395'
7-7/8"	5-1/2"	17#/15.5# K55	8850	1175	4215'
	2-7/8"		8753		

22 Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Permit Expires 2 Years From Approval
Date Unless Drilling Underway
Horizontal

* Please see attached procedure for adding lateral.

MUD PROGRAM: 8.4 - 8.9 Fresh water from Kickoff point 8428-8436' to 10500'.

CIBP will be set between 8428'-8436' w/ whipstock on top for directional drilling.

BOP: Case III; 7-1/16" 3000# w/ hydril single pipe ram, blind ram & mani fold.

23 I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines ☒ a general permit ☐, or an (attached) alternative OCD-approved plan ☐

OIL CONSERVATION DIVISION

Approved by:

Printed name: Sorina L. Flores

Title: PETROLEUM ENGINEER

Title: Drilling Tech

Approval Date: JUN 11 2008

Expiration Date:

E-mail Address: sorina_flores@xtoenergy.com

Date: 6/5/08

Phone: 432-620-6749

Conditions of Approval Attached ☐

Certificate No.	GARY G. EIDSON	12641
	RONALD J. EIDSON	3239

NVAC #301H
Horizontal Sidetrack Procedure
North Vacuum Abo Field
Lea County, New Mexico
AFE #717265
XTO WELL ID #61571

TD: 8850'
PBSD: 8804'
8-5/8" Casing: 5000'
5-1/2" Liner: 8850 – 4215' TOL, 5-1/2" 15.5# & 17# K-55
see wellbore diagram for all details

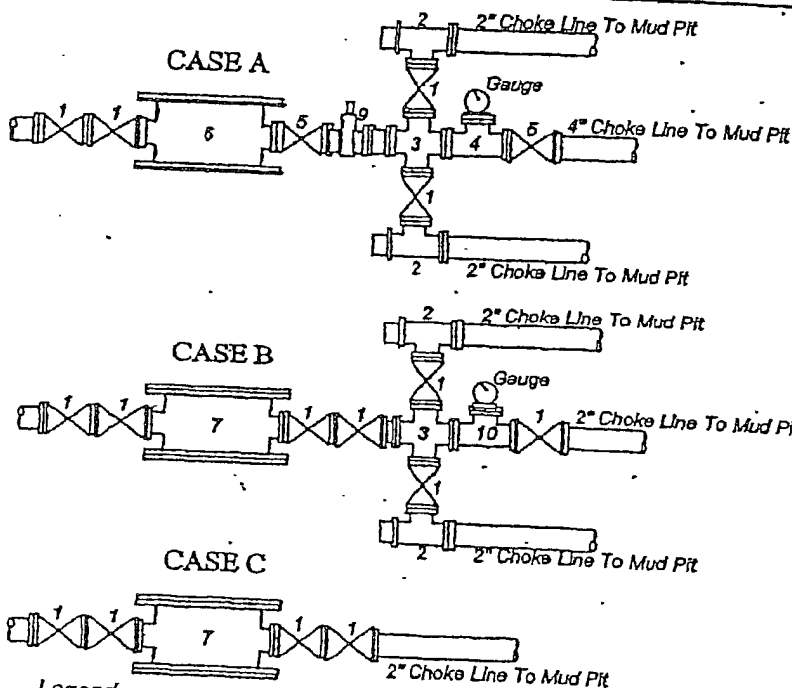
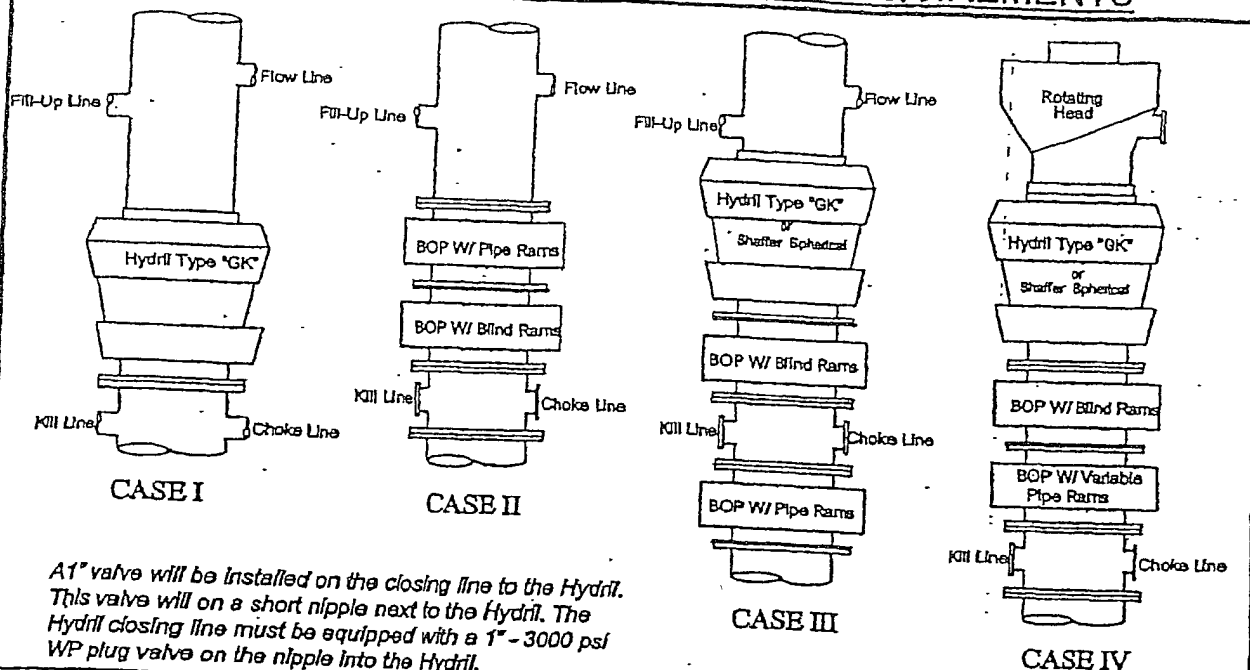
Surface Location: 790' FSL & 1980' FEL, Sec 3, T17S, R34E
Target BHL: 1600' FSL & 319' FEL, Sec 3, T17S, R34E
Drilled Date:
Abo Perfs: 8654-8737' OA
Ground Elev: 40'
Original KB Elev: 401
Key Energy #36: 40' (12'AGL)

1. MIRU Key Rig #36. Install BOP. Test to 250# & 1000#. Notify NMOGB – permit attached.
2. **Unload and tally $\pm 6800'$ 2-7/8" 10.40# AOH & 4000' 3-1/2" 13.30# IF workstring.**
3. R/U WSI WL. Run gauge ring and junk basket for 5-1/2" 17# (drift ID – 4.767") to 8560'. Log up and tie into csg collars @ 8541', 8497', 8453', 8410', 8366' (see attached log). P/U Weatherford Oil Tools wireline set 5-1/2" 17# RBP. Set RBP so that the top will be at 8440' RD WL.
4. PU 4-3/4" dummy milling assbly or 4-3/4" flat bottom mill with the 2-7/8" AOH & 3-1/2" IF drill pipe and TIH. Tag up on the RBP @ 8440', set down 20,000# of weight on the RBP. Circulate the hole with fresh water. TOOH with assbly.
5. PU Oil Tools Whipstock System (3° face) with metal muncher mills. **Note: Make sure all mills will gauge to 4.75". Minimum DD is 4.767".** Total length of the whipstock assembly in the set position is approximately 12'. Orient the UBHO sub and whipstock face on the surface. Insert the gyro stinger (Scientific Drilling) to ensure compatibility and to check orientation.
6. TIH with the whipstock assembly slowly, being careful when picking the string up off of the slips and when setting the slips. Fill DP every 2000'. Tag the RBP at 8440' with 2000# of weight. PU to first tool joint and RU Scientific Drilling gyro truck. Orient the whipstock to the desired azimuth and work the torque out of the drill string.
7. When desired orientation is achieved, tag the RBP with 2000# of weight, take a final check shot with gyro, then apply weight and set the anchor with 20,000# compression to shear the running bolt RD WL truck.
8. Obtain values for free torque, PU & SO weights. Install ditch magnets at the surface. Lower milling assembly and make the starting cut through the casing wall at approximately 8428'.

9. Mill the remainder of the window, 8428-36', making the necessary rat hole (8440') to ensure that the string mill has fully opened the window, and that the window exit is smooth. Work the mills through the window. When the window is "clean", circulate the hole clean, TOO H and LD the window mills.
10. PU 4-3/4" bit ("47-type" – the Abo has 'chert' in it), PU 3-1/2" dir assbly w Non-Mag DC & GammaRay, run surface tests, and TIH. ***Mud loggers should be rigged up after cutting the window and prior to commencing the curve.*** Use Gyro for first few surveys. Follow well plan from Baker. Open hole lateral length is +/- 1800'. Be prepared to drill with an XCD/Xanthum fluid system to keep 'YP' higher for hole cleaning in the 8-5/8" area. **For trips out of the hole, circ hole clean with sweep(s). TOH slowly in the curve and lateral, if necessary consider pumping out.**
11. At TD, circulate the hole clean with polymer sweeps.
12. TOO H and LD directional tools.
13. TIH with 4-3/4" (4-1/2") swaging tool, single reamer about 7-8 jts behind swaging tool, wash and ream to TD. POH and place 2nd reamer 1 jt behind 1st, wash and ream to TD, pull back up through the window, RIH for push pull test to btm, circ hole clean.
14. TOO H & LDDP. RD Re-entry Rig. Prepare to move to the next location.

Chip
4/29/08

MINIMUM BLOWOUT PREVENTER REQUIREMENTS



BOP SIZE	BOP CASE	WORKING PRESSURE	CHOKE CASE
13-5/8"	IV	5000	A

*Rotating head required

Bradenhead furnished by Conoco will be:
Mfr. Wood Group
Description: 13-3/8" x 13-5/8" 3M
Type: SQW

Legend

- 2" flanged all steel valve must be either Cameron "F", Halliburton Low Torque or Shafter Flo-Seal.
- 2" flanged adjustable chokes, min. 1" full opening & equipped with hard trim.
- 4" x 2" flanged steel cross.
- 4" flanged steel tee.
- 4" flanged all steel valve (Type as in no. 1).
- Drilling Spool with 2" x 4" flanged outlet.
- Drilling Spool with 2" x 2" flanged outlet.
- 2" x 2" flanged steel cross.
- 4" pressure operated gate valve.
- 2" flanged steel tee.

Notes

Choke manifold may be located in any convenient position. Use all steel fittings throughout. Make 90° turns with bull plugged tees only. No field welding will be permitted on any of the components of the choke manifold and related equipment upstream of the chokes. The choke spool and all lines and fittings must be at least equivalent to the test pressure of the preventers required. Independent closing control unit with clearly marked controls to be located on derrick floor near driller's position.

N. Vacuum ABO Unit #301

N. Vacuum ABO Field
Lea County, N.M.

