

## OCD-ARTESIA

Form 3160-3  
(April 2004)

R-111-POTASH

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR REENTER

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

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM-0556863
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator XTO ENERGY INC <b>&lt;5380&gt;</b>		7. If Unit or CA Agreement, Name and No. NM 70992X
3a. Address 200 N. LORAIN ST., STE. 800 MIDLAND, TX 79701		8. Lease Name and Well No. NASH UNIT 51H <b>&lt;303152&gt;</b>
3b. Phone No. (include area code) 432-682-8873		9. API Well No. 30-015-38365
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 660' FSL & 210' FWL, SEC 18, T23S R30E, UL: M At proposed prod. zone 660' FSL & 340' FEL, SEC 18, T23S, R30E, UL: P		10. Field and Pool, or Exploratory NASH DRAW-BRUSHY CANYON <b>&lt;47545&gt;</b>
11. Sec., T. R. M. or Blk. and Survey or Area SEC 18, T23S, R30E, UL: M		12. County or Parish EDDY
13. State NM		14. Distance in miles and direction from nearest town or post office* APPROX 25 MILES EAST SOUTHEAST OF CARLSBAD, NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 210' (SHL)	16. No. of acres in lease 5123 UNIT	17. Spacing Unit dedicated to this well 160
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth TVD: 6980' TMD: 11450'	20. BLM/BIA Bond No. on file UTB000138
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3016.5'	22. Approximate date work will start* 09/01/2010	23. Estimated duration 35 DAYS

## 24. Attachments

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

- |   |  |
|---|--|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification  |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature <i>Chip Amrock</i>	Name (Printed/Typed) CHIP AMROCK	Date 07/16/2010
Title SR. DRILLING ENGINEER		

Approved by (Signature) <i>/s/ Linda S.C. Rundell</i>	Name (Printed/Typed) Linda S.C. Rundell	Date NOV 22 2010
Title STATE DIRECTOR		Office NM STATE OFFICE

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.

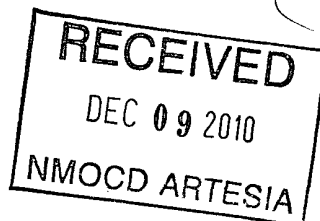
Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

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)

Carlsbad Controlled Water Basin

SEE ATTACHED FOR  
CONDITIONS OF APPROVALAPPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHED

DRILLING PLAN: BLM COMPLIANCE  
(Supplement to BLM 3160-3)

XTO Energy Inc.  
Nash Well #51H

Projected TD: 11450 MD / TVD: 6980'  
SHL: 660' FSL & 210' FWL , SECTION 18, T23S, R30E (M)  
BHL: 660' FSL & 340' FEL, SECTION 18, T23S, R30E (P)  
Eddy County, NM  
Lease #: NMNM-0556863

**1. GEOLOGIC NAME OF SURFACE FORMATION:**

A. Salido

**2. ESTIMATED TOPS OF GEOLOGICAL MARKERS & DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:**

Formation	Subsea Depth	Well Depth	Water / Oil / Gas
Rustler		302'	Water
Base of Castille		3285'	Water
Bell Canyon		3330'	Water/Oil/Gas
Cherry Canyon		4070'	Water/Oil/Gas
Top Brushy Canyon		5740'	Water/Oil/Gas
Base Brushy Canyon		6780'	Water/Oil/Gas
Brushy Canyon E5 Zone		6940'	Water/Oil/Gas
Target/Land Curve		6976'	Water/Oil/Gas
TD/MD		11450'	Water/Oil/Gas

\*\*\* Hydrocarbons @ Brushy Canyon

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13-3/8" casing @ 225' and circulating cement back to surface. Potash/fresh water sands will be protected by setting 9-5/8" casing at 3250' and circulating cement to surface. The Brushy Canyon intervals will be isolated by setting 7" casing to the end of the directional curve at 7500' +/- and cementing back to surface. A 6-1/8" lateral hole will be drilled to MD/TD and 4-1/2" casing with Halliburton swell packers will be run for completion.

**3. CASING PROGRAM:**

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17-1/2"	0' - 325' 225'	13-3/8"	48#	STC	H-40	New	2.24	.96	4.56
12-1/4"	0' - 3400' 3250'	9-5/8"	36#	LTC	J-55	New	2.12	1.38	3.35
8-3/4"	0' - 7500'	7"	26#	LTC	HCP-110	New	2.6	1.6	2.87
6-1/8"	7350 - 11450'	4-1/2"	11.6#	LTC	P-110	New	2.77	1.96	4.73

See COA

7/18/2010

## WELLHEAD:

- A. Starting head: 13-5/8" 3000 psi top flange x 13-3/8" SOW bottom (to be removed upon setting intermediate casing)
- B. Lower casing head: 11" 3000 psi top flange x 9-5/8" SOW bottom
- C. Casing hanger 11" bowl x 7" casing
- D. 'B' Section / Tubing spool: 11" 3000 psi bottom flange x 7-1/16" 5000 psi top flange

## 4. CEMENT PROGRAM: (Note yields and DV tool depts. If multiple stages)

- A. Surface Casing: 13-3/8", 48#, NEW H-40, STC casing to be set at  $\pm 325'$  <sup>225' See COA</sup>

500 sx HalCem-C + 2% CaCl (14.80 ppg, 1.35 cu ft/sx, 6.39 gal/sx wtr)

Compr Strengths: 12 hr - 900 psi 24 hr - 1500 psi

\*\*\*All volumes 100% excess. Cement to surface.

In the event that loss circulation is encountered while drilling the surface hole ( i.e. Nash #39H, #40H, #41H), an alternate cementing procedure will be to pump 150 sx Thixotropic + 10 pps CalSeal + 10 pps Gilsonite + 2% CaCl (14 ppg, 1.7 cu ft/sx) Compr Strengths 24 hr - 651 psi 48 hr - 847 psi followed by 200 sx HalCem C + 2% CaCl (properties above) Run temp survey to locate top of cement, top out with 1" to surface with the required amount of "Thixotropic" cement. These events and procedures to be coordinated and communicated with the designated BLM representative.

- B. 1<sup>ST</sup> Interm. Casing: 9-5/8", 36#, NEW J-55, LTC casing to be set at  $\pm 3400'$  <sup>3250' See COA</sup>

### Stage 1:

Lead: 20 bbls FW, then 900 sx EconoCem-HLC + 5% salt (mixed at 12.8 ppg, 1.92 ft<sup>3</sup>/sk, 10.44 gal/sx wtr) Compr Strengths 12 hr - 319 psi 24 hr - 653 psi

Tail: 250 sx HalCem-C + 1% CaCl (mixed at 14.8 ppg, 1.34 ft<sup>3</sup>/sk, 6.36 gal/sx wtr)

Compr Strengths: 12 hr - 900 psi 24 hr - 1500 psi

\*\*\*All volumes 100% excess. Cement to surface.

- C. 2<sup>nd</sup> Interm. Casing: 7", 26#, NEW HCP-110, LTC casing to be set at  $\pm 7500'$  w/DVT @ 5500'

### Stage 1:

Lead: 650 sx CorossaCem-H + 0.5% LAP-1 + 0.1% HR-800 + 5 lb/sx Gilsonite (14.4 ppg, 1.23 cuft/sx, 5.18 gal/sx wtr). Compr Strengths: 24 hr - 681 psi 48 hr - 1561 psi.

Tail (Csg Shoe Cmt): 150 sx HalCem-H + .5% LAP-1 + .25% CFR-3 + 5 pps Gilsonite + .25 lb/sx D-air 3000 (15.8 ppg, 1.17 cuft/sx, 4.58 gal/sx)

Compr Strengths - 24 hr - 2203 psi 48 hr - 2788 psi \*\*\* Cement to 5500'.

### Stage 2: (thru DV Tool @ 5500' up to base of water flow area around 4000')

Lead: 100 sx EconoCem HLC + 5% Salt (mixed at 12.8 ppg, 1.92 cuft/sx, 10.44 gal/sx wtr)

Compr Strengths: 12 hr - 444 psi 24 hr - 755 psi

Tail: 150 sx HalCem C (mixed at 14.8 ppg, 1.33 cuft/sx, 6.34 gal/sx wtr)

Compr Strengths: 12 hr - 1404 psi 24 hr - 1909 psi

**Cement to be pumped down the 7" x 9-5/8" annulus to eliminate and isolate the water flow area – cement to fill from 4000' to surface.**

Lead: 500 sx EconoCem HLC + 5% Salt (mixed at 12.8 ppg, 1.92 cuft/sx, 10.44 gal/sx wtr)  
Compr Strengths: 12 hr – 444 psi 24 hr – 755 psi

Tail: 50 sx HalCem C (mixed at 14.8 ppg, 1.33 cuft/sx, 6.34 gal/sx wtr)  
Compr Strengths: 12 hr – 1404 psi 24 hr – 1909 psi \*\*\* Cement to Surface.

## 5. PRESSURE CONTROL EQUIPMENT:

The blow out preventer equipment (BOP) for this well consists of two groups of mechanical pressure equipment – 1) a 13-5/8" 3M Hydril and 2) an 11" 5M double ram BOP with Hydril and manifold.

The 13-5/8" 3M Hydril will be rigged up on the 13-3/8" surface casing and utilized while drilling the 12-1/4" hole to 3400'. This Hydril will be tested to 1500 psi. Once the 9-5/8" casing is cemented, the 13-5/8" 3M Hydril will be removed and a 11" 3M x 9-5/8" bradenhead flange will be installed. The 11" 5M BOP & equipment will then be nipped up and tested. With the 11" 3M bradenhead flange being the limiting factor, the 11" 5M BOP will be tested to 3000 psi. The 3000 psi test pressure is sufficient for this well with formation pressures of 2500 psi or less. The 11" 5M BOP diagram is attached.

## 6. PROPOSED MUD CIRCULATION SYSTEM:

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' to 325' 225'	17-1/2"	FW/Native	8.5-8.8	35-40	NC
280' to 3400' +/-	12-1/4"	Brine/Gel Sweeps	9.8-10.2	30-32	NC
3300' to 7500' 3250	8-3/4"	Cut Brine/ Poly-Sweeps	9.2-9.6	29-32	NC-30
7500' to 11450'	6-1/8"	Cut Brine/Poly-Starch	8.6-9	32-38	NC -30

The necessary mud products for weight addition and fluid loss control will be on location at all times.

Spud with fresh water/native mud. Drill out from under 13-3/8" surface casing with brine solution. Use fibrous materials as needed to control seepage and lost circulation. Pump viscous sweeps as needed for hole cleaning. Use available solids controls equipment to help keep mud weight down after mud up. Rig up Dynamic Energy Systems' solids control equipment to operate as a closed loop system.

## 7. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT:

- A Kelly cock will be in the drill string at all times.
- A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.
- H2S monitors will be on location when drilling the 12-1/4" hole.

## 8. LOGGING, CORING AND TESTING PROGRAM:

- Mud Logger: Suttles Mud Logging Unit (2 man) on @ 6000'.  
Catch 10' samples from 6000' to 11450' (TD/MD).  
Send 1 set of dry samples to Midland Sample Library.

See  
COA

## 9. ABNORMAL PRESSURES AND TEMPERATURES / POTENTIAL HAZARDS:

See COA — None anticipated. Max bottom hole pressure should not exceed 2500psi. BHT of 175 F is anticipated. H2S can be present from 4600 – TD. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid.

## 10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

A. Road and location construction will begin after Santa Fe & BLM has approved APD. Anticipated spud date will be as soon after Santa Fe and BLM approval and as soon as rig will be available. Move in operations and drilling is expected to take 40 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.

## 11. SPECIAL INSTRUCTIONS:

- A. Reports should be filled out on the XTO Drilling Report form, and the Casing/Cementing Detail Forms provided.
- B. Deviation:
  - Surface Hole: Maximum of 1° and not more than 1° change per 100'.
  - Intermediate Hole: Maximum of 4° and not more than 1.5° change per 100'.
  - Production hole: Maximum of 6° and not more than 1.5° change per 100'.

**Note: Maximum distance between surveys is 500'.**
- C. WOC a minimum of 12 hours before drilling out shoe joint on surface and intermediate casing strings. Use minimal WOB and RPM until drill collars are below the shoe joints.
- D. Check BOP blind rams each trip and pipe rams each day. Strap out of hole for logging and/or casing jobs.
- E. A trash trailer will be provided on each location. Keep trash picked up and the location as clean as possible. All drilling line, oil filters, etc. should be hauled away at the Drilling Contractor's expense. At the conclusion of drilling operations, the contents of the trash trailer will be disposed of into a commercial sanitary landfill.
- F. The reserve pits should be lined with a plastic liner in order to contain the drill cuttings and drilling fluids. At the conclusion of the drilling operations, all re-usable drilling fluid should be moved to the next well in the drilling order.



# Planned Wellpath Report

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Operator	XTO Energy Inc.	Slot	No. 51H SHL
Area	Eddy County, NM	Well	No. 51H
Field	(Nash) Sec 18, T23S, R30E	Wellbore	No. 51H PWB
Facility	Nash Unit No. 51H		

Projection System	NAD27 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect® 2.0
North Reference	Grid	User	Victor Hernandez
Scale	0.999927	Report Generated	7/8/2010 at 5:02:47 PM
Convergence at slot	0.22° East	Databasc/Sourcce file	WA_Midland/No. 51H_PWB.xml

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.00	0.00	625092.10	472886.30	32°17'57.954"N	103°55'42.542"W
Facility Reference Pt			625092.10	472886.30	32°17'57.954"N	103°55'42.542"W
Field Reference Pt			625092.10	472886.30	32°17'57.954"N	103°55'42.542"W

Calculation method	Minimum curvature	Rig on No. 51H SHL (KB) to GL	32.00ft
Horizontal Reference Pt	SL	Rig on No. 51H SHL (KB) to Mean Sea Level	3048.00ft
Vertical Reference Pt	Rig on No. 51H SHL (KB)	GL to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No. 51H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	89.87°



## Planned Wellpath Report

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Operator	XTO Energy Inc.	Slot	No. 51H SHL
Area	Eddy County, NM	Well	No. 51H
Field	(Nash) Sec 18, T23S, R30E	Wellbore	No. 51H PWB
Facility	Nash Unit No. 51H		

### WELLPATH DATA (63 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	89.875	0.00	0.00	0.00	0.00	625092.10	472886.30	32°17'57.954"N	103°55'42.542"W	0.00	Tie On
302.00†	0.000	89.875	302.00	0.00	0.00	0.00	625092.10	472886.30	32°17'57.954"N	103°55'42.542"W	0.00	Rustler / Salado
3285.00†	0.000	89.875	3285.00	0.00	0.00	0.00	625092.10	472886.30	32°17'57.954"N	103°55'42.542"W	0.00	Base Castile
3330.00†	0.000	89.875	3330.00	0.00	0.00	0.00	625092.10	472886.30	32°17'57.954"N	103°55'42.542"W	0.00	Bell Canyon
4070.00†	0.000	89.875	4070.00	0.00	0.00	0.00	625092.10	472886.30	32°17'57.954"N	103°55'42.542"W	0.00	Cherry Canyon
5740.00†	0.000	89.875	5740.00	0.00	0.00	0.00	625092.10	472886.30	32°17'57.954"N	103°55'42.542"W	0.00	Brushy Canyon
6168.00	0.000	89.875	6168.00	0.00	0.00	0.00	625092.10	472886.30	32°17'57.954"N	103°55'42.542"W	0.00	EST. KOP
6268.00†	7.000	89.875	6267.75	6.10	0.01	6.10	625098.20	472886.31	32°17'57.954"N	103°55'42.471"W	7.00	
6368.00†	14.000	89.875	6366.02	24.31	0.05	24.31	625116.41	472886.35	32°17'57.954"N	103°55'42.258"W	7.00	
6468.00†	21.000	89.875	6461.33	54.37	0.12	54.37	625146.46	472886.42	32°17'57.953"N	103°55'41.908"W	7.00	
6568.00†	28.000	89.875	6552.27	95.81	0.21	95.81	625187.90	472886.51	32°17'57.953"N	103°55'41.425"W	7.00	
6668.00†	35.000	89.875	6637.48	148.03	0.32	148.03	625240.11	472886.62	32°17'57.952"N	103°55'40.817"W	7.00	
6768.00†	42.000	89.875	6715.69	210.24	0.46	210.24	625302.32	472886.76	32°17'57.951"N	103°55'40.092"W	7.00	
6859.31†	48.391	89.875	6780.00	274.99	0.60	274.99	625367.07	472886.90	32°17'57.950"N	103°55'39.338"W	7.00	Basal Brushy Canyon
6868.00†	49.000	89.875	6785.74	281.52	0.61	281.52	625373.60	472886.91	32°17'57.950"N	103°55'39.262"W	7.00	
6968.00†	56.000	89.875	6846.58	360.81	0.79	360.80	625452.88	472887.09	32°17'57.949"N	103°55'38.338"W	7.00	
7068.00†	63.000	89.875	6897.30	446.91	0.98	446.91	625538.98	472887.28	32°17'57.947"N	103°55'37.335"W	7.00	
7168.00†	70.000	89.875	6937.15	538.56	1.18	538.56	625630.62	472887.48	32°17'57.946"N	103°55'36.267"W	7.00	
7176.46†	70.592	89.875	6940.00	546.52	1.19	546.52	625638.58	472887.49	32°17'57.946"N	103°55'36.175"W	7.00	Brushy Canyon ES Zone
7268.00†	77.000	89.875	6965.53	634.39	1.38	634.38	625726.44	472887.68	32°17'57.944"N	103°55'35.151"W	7.00	
7368.00†	84.000	89.875	6982.03	732.95	1.60	732.95	625825.00	472887.90	32°17'57.943"N	103°55'34.003"W	7.00	
7433.78	88.605	89.875	6986.27	798.58	1.74	798.58	625890.62	472888.04	32°17'57.942"N	103°55'33.238"W	7.00	END OF CURVE
7468.00†	88.605	89.875	6987.10	832.79	1.82	832.79	625924.82	472888.12	32°17'57.941"N	103°55'32.840"W	0.00	
7568.00†	88.605	89.875	6989.54	932.76	2.04	932.76	626024.79	472888.34	32°17'57.939"N	103°55'31.675"W	0.00	
7668.00†	88.605	89.875	6991.97	1032.73	2.25	1032.73	626124.75	472888.55	32°17'57.938"N	103°55'30.510"W	0.00	
7768.00†	88.605	89.875	6994.41	1132.70	2.47	1132.70	626224.71	472888.77	32°17'57.936"N	103°55'29.346"W	0.00	
7868.00†	88.605	89.875	6996.84	1232.67	2.69	1232.67	626324.67	472888.99	32°17'57.935"N	103°55'28.181"W	0.00	
7968.00†	88.605	89.875	6999.28	1332.64	2.91	1332.64	626424.64	472889.21	32°17'57.933"N	103°55'27.016"W	0.00	
8068.00†	88.605	89.875	7001.71	1432.61	3.13	1432.61	626524.60	472889.43	32°17'57.931"N	103°55'25.852"W	0.00	
8168.00†	88.605	89.875	7004.15	1532.58	3.35	1532.58	626624.56	472889.65	32°17'57.930"N	103°55'24.687"W	0.00	



## Planned Wellpath Report

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Operator	XTO Energy Inc.	Slot	No. 51H SHL
Area	Eddy County, NM	Well	No. 51H
Field	(Nash) Sec 18, T23S, R30E	Wellbore	No. 51H PWB
Facility	Nash Unit No. 51H		

### WELLPATH DATA (63 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8268.00†	88.605	89.875	7006.58	1632.55	3.56	1632.55	626724.53	472889.86	32°17'57.928"N	103°55'23.522"W	0.00	
8368.00†	88.605	89.875	7009.02	1732.52	3.78	1732.52	626824.49	472890.08	32°17'57.927"N	103°55'22.358"W	0.00	
8468.00†	88.605	89.875	7011.45	1832.49	4.00	1832.49	626924.45	472890.30	32°17'57.925"N	103°55'21.193"W	0.00	
8568.00†	88.605	89.875	7013.89	1932.46	4.22	1932.46	627024.41	472890.52	32°17'57.923"N	103°55'20.028"W	0.00	
8668.00†	88.605	89.875	7016.32	2032.43	4.44	2032.43	627124.38	472890.74	32°17'57.922"N	103°55'18.864"W	0.00	
8768.00†	88.605	89.875	7018.76	2132.40	4.65	2132.40	627224.34	472890.95	32°17'57.920"N	103°55'17.699"W	0.00	
8868.00†	88.605	89.875	7021.19	2232.37	4.87	2232.37	627324.30	472891.17	32°17'57.918"N	103°55'16.534"W	0.00	
8968.00†	88.605	89.875	7023.63	2332.34	5.09	2332.34	627424.26	472891.39	32°17'57.917"N	103°55'15.370"W	0.00	
9068.00†	88.605	89.875	7026.06	2432.31	5.31	2432.31	627524.23	472891.61	32°17'57.915"N	103°55'14.205"W	0.00	
9168.00†	88.605	89.875	7028.50	2532.28	5.53	2532.28	627624.19	472891.83	32°17'57.913"N	103°55'13.040"W	0.00	
9268.00†	88.605	89.875	7030.93	2632.25	5.75	2632.25	627724.15	472892.05	32°17'57.912"N	103°55'11.876"W	0.00	
9368.00†	88.605	89.875	7033.37	2732.23	5.96	2732.22	627824.11	472892.26	32°17'57.910"N	103°55'10.711"W	0.00	
9468.00†	88.605	89.875	7035.80	2832.20	6.18	2832.19	627924.08	472892.48	32°17'57.908"N	103°55'09.547"W	0.00	
9568.00†	88.605	89.875	7038.24	2932.17	6.40	2932.16	628024.04	472892.70	32°17'57.907"N	103°55'08.382"W	0.00	
9668.00†	88.605	89.875	7040.67	3032.14	6.62	3032.13	628124.00	472892.92	32°17'57.905"N	103°55'07.217"W	0.00	
9768.00†	88.605	89.875	7043.11	3132.11	6.84	3132.10	628223.96	472893.14	32°17'57.903"N	103°55'06.053"W	0.00	
9868.00†	88.605	89.875	7045.55	3232.08	7.05	3232.07	628323.93	472893.35	32°17'57.902"N	103°55'04.888"W	0.00	
9968.00†	88.605	89.875	7047.98	3332.05	7.27	3332.04	628423.89	472893.57	32°17'57.900"N	103°55'03.723"W	0.00	
10068.00†	88.605	89.875	7050.42	3432.02	7.49	3432.01	628523.85	472893.79	32°17'57.898"N	103°55'02.559"W	0.00	
10168.00†	88.605	89.875	7052.85	3531.99	7.71	3531.98	628623.81	472894.01	32°17'57.897"N	103°55'01.394"W	0.00	
10268.00†	88.605	89.875	7055.29	3631.96	7.93	3631.95	628723.78	472894.23	32°17'57.895"N	103°55'00.229"W	0.00	
10368.00†	88.605	89.875	7057.72	3731.93	8.15	3731.92	628823.74	472894.45	32°17'57.893"N	103°54'59.065"W	0.00	
10468.00†	88.605	89.875	7060.16	3831.90	8.36	3831.89	628923.70	472894.66	32°17'57.892"N	103°54'57.900"W	0.00	
10568.00†	88.605	89.875	7062.59	3931.87	8.58	3931.86	629023.67	472894.88	32°17'57.890"N	103°54'56.735"W	0.00	
10668.00†	88.605	89.875	7065.03	4031.84	8.80	4031.83	629123.63	472895.10	32°17'57.888"N	103°54'55.571"W	0.00	
10768.00†	88.605	89.875	7067.46	4131.81	9.02	4131.80	629223.59	472895.32	32°17'57.887"N	103°54'54.406"W	0.00	
10868.00†	88.605	89.875	7069.90	4231.78	9.24	4231.77	629323.55	472895.54	32°17'57.885"N	103°54'53.241"W	0.00	
10968.00†	88.605	89.875	7072.33	4331.75	9.46	4331.74	629423.52	472895.75	32°17'57.883"N	103°54'52.077"W	0.00	
11068.00†	88.605	89.875	7074.77	4431.72	9.67	4431.71	629523.48	472895.97	32°17'57.882"N	103°54'50.912"W	0.00	
11168.00†	88.605	89.875	7077.20	4531.69	9.89	4531.68	629623.44	472896.19	32°17'57.880"N	103°54'49.747"W	0.00	





## Planned Wellpath Report

Prelim\_1  
Page 4 of 4



Operator	XTO Energy Inc.	Slot	No. 51H SHL
Area	Eddy County, NM	Well	No. 51H
Field	(Nash) Sec 18, T23S, R30E	Wellbore	No. 51H PWB
Facility	Nash Unit No. 51H		

WELLPATH DATA (63 stations) † = interpolated/extrapolated station											
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
11268.00†	88.605	89.875	7079.64	4631.66	10.11	4631.65	629723.40	472896.41	32°17'57.878"N	103°54'48.583"W	0.00
11368.00†	88.605	89.875	7082.07	4731.63	10.33	4731.62	629823.37	472896.63	32°17'57.876"N	103°54'47.418"W	0.00
11447.16	88.605	89.875	7084.00 <sup>1</sup>	4810.77	10.50	4810.76	629902.50	472896.80	32°17'57.875"N	103°54'46.496"W	0.00 No. 1H PBHL

HOLE & CASING SECTIONS Ref Wellbore: No. 51H PWB Ref Wellpath: Prelim_1											
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]		
8.75in Open Hole	6168.00	7433.00	1265.00	6168.00	6986.25	0.00	0.00	1.74	797.80		
7in Casing	0.00	7433.00	7433.00	0.00	6986.25	0.00	0.00	1.74	797.80		
6.125in Open Hole	7433.00	11447.16	4014.16	6986.25	7084.00	1.74	797.80	10.50	4810.76		

TARGETS										
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape	
1) No. 1H PBHL	11447.16	7084.00	10.50	4810.76	629902.50	472896.80	32°17'57.875"N	103°54'46.496"W	point	

SURVEY PROGRAM Ref Wellbore: No. 51H PWB Ref Wellpath: Prelim_1											
Start MD [ft]	End MD [ft]	Positional Uncertainty Model				Log Name/Comment			Wellbore		
32.00	11447.16	NaviTrak (Standard)							No. 51H PWB		



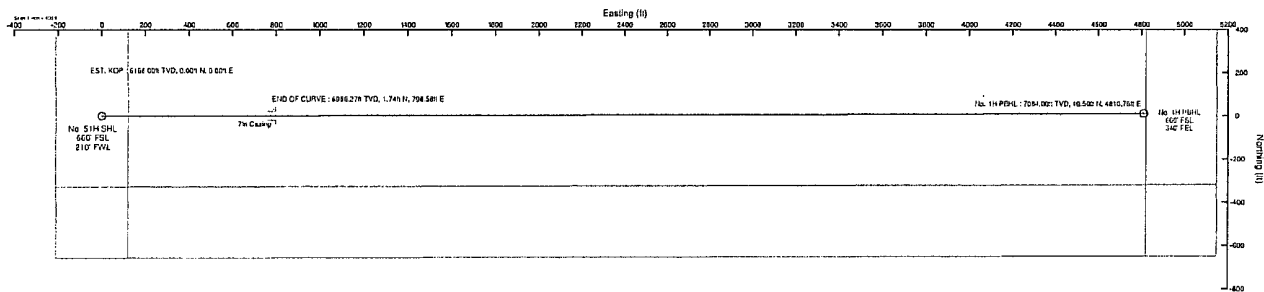
# XTO Energy Inc.

Location: Eddy County, NM  
Field: (Nash) Sec 16, T29S, R30E  
Facility: Nash Unit No. 51H

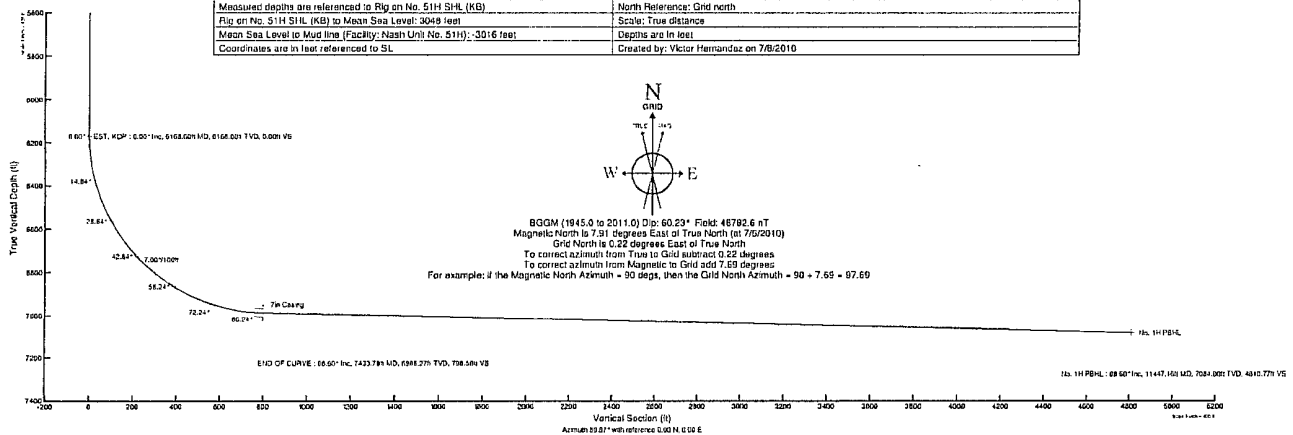
Slot: No. 51H SHL  
Well: No. 51H  
Wellbore: No. 51H PWB



Well Profile Data							
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)
Tie On	0.00	0.000	89.875	0.00	0.00	0.00	0.00
EST. KOP	6169.00	0.000	89.875	6169.00	0.00	0.00	0.00
END OF CURVE	7433.78	88.605	89.875	6986.27	1.74	798.58	7.00
No. 1H PBHL	11447.16	88.605	89.875	7084.00	10.50	4810.76	0.00



Plot reference wellpath is Prelim.	
True vertical depths are referenced to Rig on No. 51H SHL (KB)	Grid System: NAD27 / TM New Mexico State Planes, Eastern Zone (300'), US feet
Measured depths are referenced to Rig on No. 51H SHL (KB)	North Reference: Grid north
Rig on No. 51H SHL (KB) to Mean Sea Level: 3049 feet	Scale: True distance
Mean Sea Level to Mud line (Facility: Nash Unit No. 51H): 3016 feet	Depths are in feet
Coordinates are in feet referenced to SL	Created by: Victor Hernandez on 7/8/2010

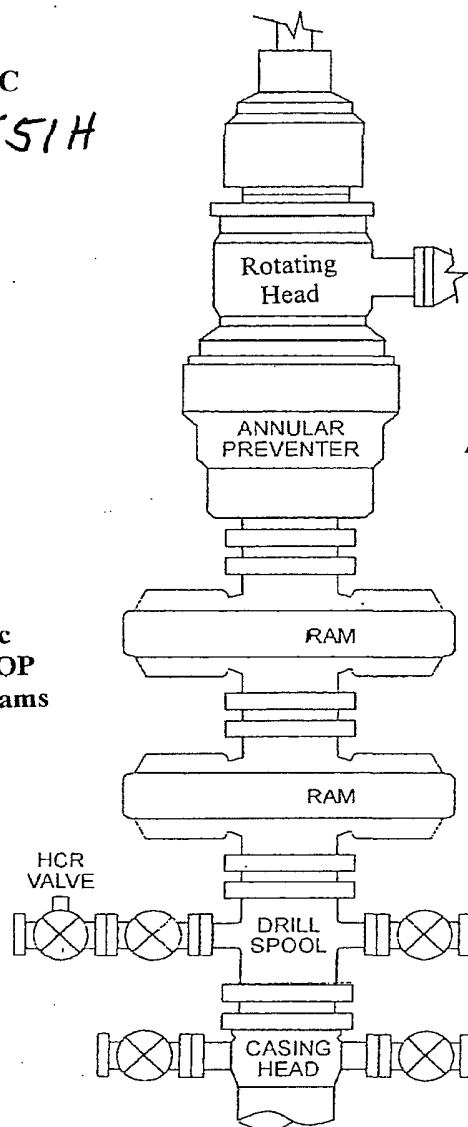


XTO ENERGY INC

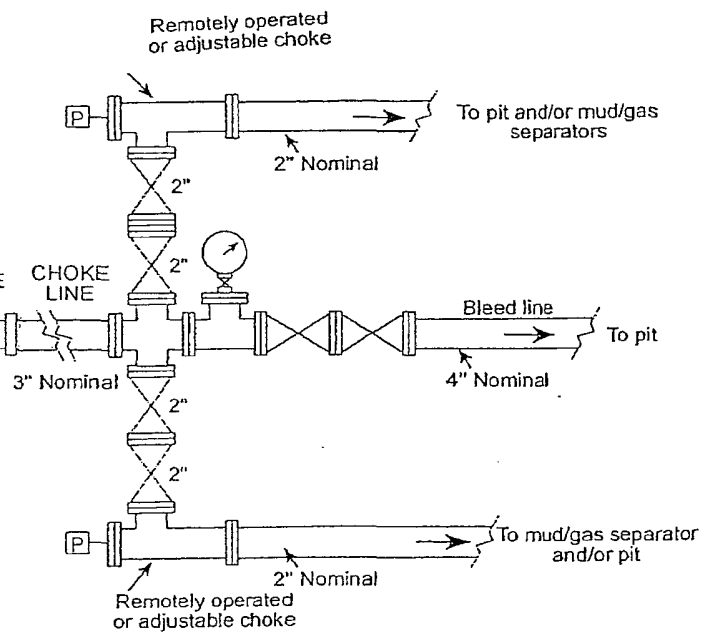
Nash Unit #49H **51H**

**11" Hydraulic  
Double Ram BOP  
Blinds X Pipe Rams**

**11" 5000 psi  
Hydraulic  
Annular BOP**



9-5/8" 3000 psi  
SOW Wellhead



5000 psi Working Pressure  
BOPE Configuration and Choke Manifold