Form 3160-5
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO 1004-0137
Expires March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

2007 AUG 1 AM 11 27

SUBMIT IN TRIPLICATE - Other instructions on reverse side

RECEIVED
070 FARMINGTON NM

5 Lease Serial No
NMSF-079757A

6 If Indian, Allottee or Tribe Name

7 If Unit or CA/Agreement, Name and/or No

1 Type of Well
[ ] Oil Well [X] Gas Well [ ] Other

8 Well Name and No
VAQUEROS CANYON #1

2 Name of Operator
XTO Energy Inc.

9 API Well No
30-039-27679

3a Address
2700 Farmington Ave., Bldg. K. Ste 1 Farmington,

3b Phone No. (*include area code*)
505-324-1090

10 Field and Pool, or Exploratory Area
BASIN FRUITLAND COAL

4 Location of Well (*Footage, Sec, T, R, M, or Survey Description*)
1370' FNL & 665' FEL SEC 10H-T29N-R4W

11 County or Parish, State
Rio Arriba ~~SAN JUAN~~ NM

12 CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
[X] Notice of Intent	[ ] Acidize	[ ] Deepen	[ ] Production (Start/Resume)	[ ] Water Shut-Off
[ ] Subsequent Report	[ ] Alter Casing	[ ] Fracture Treat	[ ] Reclamation	[ ] Well Integrity
[ ] Final Abandonment Notice	[ ] Casing Repair	[ ] New Construction	[ ] Recomplete	[X] Other CHANGE BHL
	[ ] Change Plans	[ ] Plug and Abandon	[ ] Temporarily Abandon	
	[ ] Convert to Injection	[ ] Plug Back	[ ] Water Disposal	

13 Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones Attach the Bond under which the work will be performed or provide the Bond No on file with BLM/BIA Required subsequent reports shall be filed within 30 days following completion of the involved operations If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. *Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has* determined that the final site is ready for final inspection.)

XTO Energy Inc. received verbal approval from Jim Lovato & Troy Salyers of the BLM at 1:00 p.m., 7/27/07 & intends to change the bottom hole location on this well. Please see the attached plats & drilling program.

RCVD AUG2'07
OIL CONS. DIV.
DIST. 3

HOLD C104 FOR directional survey and as drilled C-102 form

14 I hereby certify that the foregoing is true and correct
Name (*Printed/Typed*)
LORRI D. BINGHAM

Title
REGULATORY COMPLIANCE TECH

Date 7/27/07

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by Troy L. Salyers

Title Petroleum Engineer

Date 8/01/2007

Office FFO

Conditions of approval, if any, are attached. Approval of this notice 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

Title 18 U S C Section 1001, and Title 43 U.S.C Section 1212, makes 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

NMOCD

DISTRICT I
1625 N French Dr Hobbs NM 88240

DISTRICT II
1301 W Grand Ave Artesia NM 88210

DISTRICT III
1000 Rio Brazos Rd Aztec, NM 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 Dr
Santa Fe, NM 87505

2007 AUG -1 AM 11 27

RECEIVED
070 FARMINGTON NM

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	[2] Pool Code	[3] Pool Name
		Fruitland Coal

[4] Property Code	[5] Property Name	[6] Well Number
	VAQUEROS CANYON	1

[7] OGRID No	[8] Operator Name	[9] Elevation
	XTO ENERGY INC	6949

[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
H	10	29-N	4-W		1370	NORTH	665	EAST	RIO ARRIBA

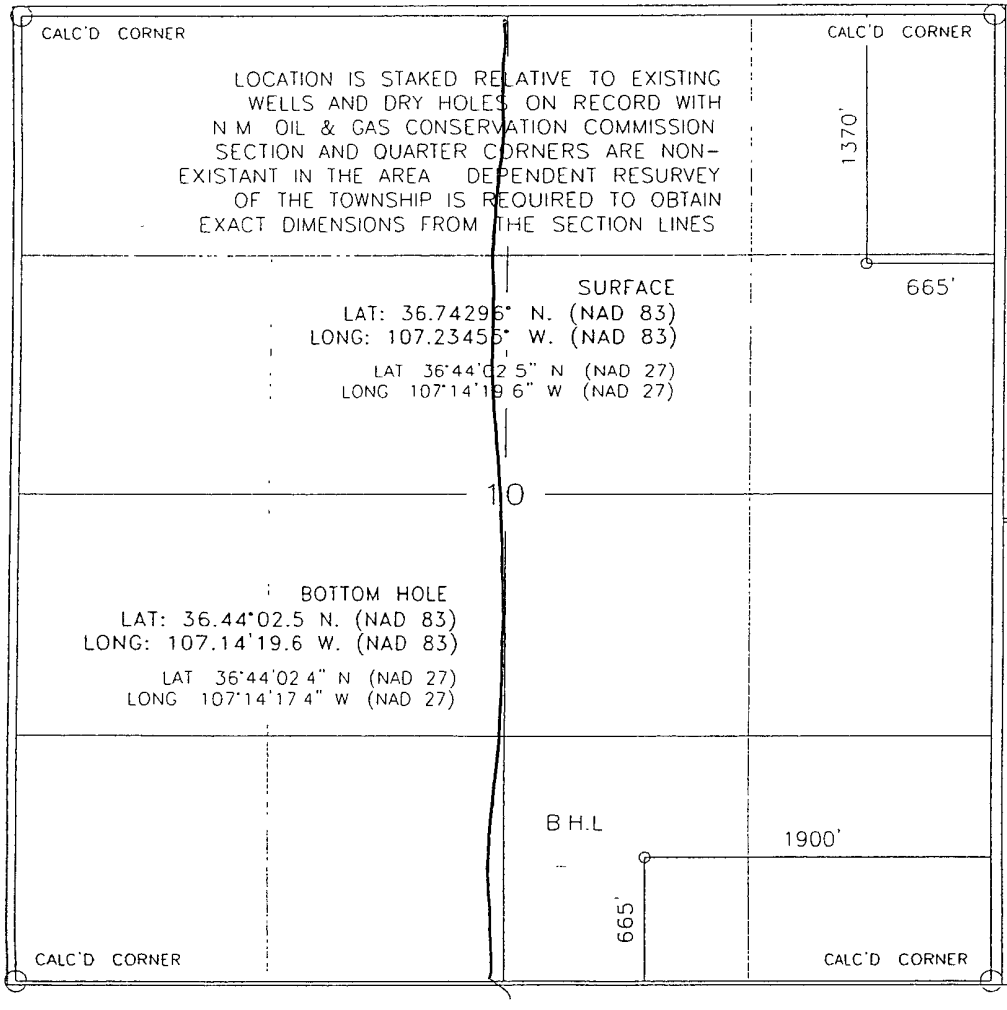
[11] Bottom Hole Location If Different From Surface

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	10	29-N	4-W		665	SOUTH	1900	EAST	RIO ARRIBA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No
320 E/2			

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

16



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

Signature 7/27/07
Date

LORRI D. BINGHAM
Printed Name

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 belief

JULY 20, 2007
Date of Survey

Signature and Seal of Professional Surveyor

ROY A. RUSH
NEW MEXICO
8894
REGISTERED PROFESSIONAL LAND SURVEYOR

7-25-07

Certificate Number

XTO ENERGY INC.
Vaqueros Canyon #1
Drilling Program
July 20, 2007

Surface Location: 1370' FNL & 665' FEL, Sec. 10, T29N, R4W
Bottomhole Location: 660' FSL & 1900' FEL, Sec. 10, T29N, R4W
County: Rio Arriba Co. **State**: New Mexico

GREATEST PROJECTED TVD: 3840'
GREATEST PROJECTED MD: 6580'
OBJECTIVE: Fruitland Coal

APPROX GR ELEV: 6949'
Est KB ELEV: 6961' (12' AGL)

1. MUD PROGRAM:

INTERVAL	0' to 360'	360' to 3780'	3780' to TD
HOLE SIZE	12.25"	8.75"	6.125"
MUD TYPE	FW/Spud Mud	LSND/Gel	Air/Mist
WEIGHT	8.6-9.0	8.4-8.8	NA
VISCOSITY	28-32	28-32	NA
WATER LOSS	NC	5-6	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. Use Fruitland Coal produced water as make-up water for mist fluid. Pump enough fluid to dampen vibration at directional BHA. If directional control is not maintainable in air/mist environment convert to polymer mud.

2. CASING PROGRAM:

Surface Casing: 9.625" casing to be set at ± 360' in a 12-1/4" hole filled with 8.40 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'-360'	360'	36.0#	J-55	ST&C	2020	3520	394	8.921	8.765	12.85	22.4	30.4

Production Casing: 7" casing to be set at ± 3780'MD, 3489'TVD in an 8.75" 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]
0'-3780'	3780'	23#	J-55	ST&C	4320	4980	334	6.276	6.151	2.83	3.27	3.84

Production Liner: 4.5" casing to be set at ±6580' MD, 3489' TVD in a 6 ⅛" 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]
3730'-6580'	2850'	10.5	J-55	ST&C	4010	4790	132	4.052	3.927	2.631	3.143	1.91

[1]Collapse SF is based on evacuated annulus and hydrostatic at TVD.
[2]Burst SF is based on evacuated casing and hydrostatic at TVD.
[3]Tensile 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 (if tie-back string is utilized).
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 surface and intermediate casing strings):

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

176 sx of Type III cement (or equivalent) typically containing accelerator and LCM, mixed at 14.5 ppg, 1.39 ft^3/sk, & 6.70 gal wtr/sk.

Total slurry volume is 245 ft^3, 100% excess of calculated annular volume to 360'.

B. Production Casing: 7", 23#/ft, J-55, ST&C casing to be set at ±3780'MD, 3489' TVD in 8.75" hole.

LEAD:
± 290 sx of Premium Lite FM or CBM Lite typically containing accelerator, LCM, dispersant, and fluid loss additives at 12.1 ppg, 2.22 ft^3/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 ft^3/sk, & 7.34 gal wtr/sk.

Total estimated slurry volume for the 7" production casing is 790 ft^3.

C. Production Liner: 4.5", 11.6#/ft, J-55, ST&C casing is to be set at 3750' MD, 3489' 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: Gamma ray and possibly Resistivity logs will be run from surface shoe to TD. A pilot hole will be drilled at a 35 degree angle to the top of the Picture Cliffs. The pilot hole will be logged with Array Induction/SFL/GR/SP fr/TD (4024') to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (4024') to the bottom of the surface casing.

6. FORMATION TOPS:

Est. KB Elevation: 6961'

Please see directional program for estimated formation tops.

**** Maximum anticipated BHP should be <1,200 psig (<0.30 psi/ft) *****

7. COMPANY PERSONNEL:

Name	Title	Office Phone	Home Phone
John Egelston	Drilling Engineer	505-564-6734	505-330-6902
Jerry Lacy	Drilling Superintendent	505-566-7917	505-320-6543
John Klutsch	Project Geologist	817-885-2800	--

JWE
7/20/07

XTO Energy

San Juan Basin (NAD 83)
Vaqueros Canyon #1
Vaqueros Canyon #1
Vaqueros Canyon #1 -- Surface and Pilot Hole

Plan: Build & Pilot Hole

Standard Planning Report

20 July, 2007

XTO Energy, Inc.

Planning Report

Database:	EDM 2003.14 Single User Db	**Local Co-ordinate Reference:**	Well Vaqueros Canyon #1
Company:	XTO Energy	**TVD Reference:**	Rig KB @ 6961.0ft (AWS #507)
Project:	San Juan Basin (NAD 83)	**MD Reference:**	Rig KB @ 6961 0ft (AWS #507)
Site:	Vaqueros Canyon #1	**North Reference:**	True
Well:	Vaqueros Canyon #1	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Vaqueros Canyon #1 -- Surface and Pilot I		
Design:	Build & Pilot Hole		

Project San Juan Basin (NAD 83), San Juan Co , NM, Directional wells in T30N, R12W (NAD 83)

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Western Zone		

Site Vaqueros Canyon #1, T29N, R04W

Site Position:			**Northing:**		ft	**Latitude:**	
From:	None		**Easting:**		ft	**Longitude:**	
Position Uncertainty:		0 0 ft	**Slot Radius:**		"	**Grid Convergence:**	0 00 °

Well Vaqueros Canyon #1, 5 deg/100' to 40 deg and 15 deg/100' to 90 deg

Well Position	**+N/-S**	0 0 ft	**Northing:**	0 00 ft		**Latitude:**	30° 42' 36 034 N
	+E/-W	0 0 ft	**Easting:**	0 00 ft		**Longitude:**	116° 28' 58 264 W
Position Uncertainty		0 0 ft	**Wellhead Elevation:**	6,949 0 ft		**Ground Level:**	6,949 0 ft

Wellbore Vaqueros Canyon #1 -- Surface and Pilot Hole

Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	User Defined	7/18/2007	0.00	0 00	0

Design Build & Pilot Hole

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0 0

Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**
	0 0	0 0	0 0	200 81

Plan Sections

Measured Depth (ft)	**Inclination (°)**	**Azimuth (°)**	**Vertical Depth (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Dogleg Rate (°/100ft)**	**Build Rate (°/100ft)**	**Turn Rate (°/100ft)**	**TFO (°)**	**Target**
0 0	0 00	0 00	0 0	0 0	0 0	0 00	0 00	0 00	0 00	
2,232.0	0 00	0 00	2,232 0	0.0	0 0	0 00	0 00	0 00	0 00	
2,233 0	0 03	200 81	2,233 0	0.0	0.0	3 00	3 00	0 00	-159 19	
3,398 7	35 00	200 81	3,327 5	-322 9	-122 7	3 00	3 00	0 00	0 00	Vaqueros Canyon #1
4,024 4	35 00	200 81	3,840 0	-658 4	-250 2	0 00	0.00	0 00	0 00	

XTO Energy, Inc.

Planning Report

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Company:	XTO Energy	**TVD Reference:**	Rig KB @ 6961 0ft (AWS #507)
Project:	San Juan Basin (NAD 83)	**MD Reference:**	Rig KB @ 6961 0ft (AWS #507)
Site:	Vaqueros Canyon #1	**North Reference:**	True
Well:	Vaqueros Canyon #1	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Vaqueros Canyon #1 – Surface and Pilot I		
Design:	Build & Pilot Hole		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0 0	0 00	0 00	0.0	0 0	0 0	0 0	0 00	0 00	0 00
100 0	0 00	0 00	100 0	0 0	0 0	0 0	0 00	0 00	0 00
200 0	0 00	0 00	200 0	0 0	0 0	0 0	0 00	0 00	0 00
300 0	0 00	0.00	300 0	0 0	0 0	0.0	0.00	0 00	0 00
360 0	0 00	0 00	360 0	0 0	0.0	0 0	0 00	0 00	0 00
9 5/8"									
400 0	0 00	0 00	400 0	0 0	0 0	0 0	0 00	0 00	0 00
500 0	0 00	0 00	500 0	0 0	0 0	0 0	0.00	0 00	0 00
600 0	0 00	0 00	600 0	0 0	0 0	0 0	0 00	0 00	0 00
700 0	0 00	0 00	700 0	0 0	0.0	0 0	0 00	0 00	0 00
800 0	0 00	0 00	800.0	0 0	0 0	0.0	0 00	0 00	0 00
900 0	0 00	0 00	900 0	0 0	0 0	0 0	0 00	0 00	0 00
1,000 0	0 00	0 00	1,000 0	0 0	0 0	0 0	0 00	0 00	0 00
1,100 0	0 00	0.00	1,100 0	0 0	0 0	0 0	0 00	0 00	0 00
1,200 0	0 00	0.00	1,200 0	0.0	0 0	0 0	0 00	0 00	0 00
1,300 0	0 00	0.00	1,300.0	0 0	0 0	0 0	0 00	0 00	0 00
1,400 0	0.00	0 00	1,400.0	0 0	0.0	0 0	0 00	0 00	0 00
1,500 0	0.00	0 00	1,500.0	0 0	0.0	0 0	0 00	0 00	0 00
1,600 0	0.00	0 00	1,600.0	0 0	0.0	0 0	0 00	0.00	0 00
1,700 0	0 00	0 00	1,700.0	0 0	0 0	0 0	0 00	0 00	0 00
1,800 0	0 00	0 00	1,800 0	0 0	0.0	0.0	0 00	0 00	0 00
1,900 0	0 00	0 00	1,900 0	0 0	0 0	0 0	0 00	0 00	0 00
2,000 0	0 00	0 00	2,000 0	0 0	0 0	0 0	0 00	0 00	0 00
2,100 0	0 00	0 00	2,100 0	0.0	0 0	0.0	0 00	0 00	0 00
2,200 0	0.00	0 00	2,200.0	0 0	0.0	0 0	0 00	0 00	0 00
2,232 0	0 00	0 00	2,232 0	0 0	0 0	0 0	0 00	0 00	0 00
2,233 0	0 03	200 81	2,233 0	0 0	0 0	0 0	3 00	3 00	0 00
2,300 0	2 04	200 81	2,300 0	-1 1	-0 4	1 2	3 00	3 00	0 00
2,400 0	5 04	200 81	2,399 8	-6 9	-2.6	7 4	3 00	3.00	0 00
2,500 0	8 04	200.81	2,499 1	-17 5	-6 7	18 8	3 00	3 00	0 00
2,600 0	11 04	200 81	2,597.7	-33 0	-12 6	35 3	3 00	3 00	0 00
2,700 0	14 04	200.81	2,695.3	-53 3	-20 3	57 1	3.00	3 00	0 00
2,800 0	17 04	200 81	2,791 7	-78 4	-29 8	83 8	3 00	3 00	0 00
2,900 0	20 04	200 81	2,886 5	-108 1	-41 1	115 6	3 00	3 00	0 00
3,000 0	23 04	200 81	2,979 5	-142 4	-54 1	152 3	3 00	3 00	0 00
3,100 0	26 04	200 81	3,070 4	-181 2	-68 9	193 9	3 00	3 00	0 00
3,149 9	27 54	200 81	3,115 0	-202 3	-76 9	216 4	3.00	3 00	0 00
Ojo Alamo									
3,200 0	29 04	200 81	3,159 1	-224 4	-85 3	240 1	3 00	3 00	0 00
3,300 0	32 04	200 81	3,245 2	-271 9	-103 3	290 9	3 00	3 00	0 00
3,322 3	32 71	200 81	3,264 0	-283.1	-107 6	302 8	3 00	3 00	0 00
Fruitland Formation									
3,398 7	35 00	200.81	3,327 5	-322 9	-122 7	345 4	3 00	3 00	0 00
Vaqueros Canyon #1 End of Hzl									
3,400 0	35 00	200 81	3,328 5	-323 6	-123.0	346 2	0 00	0 00	0 00
3,500 0	35 00	200 81	3,410.5	-377 2	-143.3	403 5	0 00	0 00	0.00
3,597.1	35.00	200 81	3,490 0	-429.3	-163 1	459 2	0 00	0 00	0 00
Lower Fruitland Coal									
3,600 0	35 00	200 81	3,492 4	-430 8	-163 7	460 9	0 00	0 00	0 00
3,700.0	35 00	200 81	3,574.3	-484 4	-184 1	518 2	0.00	0 00	0 00
3,800 0	35 00	200 81	3,656 2	-538.1	-204.5	575.6	0 00	0.00	0 00
3,900 0	35 00	200 81	3,738 1	-591 7	-224.8	632 9	0 00	0 00	0 00
4,000 0	35 00	200 81	3,820 0	-645 3	-245.2	690 3	0 00	0 00	0 00

XTO Energy, Inc.

Planning Report

Database:	EDM 2003 14 Single User Db	**Local Co-ordinate Reference:**	Well Vaqueros Canyon #1
Company:	XTO Energy	**TVD Reference:**	Rig KB @ 6961 0ft (AWS #507)
Project:	San Juan Basin (NAD 83)	**MD Reference:**	Rig KB @ 6961 0ft (AWS #507)
Site:	Vaqueros Canyon #1	**North Reference:**	True
Well:	Vaqueros Canyon #1	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Vaqueros Canyon #1 -- Surface and Pilot I		
Design:	Build & Pilot Hole		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,024 4	35 00	200 81	3,840.0	-658 4	-250 2	704 3	0 00	0 00	0 00
Pictured Cliffs SS									
4,165.0	0 00	0 00	0 0	0.0	0 0	0 0	24 89	-24 89	0 00
7"									
6,955 0	0 00	0 00	0 0	0 0	0 0	0.0	0.00	0 00	0 00
4 1/2"									

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Vaqueros Canyon #1 En	0 00	0.00	3,490.0	-3,250 0	-1,235 0	-3,145.66	-1,480 73	30° 42' 4.127 N	116° 29' 12 264 W
- plan misses by 2794.5ft at 4024 4ft MD (3840 0 TVD, -658 4 N, -250 2 E)									
- Point									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
360 0	360 0	9 5/8"	9-5/8	12-1/4
4,165 0		7"	7	8-3/4
6,955 0		4 1/2"	4-1/2	6-1/8

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,149 9	3,115 0	Ojo Alamo	Sandstone	0 00	
3,322 3	3,264 0	Fruitland Formation		0 00	
3,597 1	3,490 0	Lower Fruitland Coal	Coal	0 00	
4,024 4	3,840 0	Pictured Cliffs SS	Sandstone	0 00	

XTO Energy

San Juan Basin (NAD 83)
Vaqueros Canyon #1
Vaqueros Canyon #1
Vaqueros Canyon #1 -- Horizontal Section

Plan: Horizontal Section

Standard Planning Report

20 July, 2007

XTO Energy, Inc.

Planning Report

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Project:	San Juan Basin (NAD 83)	**MD Reference:**	Rig KB @ 6961 0ft (AWS #507)
Site:	Vaqueros Canyon #1	**North Reference:**	True
Well:	Vaqueros Canyon #1	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Vaqueros Canyon #1 -- Horizontal Section		
Design:	Horizontal Section		

Project San Juan Basin (NAD 83), San Juan Co , NM, Directional wells in T30N, R12W (NAD 83)

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Western Zone		

Site Vaqueros Canyon #1, T29N, R04W

Site Position:			**Northing:**	ft	**Latitude:**	
From:	None		**Easting:**	ft	**Longitude:**	
Position Uncertainty:		0 0 ft	**Slot Radius:**	"	**Grid Convergence:**	0 00 °

Well Vaqueros Canyon #1, 5 deg/100' to 40 deg and 15 deg/100' to 90 deg

Well Position	**+N/-S**	0 0 ft	**Northing:**	0 00 ft	**Latitude:**	30° 42' 36 034 N
	+E/-W	0 0 ft	**Easting:**	0 00 ft	**Longitude:**	116° 28' 58 264 W
Position Uncertainty		0 0 ft	**Wellhead Elevation:**	6,949.0 ft	**Ground Level:**	6,949 0 ft

Wellbore Vaqueros Canyon #1 -- Horizontal Section

Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	User Defined	7/20/2007	0 00	0 00	0

Design Horizontal Section

Audit Notes:

Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	3,398 0

Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**
	0 0	0 0	0 0	200 81

Plan Sections

Measured Depth (ft)	**Inclination (°)**	**Azimuth (°)**	**Vertical Depth (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Dogleg Rate (°/100ft)**	**Build Rate (°/100ft)**	**Turn Rate (°/100ft)**	**TFO (°)**	**Target**
3,398 0	34 98	200 81	3,326.9	-322 5	-122 6	0 00	0 00	0 00	0 00	
3,398 0	34 98	200 81	3,326 9	-322.5	-122 6	15 00	15 00	0 01	0 02	
3,764 8	90 00	200 81	3,489 9	-615 1	-233 7	15 00	15 00	0 00	0 00	Vaqueros Canyon #1
6,583 6	90 00	200 81	3,489.9	-3,250.0	-1,235 0	0 00	0 00	0 00	0 00	Vaqueros Canyon #1

XTO Energy, Inc.

Planning Report

Database:	EDM 2003 14 Single User Db	**Local Co-ordinate Reference:**	Well Vaqueros Canyon #1
Company:	XTO Energy	**TVD Reference:**	Rig KB @ 6961 0ft (AWS #507)
Project:	San Juan Basin (NAD 83)	**MD Reference:**	Rig KB @ 6961 0ft (AWS #507)
Site:	Vaqueros Canyon #1	**North Reference:**	True
Well:	Vaqueros Canyon #1	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Vaqueros Canyon #1 -- Horizontal Section		
Design:	Horizontal Section		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
3,398 0	34 98	200 81	3,326 9	-322 5	-122 6	345 0	3 00	3 00	0 00
3,400 0	35 28	200 81	3,328.5	-323 6	-123 0	346 2	15.00	15.00	0 00
3,425 0	39 03	200 81	3,348.5	-337 7	-128 3	361 3	15 00	15 00	0 00
3,450 0	42 78	200 81	3,367.4	-353 0	-134 1	377 6	15 00	15 00	0 00
3,475 0	46 53	200 81	3,385 1	-369 4	-140 4	395 2	15 00	15.00	0 00
3,500 0	50 28	200 81	3,401 7	-386 9	-147.0	413 9	15 00	15 00	0 00
3,525 0	54 03	200 81	3,417 1	-405.3	-154 0	433 6	15 00	15 00	0 00
3,550 0	57 78	200 81	3,431 1	-424 7	-161 4	454 3	15 00	15 00	0 00
3,575 0	61 53	200 81	3,443 7	-444 9	-169 0	475 9	15 00	15 00	0 00
3,600 0	65 28	200 81	3,454 9	-465 8	-177 0	498.2	15 00	15 00	0 00
3,625 0	69 03	200 81	3,464 6	-487.3	-185 2	521 3	15 00	15 00	0 00
3,650 0	72 78	200 81	3,472 8	-509 4	-193 6	544.9	15 00	15 00	0 00
3,675 0	76 53	200 81	3,479 4	-531 9	-202 1	569 0	15 00	15 00	0 00
3,700 0	80 28	200 81	3,484 4	-554 8	-210 8	593 5	15.00	15 00	0 00
3,725 0	84 03	200 81	3,487.8	-577 9	-219 6	618 3	15 00	15.00	0 00
3,750 0	87.78	200 81	3,489 6	-601 2	-228 5	643.2	15 00	15 00	0 00
3,764 8	90 00	200 81	3,489.9	-615 1	-233 7	658 0	15 00	15 00	0 00
Vaqueros Canyon #1 End of Hzl									
3,800 0	90 00	200.81	3,489.9	-648 0	-246 2	693 2	0 00	0 00	0 00
3,900 0	90 00	200 81	3,489 9	-741 5	-281 8	793 2	0 00	0 00	0 00
4,000 0	90 00	200.81	3,489 9	-834 9	-317.3	893 2	0 00	0 00	0 00
4,100 0	90 00	200 81	3,489 9	-928.4	-352 8	993 2	0 00	0 00	0 00
4,200 0	90 00	200 81	3,489 9	-1,021.9	-388.3	1,093.2	0 00	0 00	0 00
4,300 0	90 00	200 81	3,489.9	-1,115 4	-423 8	1,193 2	0 00	0 00	0 00
4,400 0	90 00	200 81	3,489 9	-1,208 8	-459 4	1,293 2	0 00	0 00	0 00
4,500 0	90 00	200 81	3,489 9	-1,302.3	-494 9	1,393 2	0 00	0 00	0 00
4,600 0	90.00	200 81	3,489 9	-1,395 8	-530 4	1,493 2	0 00	0 00	0 00
4,700 0	90 00	200.81	3,489 9	-1,489 3	-565 9	1,593 2	0 00	0 00	0 00
4,800 0	90 00	200 81	3,489 9	-1,582 8	-601 4	1,693 2	0 00	0 00	0 00
4,900 0	90 00	200 81	3,489 9	-1,676 2	-637 0	1,793 2	0 00	0 00	0 00
5,000.0	90 00	200 81	3,489 9	-1,769 7	-672 5	1,893.2	0 00	0.00	0 00
5,100 0	90 00	200 81	3,489 9	-1,863 2	-708 0	1,993.2	0 00	0 00	0 00
5,200 0	90 00	200 81	3,489 9	-1,956 7	-743 5	2,093 2	0 00	0 00	0 00
5,300 0	90 00	200 81	3,489 9	-2,050 1	-779 1	2,193 2	0 00	0 00	0 00
5,400 0	90 00	200 81	3,489 9	-2,143 6	-814 6	2,293 2	0 00	0 00	0 00
5,500 0	90 00	200.81	3,489 9	-2,237 1	-850 1	2,393 2	0 00	0 00	0 00
5,600 0	90 00	200 81	3,489 9	-2,330 6	-885 6	2,493 2	0 00	0 00	0 00
5,700 0	90 00	200 81	3,489 9	-2,424 1	-921 1	2,593 2	0 00	0 00	0 00
5,800 0	90 00	200 81	3,489 9	-2,517 5	-956 7	2,693.2	0.00	0 00	0 00
5,900.0	90 00	200 81	3,489 9	-2,611 0	-992 2	2,793 2	0.00	0 00	0 00
6,000 0	90 00	200.81	3,489 9	-2,704 5	-1,027.7	2,893 2	0 00	0 00	0 00
6,100 0	90 00	200 81	3,489 9	-2,798 0	-1,063 2	2,993 2	0 00	0 00	0 00
6,200 0	90 00	200 81	3,489 9	-2,891.5	-1,098 8	3,093.2	0 00	0.00	0 00
6,300 0	90 00	200 81	3,489 9	-2,984 9	-1,134 3	3,193 2	0 00	0 00	0 00
6,400 0	90 00	200 81	3,489 9	-3,078.4	-1,169 8	3,293.2	0 00	0 00	0 00
6,500 0	90.00	200.81	3,489 9	-3,171 9	-1,205.3	3,393 2	0 00	0 00	0 00
6,583 6	90 00	200 81	3,489 9	-3,250 0	-1,235 0	3,476 7	0 00	0 00	0 00

XTO Energy, Inc.

Planning Report

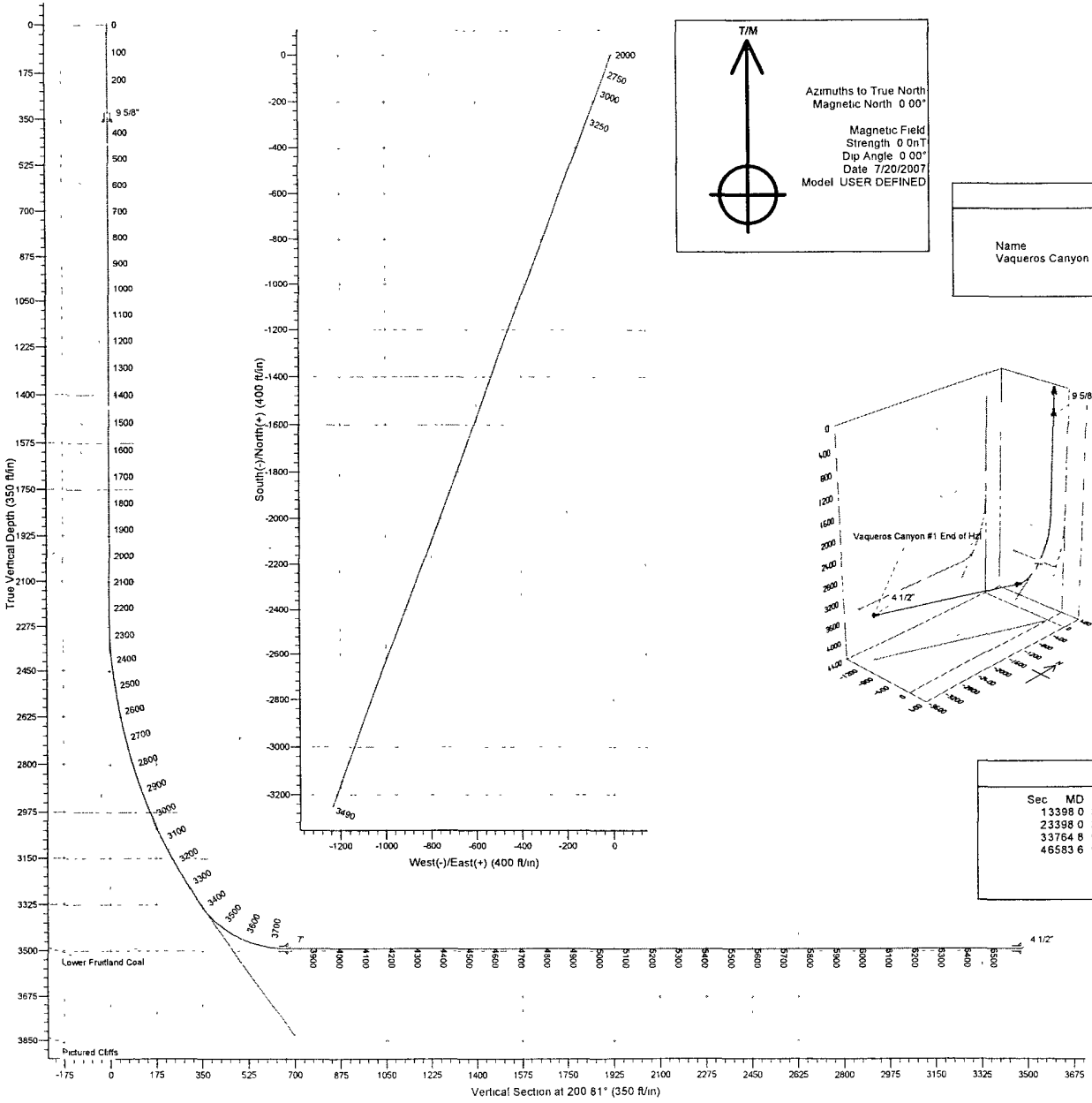
Database:	EDM 2003.14 Single User Db	**Local Co-ordinate Reference:**	Well Vaqueros Canyon #1
Company:	XTO Energy	**TVD Reference:**	Rig KB @ 6961 0ft (AWS #507)
Project:	San Juan Basin (NAD 83)	**MD Reference:**	Rig KB @ 6961 0ft (AWS #507)
Site:	Vaqueros Canyon #1	**North Reference:**	True
Well:	Vaqueros Canyon #1	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Vaqueros Canyon #1 -- Horizontal Section		
Design:	Horizontal Section		

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Vaqueros Canyon #1 En - plan hits target - Point	0.00	0 00	3,490 0	-3,250 0	-1,235 0	-3,145 66	-1,480 73	30° 42' 4 127 N	116° 29' 12 264 W

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
360 0	360.0	9 5/8"	9-5/8	12-1/4



XTO ENERGY

Well Name	Vaqueros Canyon #1
Plan Description	Land Curve & Drill Horizontal

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
Vaqueros Canyon #1 End of Hzl	3490 0	-3250 0	-1235.0	30° 42' 4.127 N	116° 29' 12 264 W	Point

Project	San Juan Basin (NAD 83)
Site	Vaqueros Canyon #1
Well	Vaqueros Canyon #1
Wellbore	Vaqueros Canyon #1 -- Horizontal Section
	Horizontal Section

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
		Lower Fruitland Coal
		Pictured Cliffs
3115 0	3149 9	Ojo Alamo
3264 0	3322 3	Fruitland Formation

CASING DETAILS

TVD	MD	Name	Size
360 0	360 0	9 5/8"	9-5/8
3489 9	3780 0	7"	7
3489 9	6580 0	4 1/2"	4-1/2

PROJECT DETAILS. San Juan Basin (NAD 83)

Geodetic System	US State Plane 1983
Datum	North American Datum 1983
Ellipsoid	GRS 1980
Zone	New Mexico Western Zone
System Datum	Mean Sea Level

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	3398 0	34 98	200 81	3326 9	-322 5	-122 6	0 00	0 00	345 0	
2	3398 0	34 98	200 81	3326 9	-322 5	-122 6	15 00	0 02	345 0	
3	3764 8	90 00	200 81	3489 9	-615 1	-233 7	15 00	0 00	658 0	Vaqueros Canyon #1 End of Hzl
4	6583 6	90 00	200 81	3489 9	-3250 0	-1235 0	0 00	0 00	3476 7	Vaqueros Canyon #1 End of Hzl