

Submit 1 Copy To Appropriate District Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised August 1, 2011

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

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐	7. Lease Name or Unit Agreement Name ROPCO 16
2. Name of Operator XTO ENERGY INC.	8. Well Number 1H
3. Address of Operator 382 CR 3100, AZTEC, NM 87410	9. OGRID Number 5380
4. Well Location Unit Letter <u>A</u> : <u>978</u> feet from the <u>NORTH</u> line and <u>1005</u> feet from the <u>EAST</u> line Section <u>16</u> Township <u>29N</u> Range <u>14W</u> NMPM County <u>SAN JUAN</u>	10. Pool name or Wildcat BASIN MANCOS
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 5217	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
DOWNHOLE COMMINGLE ☐

OTHER: ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

XTO Energy Inc., would like to revise the project area. The original project area in the submitted C-101 overlaps the existing Cha Cha Gallup pool.

Also, we would like to revise the bottom hole location, drilling program and direction plan, due to the change in the project area.

Please see attached.

HOLD C104 FOR NSP

Hold C104

for Directional Survey
and "As Drilled" plat

OIL CONS. DIV. DIST. 3
FEB 19 2013

Hold C104
for Directional Survey
and "As Drilled" plat

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Malia Villers TITLE PERMITTING TECH DATE 2/14/13

Type or print name MALIA VILLERS E-mail address: malia_villers@xtoenergy.com PHONE: 505-333-3698

For State Use Only

Deputy Oil & Gas Inspector,
District #3

APPROVED BY: Wm F. Hys TITLE Deputy Oil & Gas Inspector, District #3 DATE MAR 08 2013

District I
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District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-35455	² Pool Code 97232	³ Pool Name Basin Mancos
⁴ Property Code 303657	⁵ Property Name ROPCO 16	⁶ Well Number 1H
⁷ OGRID No. 5380	⁸ Operator Name XTO ENERGY INC.	⁹ Elevation 5,217

¹⁰ Surface Location

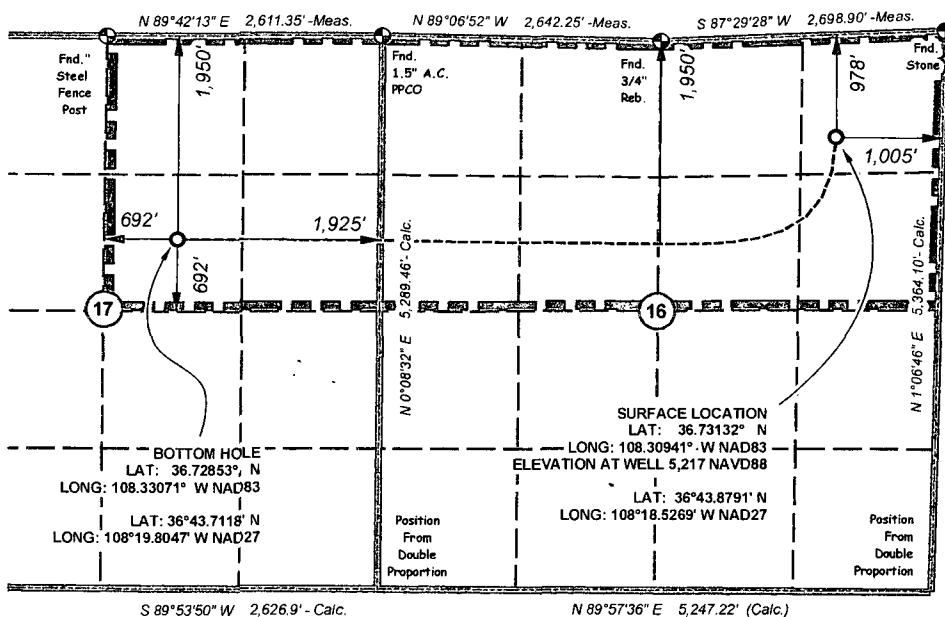
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	16	29 N	14 W		978	NORTH	1005	EAST	SAN JUAN

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
G	17	29 N	14 W		1950	NORTH	1925	EAST	SAN JUAN

¹² Dedicated Acres 480	¹³ Joint or Infill	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.



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: Maria Villers Date: 2/14/13
Printed Name: Maria Villers
E-mail Address: maria-villers@xtrenergy.com

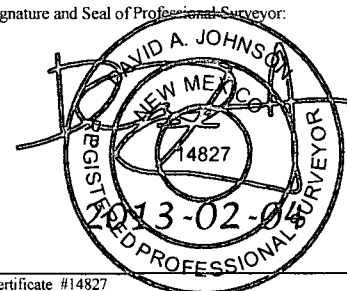
¹⁸ SURVEYOR CERTIFICATION

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.

October 9, 2012

Date of Survey

Signature and Seal of Professional Surveyor:



Certificate #14827

= Project Area
 = Found Monument

XTO ENERGY INC.

Ropco 16 #1H

APD Data

February 13, 2013

Location: 978' FNL x 1005' FEL Sec 16, T29N, R14W County: San Juan

State: New Mexico

Bottomhole Location: 1950' FNL x 1925' FEL Sec 17, T29N, R14W

GREATEST PROJECTED TVD: 4758'

APPROX GR ELEV: 5217'

GREATEST PROJECTED MD: 10915'

Est. KB ELEV: 5229' (12' AGL)

OBJECTIVE: Gallup Horizontal

1. MUD PROGRAM:

INTERVAL	0' to 500'	500' to 5100'	5100' to TD
HOLE SIZE	12.25"	8.75"	6.125"
MUD TYPE	FW/Spud Mud	FW/Polymer/LSND	Oil Based Mud/Invert
WEIGHT	8.6-9.0	8.4-9.2	11-13.5
VISCOSITY	28-32	28-36	28-36
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.

2. CASING PROGRAM:

Surface Casing: 9.625" casing to be set at $\pm 500'$ 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'-500'	500'	36.0#	J-55	ST&C	2020	3520	394	8.921	8.765	8.44	14.7	21.9

Intermediate Casing: 7" casing to be set at $\pm 5340'$ MD, 4758' 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'-5340'	5340'	26 #	J-55	ST&C	4320	4980	334	6.276	6.151	1.90	2.19	2.41

Production Casing: 4.5" casing to be set at $\pm 10915'$ MD, 4758' TVD in 6.125" hole filled with 13.5 ppg mud. (Mud may be weighted up to 13.5 ppg for hole stability reasons. Anticipated Reservoir pressure ~ 7.5 ppg)

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
5050'-10915'	5865'	11.6#	N-80	LT&C	6350	7780	223	4.00	3.875	1.91	2.33	3.28

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

²Burst SF is based on evacuated annulus 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: C-22 profile (or equivalent), 9-5/8 slip on weld on x 11", 5000# with 11" x 7-1/16" 5000# C-22 casing hanger.
- B. Tubing Head: TCM (or equivalent), 11" 5000# x 7-1/16" 5000#, TC-1A 7-1/16" x 2-3/8 tubing Hanger

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 $\pm 500'$ in 12-1/4" hole.

± 268 sx of Type V cement (or equivalent) typically containing accelerator and LCM, mixed at 15.8 ppg, 1.17 ft³/sk, & 5.01 gal wtr/sk.

Total slurry volume is 313 ft³, 100% excess of calculated annular volume to 500'.

- B. Intermediate Casing: 7", 26#/ft, J-55, ST&C casing to be set at $\pm 5340'$ MD, 4758' TVD in 8.75" hole.

LEAD 1:

± 315 sx of Type V (or equivalent) typically containing accelerator, LCM, dispersant, and fluid loss additives at 12.3 ppg, 2.36 ft³/sk, & 12.95 gal wtr/sk.

TAIL 1:

± 200 sx of Type V or Class G cement typically containing accelerator, LCM, dispersant, and fluid loss additives at 13.5 ppg, 1.81 ft³/sk, & 8.85 gal wtr/sk.

Total estimated slurry volume for the 7" production casing is 1051 ft³.

- C. Production Liner: 4.5", 11.6#/ft, N-80, LT&C casing is to be set at 11242' MD, 4758' 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 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 from Surface shoe to TD.

6. **FORMATION TOPS:**

See attached Directional Program.

**** Maximum anticipated BHP should be <2,000 psig (<0.38psi/ft) ****

7. **COMPANY PERSONNEL:**

Name	Title	Office Phone	Cellular Phone
Ross Lubbers	Drilling Manager	303-397-3721	405-659-8563
Justin Niederhofer	Drilling Engineer	303-397-3719	505-320-0158
Bobby Jackson	Drilling Superintendent	303-397-3720	505-486-4706
Charles Musekamp	Project Geologist	817-885-2800	--

JDN
2/13/13

XTO Energy

San Juan Basin(NAD 83)

Ropco 16-1H

Ropco 16-1H

Ropco 16-1H

Plan: Rvised Plan

Standard Planning Report

13 February, 2013

XTO Energy Inc.

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well Ropco 16-1H
Company:	XTO Energy	TVD Reference:	Rig KB @ 5237.00ft (Unknown Rig)
Project:	San Juan Basin(NAD 83)	MD Reference:	Rig KB @ 5237.00ft (Unknown Rig)
Site:	Ropco 16-1H	North Reference:	True
Well:	Ropco 16-1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Ropco 16-1H		
Design:	Rvised Plan		

Project	San Juan Basin(NAD 83), San Juan Co., NM,		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Western Zone		

Site	Ropco 16-1H, T29N, R14W		
Site Position:		Northing:	2,085,863.71 ft
From:	Lat/Long	Easting:	2,583,585.34 ft
Position Uncertainty:	0.00 ft	Slot Radius:	in
		Latitude:	36° 43' 52.75 N
		Longitude:	108° 18' 33.88 W
		Grid Convergence:	-0.28 °

Well	Ropco 16-1H, Horizontal Mancos		
Well Position	+N/-S	0.00 ft	Northing: 2,085,863.71 ft
	+E/-W	0.00 ft	Easting: 2,583,585.34 ft
Position Uncertainty	0.00 ft	Wellhead Elevation:	5,217.00 ft
		Latitude:	36° 43' 52.75 N
		Longitude:	108° 18' 33.88 W
		Ground Level:	5,217.00 ft

Wellbore	Ropco 16-1H				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	10.29	63.40	50,838

Design	Rvised Plan			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	260.76

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,304.82	90.00	230.00	4,758.00	-615.79	-733.87	5.98	5.98	0.00	230.00	
5,404.82	90.00	230.00	4,758.00	-680.07	-810.48	0.00	0.00	0.00	0.00	
6,404.87	90.00	270.00	4,758.00	-1,015.19	-1,731.25	4.00	0.00	4.00	90.00	Revised BHL -- Ropco
10,915.59	90.00	270.00	4,758.00	-1,015.04	-6,241.97	0.00	0.00	0.00	0.00	Revised BHL -- Ropco

XTO Energy Inc.

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well Ropco 16-1H
Company:	XTO Energy	TVD Reference:	Rig KB @ 5237.00ft (Unknown Rig)
Project:	San Juan Basin(NAD 83)	MD Reference:	Rig KB @ 5237.00ft (Unknown Rig)
Site:	Ropco 16-1H	North Reference:	True
Well:	Ropco 16-1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Ropco 16-1H		
Design:	Rvised Plan		

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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"									
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,245.00	0.00	0.00	2,245.00	0.00	0.00	0.00	0.00	0.00	0.00
Cliffhouse SS									
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,179.00	0.00	0.00	3,179.00	0.00	0.00	0.00	0.00	0.00	0.00
Point Lookout SS									
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,520.00	0.00	0.00	3,520.00	0.00	0.00	0.00	0.00	0.00	0.00
Mancos Shale									
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,850.00	2.99	230.00	3,849.98	-0.84	-1.00	1.12	5.98	5.98	0.00
3,900.00	5.98	230.00	3,899.82	-3.35	-3.99	4.48	5.98	5.98	0.00
3,950.00	8.97	230.00	3,949.39	-7.53	-8.98	10.07	5.98	5.98	0.00
4,000.00	11.96	230.00	3,998.55	-13.37	-15.93	17.87	5.98	5.98	0.00
4,050.00	14.95	230.00	4,047.17	-20.85	-24.85	27.87	5.98	5.98	0.00
4,100.00	17.94	230.00	4,095.12	-29.95	-35.69	40.03	5.98	5.98	0.00
4,150.00	20.93	230.00	4,142.27	-40.64	-48.43	54.33	5.98	5.98	0.00
4,200.00	23.92	230.00	4,188.48	-52.90	-63.05	70.72	5.98	5.98	0.00

XTO Energy Inc.

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well Ropco 16-1H
Company:	XTO Energy	TVD Reference:	Rig KB @ 5237.00ft (Unknown Rig)
Project:	San Juan Basin(NAD 83)	MD Reference:	Rig KB @ 5237.00ft (Unknown Rig)
Site:	Ropco 16-1H	North Reference:	True
Well:	Ropco 16-1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Ropco 16-1H		
Design:	Rvised Plan		

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)
4,250.00	26.91	230.00	4,233.63	-66.70	-79.48	89.16	5.98	5.98	0.00
4,300.00	29.90	230.00	4,277.61	-81.98	-97.71	109.60	5.98	5.98	0.00
4,350.00	32.89	230.00	4,320.28	-98.73	-117.66	131.98	5.98	5.98	0.00
4,400.00	35.88	230.00	4,361.54	-116.88	-139.29	156.24	5.98	5.98	0.00
4,450.00	38.88	230.00	4,401.26	-136.39	-162.54	182.32	5.98	5.98	0.00
4,480.90	40.72	230.00	4,425.00	-149.10	-177.69	199.32	5.98	5.98	0.00
Upper Gallup									
4,500.00	41.87	230.00	4,439.35	-157.20	-187.35	210.15	5.98	5.98	0.00
4,550.00	44.86	230.00	4,475.70	-179.27	-213.64	239.64	5.98	5.98	0.00
4,600.00	47.85	230.00	4,510.21	-202.52	-241.35	270.73	5.98	5.98	0.00
4,650.00	50.84	230.00	4,542.78	-226.90	-270.41	303.32	5.98	5.98	0.00
4,700.00	53.83	230.00	4,573.33	-252.33	-300.72	337.32	5.98	5.98	0.00
4,750.00	56.82	230.00	4,601.78	-278.76	-332.22	372.65	5.98	5.98	0.00
4,800.00	59.81	230.00	4,628.04	-306.11	-364.80	409.21	5.98	5.98	0.00
4,850.00	62.80	230.00	4,652.05	-334.30	-398.40	446.89	5.98	5.98	0.00
4,900.00	65.79	230.00	4,673.73	-363.25	-432.91	485.60	5.98	5.98	0.00
4,950.00	68.78	230.00	4,693.04	-392.89	-468.23	525.22	5.98	5.98	0.00
5,000.00	71.77	230.00	4,709.91	-423.14	-504.28	565.66	5.98	5.98	0.00
5,050.00	74.76	230.00	4,724.31	-453.92	-540.96	606.80	5.98	5.98	0.00
5,100.00	77.75	230.00	4,736.19	-485.13	-578.16	648.53	5.98	5.98	0.00
5,150.00	80.74	230.00	4,745.52	-516.70	-615.78	690.74	5.98	5.98	0.00
5,166.28	81.71	230.00	4,748.00	-527.05	-628.11	704.56	5.98	5.98	0.00
Gallup Mkr 5									
5,200.00	83.73	230.00	4,752.27	-548.55	-653.73	733.30	5.98	5.98	0.00
5,250.00	86.72	230.00	4,756.43	-580.57	-691.90	776.11	5.98	5.98	0.00
5,304.82	90.00	230.00	4,758.00	-615.79	-733.87	823.19	5.98	5.98	0.00
Target Interval									
5,340.00	90.00	230.00	4,758.00	-638.40	-760.82	853.42	0.00	0.00	0.00
7"									
5,404.82	90.00	230.00	4,758.00	-680.07	-810.48	909.12	0.00	0.00	0.00
5,500.00	90.00	233.81	4,758.00	-738.78	-885.36	992.46	4.00	0.00	4.00
5,600.00	90.00	237.81	4,758.00	-794.97	-968.06	1,083.11	4.00	0.00	4.00
5,700.00	90.00	241.81	4,758.00	-845.25	-1,054.48	1,176.47	4.00	0.00	4.00
5,800.00	90.00	245.81	4,758.00	-889.38	-1,144.19	1,272.11	4.00	0.00	4.00
5,900.00	90.00	249.81	4,758.00	-927.14	-1,236.76	1,369.54	4.00	0.00	4.00
6,000.00	90.00	253.81	4,758.00	-958.36	-1,331.75	1,468.30	4.00	0.00	4.00
6,100.00	90.00	257.81	4,758.00	-982.87	-1,428.67	1,567.91	4.00	0.00	4.00
6,200.00	90.00	261.81	4,758.00	-1,000.57	-1,527.07	1,667.87	4.00	0.00	4.00
6,300.00	90.00	265.81	4,758.00	-1,011.35	-1,626.47	1,767.71	4.00	0.00	4.00
6,404.87	90.00	270.00	4,758.00	-1,015.19	-1,731.25	1,871.74	4.00	0.00	4.00
6,500.00	90.00	270.00	4,758.00	-1,015.18	-1,826.38	1,965.64	0.00	0.00	0.00
6,600.00	90.00	270.00	4,758.00	-1,015.18	-1,926.38	2,064.34	0.00	0.00	0.00
6,700.00	90.00	270.00	4,758.00	-1,015.18	-2,026.38	2,163.05	0.00	0.00	0.00
6,800.00	90.00	270.00	4,758.00	-1,015.17	-2,126.38	2,261.75	0.00	0.00	0.00
6,900.00	90.00	270.00	4,758.00	-1,015.17	-2,226.38	2,360.45	0.00	0.00	0.00
7,000.00	90.00	270.00	4,758.00	-1,015.17	-2,326.38	2,459.16	0.00	0.00	0.00
7,100.00	90.00	270.00	4,758.00	-1,015.16	-2,426.38	2,557.86	0.00	0.00	0.00
7,200.00	90.00	270.00	4,758.00	-1,015.16	-2,526.38	2,656.56	0.00	0.00	0.00
7,300.00	90.00	270.00	4,758.00	-1,015.16	-2,626.38	2,755.27	0.00	0.00	0.00
7,400.00	90.00	270.00	4,758.00	-1,015.15	-2,726.38	2,853.97	0.00	0.00	0.00
7,500.00	90.00	270.00	4,758.00	-1,015.15	-2,826.38	2,952.67	0.00	0.00	0.00
7,600.00	90.00	270.00	4,758.00	-1,015.15	-2,926.38	3,051.37	0.00	0.00	0.00
7,700.00	90.00	270.00	4,758.00	-1,015.14	-3,026.38	3,150.08	0.00	0.00	0.00

XTO Energy Inc.

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well Ropco 16-1H
Company:	XTO Energy	TVD Reference:	Rig KB @ 5237.00ft (Unknown Rig)
Project:	San Juan Basin(NAD 83)	MD Reference:	Rig KB @ 5237.00ft (Unknown Rig)
Site:	Ropco 16-1H	North Reference:	True
Well:	Ropco 16-1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Ropco 16-1H		
Design:	Revised Plan		

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)
7,800.00	90.00	270.00	4,758.00	-1,015.14	-3,126.38	3,248.78	0.00	0.00	0.00
7,900.00	90.00	270.00	4,758.00	-1,015.14	-3,226.38	3,347.48	0.00	0.00	0.00
8,000.00	90.00	270.00	4,758.00	-1,015.13	-3,326.38	3,446.19	0.00	0.00	0.00
8,100.00	90.00	270.00	4,758.00	-1,015.13	-3,426.38	3,544.89	0.00	0.00	0.00
8,200.00	90.00	270.00	4,758.00	-1,015.13	-3,526.38	3,643.59	0.00	0.00	0.00
8,300.00	90.00	270.00	4,758.00	-1,015.12	-3,626.38	3,742.30	0.00	0.00	0.00
8,400.00	90.00	270.00	4,758.00	-1,015.12	-3,726.38	3,841.00	0.00	0.00	0.00
8,500.00	90.00	270.00	4,758.00	-1,015.12	-3,826.38	3,939.70	0.00	0.00	0.00
8,600.00	90.00	270.00	4,758.00	-1,015.12	-3,926.38	4,038.40	0.00	0.00	0.00
8,700.00	90.00	270.00	4,758.00	-1,015.11	-4,026.38	4,137.11	0.00	0.00	0.00
8,800.00	90.00	270.00	4,758.00	-1,015.11	-4,126.38	4,235.81	0.00	0.00	0.00
8,900.00	90.00	270.00	4,758.00	-1,015.11	-4,226.38	4,334.51	0.00	0.00	0.00
9,000.00	90.00	270.00	4,758.00	-1,015.10	-4,326.38	4,433.22	0.00	0.00	0.00
9,100.00	90.00	270.00	4,758.00	-1,015.10	-4,426.38	4,531.92	0.00	0.00	0.00
9,200.00	90.00	270.00	4,758.00	-1,015.10	-4,526.38	4,630.62	0.00	0.00	0.00
9,300.00	90.00	270.00	4,758.00	-1,015.09	-4,626.38	4,729.32	0.00	0.00	0.00
9,400.00	90.00	270.00	4,758.00	-1,015.09	-4,726.38	4,828.03	0.00	0.00	0.00
9,500.00	90.00	270.00	4,758.00	-1,015.09	-4,826.38	4,926.73	0.00	0.00	0.00
9,600.00	90.00	270.00	4,758.00	-1,015.08	-4,926.38	5,025.43	0.00	0.00	0.00
9,700.00	90.00	270.00	4,758.00	-1,015.08	-5,026.38	5,124.14	0.00	0.00	0.00
9,800.00	90.00	270.00	4,758.00	-1,015.08	-5,126.38	5,222.84	0.00	0.00	0.00
9,900.00	90.00	270.00	4,758.00	-1,015.07	-5,226.38	5,321.54	0.00	0.00	0.00
10,000.00	90.00	270.00	4,758.00	-1,015.07	-5,326.38	5,420.25	0.00	0.00	0.00
10,100.00	90.00	270.00	4,758.00	-1,015.07	-5,426.38	5,518.95	0.00	0.00	0.00
10,200.00	90.00	270.00	4,758.00	-1,015.06	-5,526.38	5,617.65	0.00	0.00	0.00
10,300.00	90.00	270.00	4,758.00	-1,015.06	-5,626.38	5,716.35	0.00	0.00	0.00
10,400.00	90.00	270.00	4,758.00	-1,015.06	-5,726.38	5,815.06	0.00	0.00	0.00
10,500.00	90.00	270.00	4,758.00	-1,015.05	-5,826.38	5,913.76	0.00	0.00	0.00
10,600.00	90.00	270.00	4,758.00	-1,015.05	-5,926.38	6,012.46	0.00	0.00	0.00
10,700.00	90.00	270.00	4,758.00	-1,015.05	-6,026.38	6,111.17	0.00	0.00	0.00
10,800.00	90.00	270.00	4,758.00	-1,015.04	-6,126.38	6,209.87	0.00	0.00	0.00
10,900.00	90.00	270.00	4,758.00	-1,015.04	-6,226.38	6,308.57	0.00	0.00	0.00
10,915.00	90.00	270.00	4,758.00	-1,015.04	-6,241.38	6,323.38	0.00	0.00	0.00
4 1/2"									
10,915.59	90.00	270.00	4,758.00	-1,015.04	-6,241.97	6,323.96	0.00	0.00	0.00

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Revised BHL -- Ropco 1	0.00	0.00	4,758.00	-1,015.04	-6,241.97	2,084,879.71	2,577,338.42	36° 43' 42.71 N	108° 19' 50.56 W
- plan hits target									
- Point									

XTO Energy Inc.
Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well Ropco 16-1H
Company:	XTO Energy	TVD Reference:	Rig KB @ 5237.00ft (Unknown Rig)
Project:	San Juan Basin(NAD 83)	MD Reference:	Rig KB @ 5237.00ft (Unknown Rig)
Site:	Ropco 16-1H	North Reference:	True
Well:	Ropco 16-1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Ropco 16-1H		
Design:	Revised Plan		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
500.00	500.00	9 5/8"	9.625	12.250	
5,340.00	4,758.00	7"	7.000	8.750	
10,915.00	4,758.00	4 1/2"	4.500	6.125	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,245.00	2,245.00	Cliffhouse SS		0.00		
3,179.00	3,179.00	Point Lookout SS		0.00		
3,520.00	3,520.00	Mancos Shale		0.00		
4,480.90	4,425.00	Upper Gallup		0.00		
5,166.28	4,748.00	Gallup Mkr 5		0.00		
5,304.82	4,758.00	Target Interval		0.00		



Well Name: Ropco 16-1H

San Juan Division
Drilling Department

Calculation Method: Minimum Curvature
Geodetic Datum: North American Datum 1983
Lat: 36° 43' 52.75 N
Long: 108° 18' 33.88 W



Azimuths to True North
Magnetic North: 10.29°

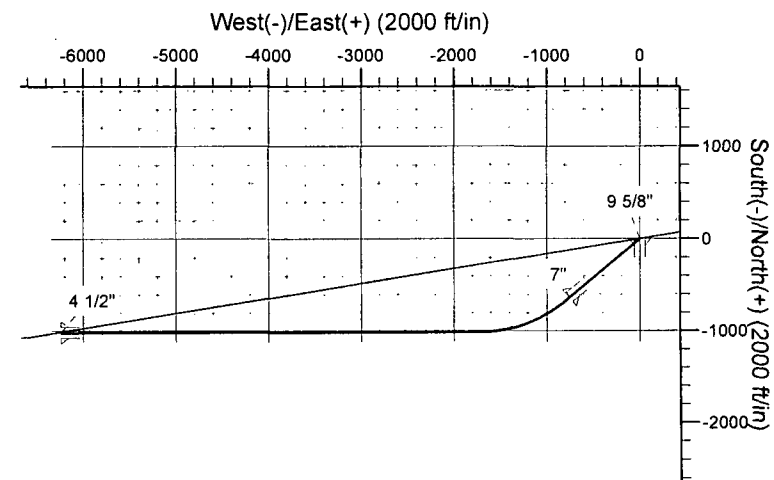
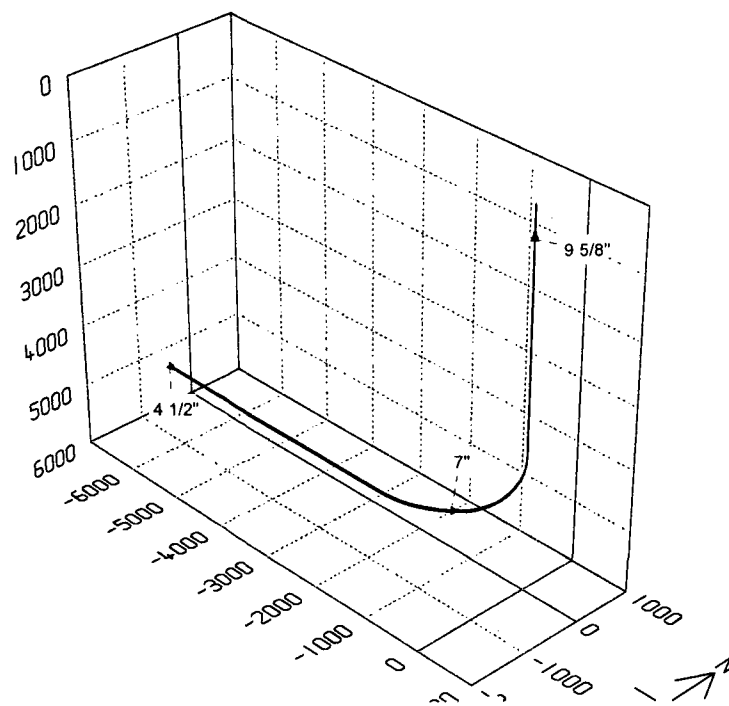
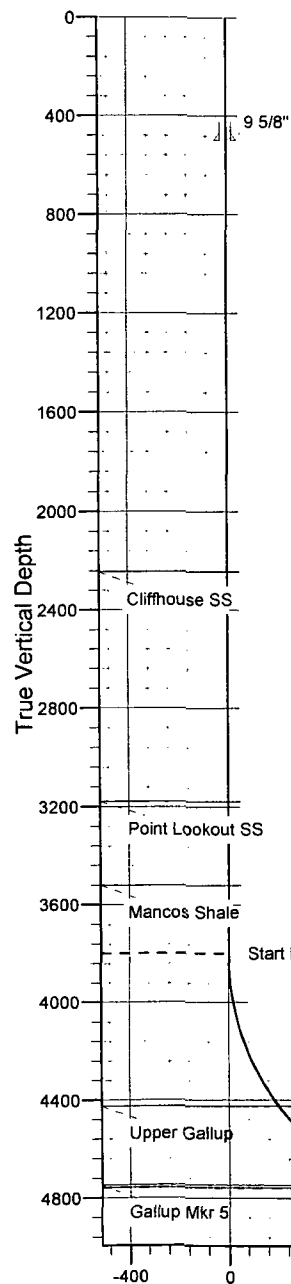
Magnetic Field
Strength: 50838.4snT
Dip Angle: 63.40°
Date: 12/31/2009
Model: IGRF200510

CASING DETAILS

TVD	MD	Name	Size
500.00	500.00	9 5/8"	9.625
4758.00	5340.00	7"	7.000
4758.00	10915.00	4 1/2"	4.500

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	3800.00	0.00	0.00	3800.00	0.00	0.00	0.00	0.00	0.00	
3	5304.82	90.00	230.00	4758.00	-615.79	-733.87	5.98	230.00	823.19	
4	5404.82	90.00	230.00	4758.00	-680.07	-810.48	0.00	0.00	909.12	
5	6404.87	90.00	270.00	4758.00	-1015.19	-1731.25	4.00	90.00	1871.74	Revised BHL -- Ropco 16-1H
6	10915.59	90.00	270.00	4758.00	-1015.04	-6241.97	0.00	0.00	6323.96	Revised BHL -- Ropco 16-1H



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2245.00	2245.00	Cliffhouse SS
3179.00	3179.00	Point Lookout SS
3520.00	3520.00	Mancos Shale
4425.00	4480.90	Upper Gallup
4748.00	5166.28	Gallup Mkr 5
4758.00	5304.82	Target Interval

Vertical Section at 260.76°

4 1/2"

TD at 10915.59