NMOCD Hobbs

Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No. NMNM26395

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.
Other

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No. NMNM135153

2. Name of Operator XTO ENERGY INCORPORATED ✓ Contact: STEPHANIE RABADUE

8. Lease Name and Well No. PERLA NEGRA FED COM 4H ✓

3. Address 500 W ILLINOIS STREET SUITE 100 MIDLAND, TX 79701

3a. Phone No. (include area code) Ph: 432.620.6714

9. API Well No. 30-025-42577-00-S1 ✓

4. Location of Well (Report location clearly and in accordance with Federal requirements)*
At surface NENE 298FNL 485FEL 32.637653 N Lat, 103.506267 W Lon Sec 25 T19S R34E Mer NMP
At top prod interval reported below SWSE 405FSL 468FEL Sec 24 T19S R34E Mer NMP
At total depth NENE 120FNL 344FEL

HOBBS OCD
JAN 25 2016
RECEIVED

10. Field and Pool, or Exploratory LEA

11. Sec., T., R., M., or Block and Survey or Area Sec 25 T19S R34E Mer NMP

12. County or Parish LEA

13. State NM

14. Date Spudded 07/12/2015

15. Date T.D. Reached 08/12/2015

16. Date Completed ☐ D & A ☒ Ready to Prod. 09/11/2015

17. Elevations (DF, KB, RT, GL)* 3780 GL

18. Total Depth: MD 16064 TVD 10860

19. Plug Back T.D.: MD 15890 TVD 10860

20. Depth Bridge Plug Set: MD TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
CBL NEUTRONLOG

22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit analysis)
Directional Survey? ☐ No ☒ Yes (Submit analysis)

23. Casing and Liner Record *(Report all strings set in well)*

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17.500	13.375 J-55	54.5	0	1882		1543		0	0
12.250	9.625 J-55	40.0	0	4048		1051		0	0
8.750	5.500 HCP-110	17.0	0	15984		2745		370	0

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.875	10384	10384						

25. Producing Intervals / 26. Perforation Record

	Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A)	BONE SPRING	8003	11056	11300 TO 15845			
B)							
C)							
D)							

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
11300 TO 15845	FRAC WELL IN 16 STAGES FR/11300-15845' WITH: 3,913,200LBS OTTAWA 20/40 SAND,

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
09/12/2015	09/19/2015	24	→	676.0	432.0	750.0			FLOWS FROM WELL
Choke Size	**Tbg. Press. Flwg. SI**	**Csg. Press.**	**24 Hr. Rate**	**Oil BBL**	**Gas MCF**	**Water BBL**	**Gas:Oil Ratio**	**Well Status**	
24/64			→	676	432	750	643	POW	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	**Tbg. Press. Flwg. SI**	**Csg. Press.**	**24 Hr. Rate**	**Oil BBL**	**Gas MCF**	**Water BBL**	**Gas:Oil Ratio**	**Well Status**	
			→						

ACCEPTED FOR RECORD
JAN 21 2016
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #324849 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

MSB/OCD 2/3/2016

FEB 03 2016

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
			→					

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
			→					

29. Disposition of Gas *(Sold, used for fuel, vented, etc.)*
SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
RUSTLER	0	1811	WATER		
CASTILE	1812	3282	SALT		
YATES	3283	3500			
SEVEN RIVERS	3501	4039			
QUEEN	4040	4739			
DELAWARE	4740	6374			
BRUSHY CANYON	6375	8002			
BONE SPRING	8003	11056			

32. Additional remarks (include plugging procedure):
CBL submitted w/3160-5 sundry

33. Circle enclosed attachments:

1. Electrical/Mechanical Logs (1 full set req'd.)
2. Geologic Report
3. DST Report
4. Directional Survey
5. Sundry Notice for plugging and cement verification
6. Core Analysis
7 Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

Electronic Submission #324849 Verified by the BLM Well Information System.
For XTO ENERGY INCORPORATED, sent to the Hobbs
Committed to AFMSS for processing by LINDA JIMENEZ on 12/01/2015 (16LJ0218SE)

Name *(please print)* STEPHANIE RABADUE Title REGULATORY ANALYST

Signature (Electronic Submission) Date 11/30/2015

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 fradulent statements or representations as to any matter within its jurisdiction.

**** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ****

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
DISTRICT II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
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, New Mexico 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-025-42577	37570	Lea; Bone Spring

Property Code	Property Name	Well Number
39834	PERLA NEGRA FEDERAL COM	4H

OGRID No	Operator Name	Elevation
005380	XTO ENERGY	3780'

Surface Location

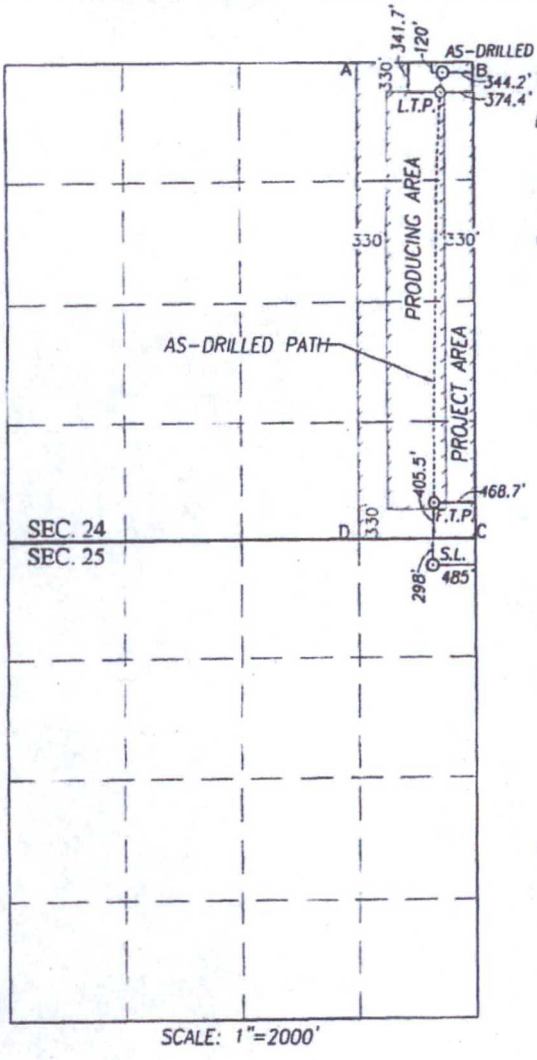
UL or lot No	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	25	19-S	34-E		298	NORTH	485	EAST	LEA

As-Drilled 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
A	24	19-S	34-E		120	NORTH	344.2	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

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



GEODETIC COORDINATES NAD 27 NME
BOTTOM HOLE LOCATION
Y=602142.0 N
X=754691.9 E
LAT.=32.652662° N
LONG.=103.505829° W

GEODETIC COORDINATES NAD 83 NME
BOTTOM HOLE LOCATION
Y=602205.6 N
X=795872.2 E
LAT.=32.652786° N
LONG.=103.506321° W

GEODETIC COORDINATES NAD 27 NME
LAST TAKE POINT
Y=601919.9 N
X=754663.7 E
LAT.=32.652052° N
LONG.=103.505927° W

GEODETIC COORDINATES NAD 83 NME
LAST TAKE POINT
Y=601983.5 N
X=795844.0 E
LAT.=32.652176° N
LONG.=103.506418° W

CORNER COORDINATES TABLE
NAD 27 NME
A - Y=602253.8 N, X=753714.0 E
B - Y=602264.8 N, X=755035.0 E
C - Y=596983.2 N, X=755082.0 E
D - Y=596970.1 N, X=753760.8 E

CORNER COORDINATES TABLE
NAD 83 NME
A - Y=602317.4 N, X=794894.3 E
B - Y=602328.4 N, X=796215.3 E
C - Y=597046.7 N, X=796262.4 E
D - Y=597033.5 N, X=794941.3 E

GEODETIC COORDINATES NAD 27 NME
FIRST TAKE POINT
Y=597384.0 N
X=754609.8 E
LAT.=32.639586° N
LONG.=103.506216° W

GEODETIC COORDINATES NAD 83 NME
FIRST TAKE POINT
Y=597447.4 N
X=795790.3 E
LAT.=32.639710° N
LONG.=103.506708° W

GEODETIC COORDINATES NAD 27 NME
SURFACE LOCATION
Y=596680.4 N
X=754599.7 E
LAT.=32.637653° N
LONG.=103.506267° W

GEODETIC COORDINATES NAD 83 NME
SURFACE LOCATION
Y=596743.9 N
X=795780.2 E
LAT.=32.637776° N
LONG.=103.506758° W

OPERATOR CERTIFICATION

I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Stephanie Rabadue
Signature Date

Stephanie Rabadue
Printed Name

Stephanie_rabadue@xtoenergy.com
E-mail Address

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.

MARCH 18, 2014
Date of Survey

Signature & Seal of Professional Surveyor

Ronald J. Eidson 10/28/2015
Certificate Number Gary G. Eidson 12641
Ronald J. Eidson 3239

ACK. REL. W.O.: 14110290 JWSC W.O.: 13.13.1002

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

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

Form C-104
Revised Feb. 26, 2007

Submit to Appropriate District Office
5 Copies

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

1 Operator name and Address	2 OGRID Number
XTO Energy Inc. 500 W. Illinois St Ste 100 Midland, TX 79701	005380
	3 Reason for Filing Code/Effective Date NW

4 API Number	5 Pool Name	6 Pool Code
30-0 25-42557	Lea; Bone Spring	37570
7 Property Code	**8 Property Name**	**9 Well Number**
39834	Perla Negra Federal Com	4H

II. 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	25	19S	24E		298	North	485	East	Lea

11 Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
A	24	19S	34E		120	North	344.2	East	Lea

12 Lse Code	13 Producing Method Code	14 Gas Connection Date	15 C-129 Permit Number	16 C-129 Effective Date	17 C-129 Expiration Date
	F				

III. Oil and Gas Transporters

18 Transporter OGRID	19 Transporter Name and Address	20 O/G/W
005108	Sentinel Transportation, LLC 4001 E. 42nd Street, Ste 307 Odessa, TX 79762	O
159160	Targa Midstream Services Limited Partnership 1000 Louisiana, Ste 4300 Houston, TX 77002	G

IV. Well Completion Data

21 Spud Date	22 Ready Date	23 TD	24 PBTD	25 Perforations	26 DHC, MC
07/12/2015	09/11/2015	16,064'	15,890'	11,300-15,845'	N/A

27 Hole Size	28 Casing & Tubing Size	29 Depth Set	30 Sacks Cement
17-1/2	13-3/8" 54.5# J-55 BTC	1882'	1543sx, 351sx circ
12-1/4	9-5/8" 40# J-55 LTC	4048'	1051sx, 182sx circ
8-3/4	5-1/2" 17# HCP-110 BTC	15,984'	2745sx, 219sx circ
N/A	2-7/8" L-80	10,384'	N/A

V. Well Test Data

31 Date New Oil	32 Gas Delivery Date	33 Test Date	34 Test Length	35 Tbg. Pressure	36 Csg. Pressure
09/12/2015	09/12/2015	09/19/2015	24hrs		
37 Choke Size	**38 Oil**	**39 Water**	**40 Gas**		**41 Test Method**
	676	720	435		

42 I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.	OIL CONSERVATION DIVISION
Signature: Stephanie Rabadue	Approved by:
Printed name: Stephanie Rabadue	Title:
Title: Regulatory Analyst	Approval Date:
E-mail Address: stephanie_rabadue@xtoenergy.com	
Date: 10/21/2014 Phone: 432-620-6714	

gyrodata

Final PvA & Surveys

Company: XTO Energy Inc.
Field: Lea County, NM (NAD27)
Location: Sec 24, TWN 19-S, RGE 34-E
Well: Perla Negra Federal Com #4H
Original Wellbore
Plan: Design #3 (Perla Negra Federal Com #4H/Original Wellbore)
WELL @ 3807.0usft (Original Well Elev)
Ground Level: 3780.0

gyrodata
Precision Wellbore Placement

WELL DETAILS: Perla Negra Federal Com #4H

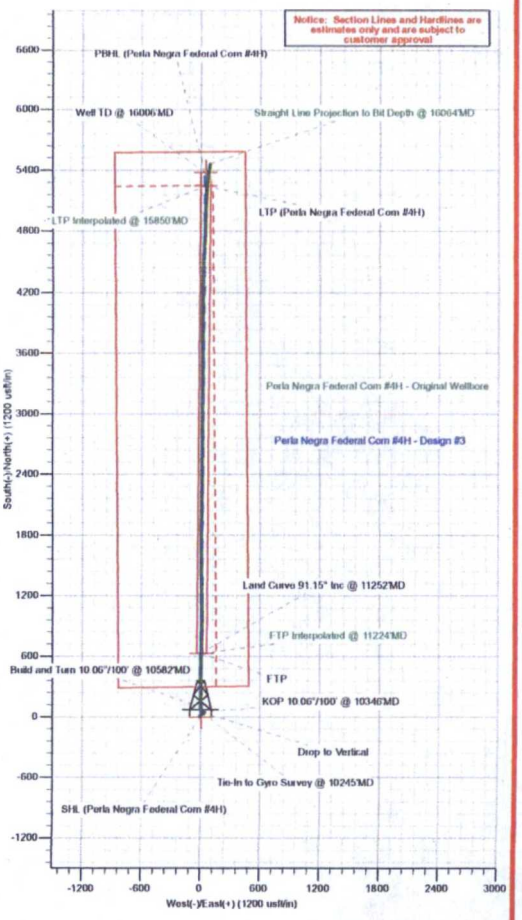
Ground Level: 3780.0
WELL @ 3807.0usft (Original Well Elev)

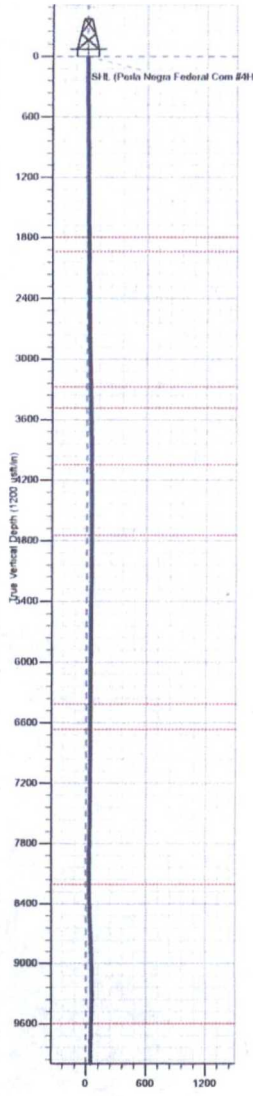
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	596680.40	754599.70	32° 38' 15.549 N	103° 30' 22.562 W	

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
1	10245.0	0.47	244.58	10243.0	47.0	9.9	0.00	0.00	47.1	Tie-In to Gyro Survey @ 10245'MD
2	10292.0	0.00	0.00	10290.0	46.9	9.7	1.00	180.00	47.0	
3	10346.1	0.00	0.00	10344.1	46.9	9.7	0.00	0.00	47.0	KOP 10.06°/100' @ 10346'MD
4	10582.0	23.73	357.71	10573.3	95.0	7.8	10.06	357.71	95.1	Build and Turn 10.06°/100' @ 10582'MD
5	10582.4	23.73	357.71	10573.7	95.2	7.8	0.00	0.00	95.2	Build and Turn 10.06°/100' @ 10582'MD
6	11252.7	91.15	0.40	10914.0	628.0	4.3	10.06	2.91	628.0	Land Curve 91.15° Inc @ 11252'MD
7	16006.9	91.15	0.40	10818.6	5381.1	37.1	0.00	0.00	5381.2	Well TD @ 16006'MD

Notice: Section Lines and Hardlines are estimates only and are subject to customer approval





PROJECT DETAILS: Lea County, NM (NAD27)

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001

System Datum: Mean Sea Level

Azimuths to Grid North
True North: -0.45°
Magnetic North: 6.72°

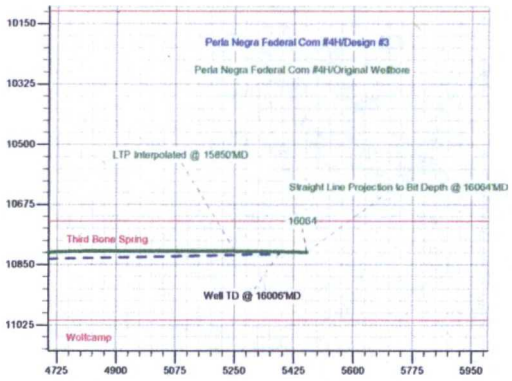
Magnetic Field
Strength: 48305.7snT
Dip Angle: 60.48°
Date: 06/16/2015
Model: IGRF2015

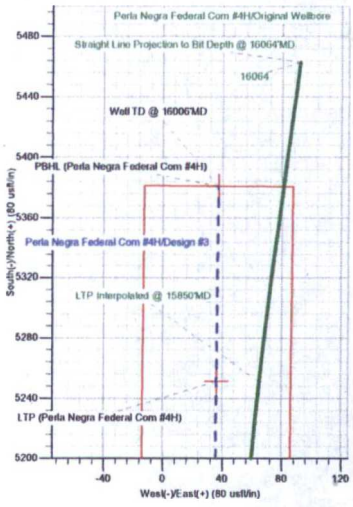
FORMATION TOP DETAILS

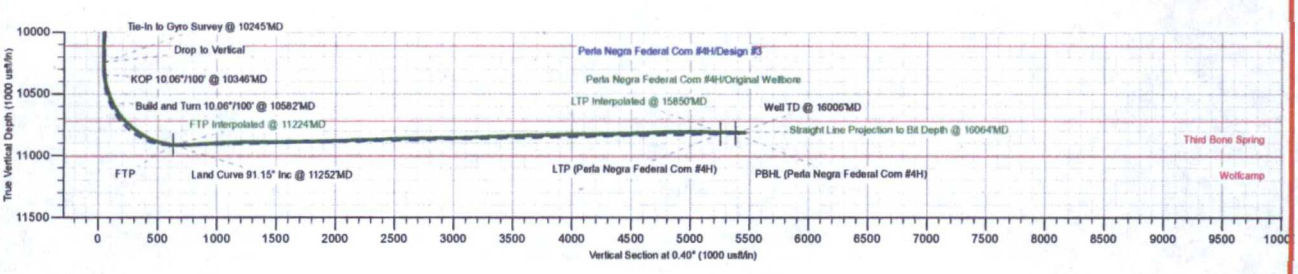
TVDPath	MDPath	Formation
1797.0	1797.1	Rustler
1938.0	1938.1	Top Salt
3277.0	3277.5	Base Salt
3487.0	3487.7	Yates
4047.0	4047.8	Seven Rivers
4747.0	4747.8	Queen
6415.0	6415.8	Delaware
6667.0	6667.8	Brushy Canyon
8207.0	8207.9	Bone Spring
9586.0	9507.8	First Bone Spring
10113.0	10115.0	Second Bone Spring
10724.0	10761.9	Third Bone Spring

ANNOTATIONS

TVD	MD	Annotation
10243.0	10245.0	Tie-In to Gyro Survey @ 10245'MD
10243.0	10245.0	Drop to Vertical
10344.1	10346.1	KOP 10.06°/100' @ 10346'MD
10573.6	10582.4	Build and Turn 10.06°/100' @ 10582'MD
10914.0	11252.7	Land Curve 91.15° Inc @ 11252'MD
10818.6	16006.9	Well TD @ 16006'MD







DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
SHL (Perla Negra Federal Com #4H)	0.0	0.0	0.0	596680.40	754590.70	32° 38' 15.549 N	103° 30' 22.562 W	Point
PBHL (Perla Negra Federal Com #4H)	10818.6	5381.1	37.1	602061.50	754636.80	32° 39' 8.791 N	103° 30' 21.638 W	Point
LTP (Perla Negra Federal Com #4H)	10821.2	5251.1	36.2	601931.50	754635.90	32° 39' 7.504 N	103° 30' 21.660 W	Point
FTP	10914.0	628.0	4.3	597308.40	754604.00	32° 38' 21.763 N	103° 30' 22.454 W	Point

Created By: Zach Lofties Date: 13:45, August 12 2015

XTO Energy Inc.

Lea County, NM (NAD27)
Sec 24, TWN 19-S, RGE 34-E
Perla Negra Federal Com #4H

Original Wellbore

Design: Original Wellbore

Standard Survey Report

12 August, 2015

gyrodata
Precision Wellbore Placement

Gyrodata
Survey Report

gyrodata
Precision Wellbore Placement

Company:	XTO Energy Inc.	**Local Co-ordinate Reference:**	Well Perla Negra Federal Com #4H
Project:	Lea County, NM (NAD27)	**TVD Reference:**	WELL @ 3807.0usft (Original Well Elev)
Site:	Sec 24, TWN 19-S, RGE 34-E	**MD Reference:**	WELL @ 3807.0usft (Original Well Elev)
Well:	Perla Negra Federal Com #4H	**North Reference:**	Grid
Wellbore:	Original Wellbore	**Survey Calculation Method:**	Minimum Curvature
Design:	Original Wellbore	**Database:**	EDM 5000.1 Single User Db

Project Lea County, NM (NAD27)

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site Sec 24, TWN 19-S, RGE 34-E

Site Position:		**Northing:**	596,680.40 usft	**Latitude:**	32° 38' 15.549 N
From:	Map	**Easting:**	754,599.70 usft	**Longitude:**	103° 30' 22.562 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.45 °

Well Perla Negra Federal Com #4H

Well Position	**+N/-S**	0.0 usft	**Northing:**	596,680.40 usft	**Latitude:**	32° 38' 15.549 N
	+E/-W	0.0 usft	**Easting:**	754,599.70 usft	**Longitude:**	103° 30' 22.562 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	0.0 usft	**Ground Level:**	3,780.0 usft

Wellbore Original Wellbore

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	06/16/15	7.17	60.48	48,396

Design Original Wellbore

Audit Notes:

Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	0.40

Survey Program **Date** 08/12/15

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	10,245.0	Gyro Survey #1 (Original Wellbore)	GYRO-NS-CT	XYZ Accel with XY Static and Continuous Gyro
10,298.0	16,064.0	MWD Survey #1 (Original Wellbore)	MWD	MWD - Standard

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.49	19.85	100.0	0.4	0.1	0.4	0.49	0.49	0.00
200.0	0.50	20.66	200.0	1.2	0.4	1.2	0.01	0.01	0.81
300.0	0.49	20.07	300.0	2.0	0.7	2.0	0.01	-0.01	-0.59
400.0	0.49	16.11	400.0	2.8	1.0	2.8	0.03	0.00	-3.96
500.0	0.50	12.83	500.0	3.7	1.2	3.7	0.03	0.01	-3.28
600.0	0.60	356.46	600.0	4.6	1.3	4.6	0.19	0.10	-16.37
700.0	0.61	340.94	700.0	5.6	1.1	5.7	0.16	0.01	-15.52
800.0	0.50	331.05	800.0	6.5	0.7	6.5	0.15	-0.11	-9.89
900.0	0.42	325.76	900.0	7.2	0.3	7.2	0.09	-0.08	-5.29

Company:	XTO Energy Inc.	**Local Co-ordinate Reference:**	Well Perla Negra Federal Com #4H
Project:	Lea County, NM (NAD27)	**TVD Reference:**	WELL @ 3807.0usft (Original Well Elev)
Site:	Sec 24, TWN 19-S, RGE 34-E	**MD Reference:**	WELL @ 3807.0usft (Original Well Elev)
Well:	Perla Negra Federal Com #4H	**North Reference:**	Grid
Wellbore:	Original Wellbore	**Survey Calculation Method:**	Minimum Curvature
Design:	Original Wellbore	**Database:**	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,000.0	0.40	322.08	1,000.0	7.8	-0.1	7.8	0.03	-0.02	-3.68
1,100.0	0.38	321.66	1,100.0	8.3	-0.6	8.3	0.02	-0.02	-0.42
1,200.0	0.32	337.47	1,200.0	8.8	-0.9	8.8	0.11	-0.06	15.81
1,300.0	0.38	337.10	1,300.0	9.4	-1.1	9.4	0.06	0.06	-0.37
1,400.0	0.56	333.74	1,400.0	10.2	-1.5	10.1	0.18	0.18	-3.36
1,500.0	0.84	318.14	1,499.9	11.1	-2.2	11.1	0.34	0.28	-15.60
1,600.0	0.86	318.01	1,599.9	12.2	-3.1	12.2	0.02	0.02	-0.13
1,700.0	0.65	348.68	1,699.9	13.4	-3.8	13.3	0.45	-0.21	30.67
1,800.0	0.62	352.45	1,799.9	14.4	-3.9	14.4	0.05	-0.03	3.77
1,900.0	0.53	5.66	1,899.9	15.4	-4.0	15.4	0.16	-0.09	13.21
2,000.0	0.74	51.01	1,999.9	16.3	-3.4	16.3	0.53	0.21	45.35
2,100.0	0.81	63.13	2,099.9	17.0	-2.3	17.0	0.18	0.07	12.12
2,200.0	0.80	62.92	2,199.9	17.7	-1.0	17.7	0.01	-0.01	-0.21
2,300.0	0.78	64.30	2,299.9	18.3	0.2	18.3	0.03	-0.02	1.38
2,400.0	0.55	59.84	2,399.9	18.8	1.2	18.8	0.24	-0.23	-4.46
2,500.0	0.44	42.81	2,499.9	19.3	1.9	19.4	0.18	-0.11	-17.03
2,600.0	0.40	20.81	2,599.9	20.0	2.3	20.0	0.17	-0.04	-22.00
2,700.0	0.55	7.76	2,699.9	20.8	2.5	20.8	0.18	0.15	-13.05
2,800.0	1.02	26.77	2,799.9	22.0	2.9	22.0	0.53	0.47	19.01
2,900.0	1.94	49.03	2,899.8	23.9	4.6	24.0	1.07	0.92	22.26
3,000.0	2.37	54.42	2,999.8	26.2	7.6	26.3	0.47	0.43	5.39
3,100.0	2.60	55.80	3,099.7	28.7	11.1	28.8	0.24	0.23	1.38
3,200.0	2.65	55.65	3,199.6	31.3	14.9	31.4	0.05	0.05	-0.15
3,300.0	2.62	55.33	3,299.4	33.9	18.7	34.0	0.03	-0.03	-0.32
3,400.0	1.96	54.50	3,399.4	36.2	22.0	36.3	0.66	-0.66	-0.83
3,500.0	1.54	55.14	3,499.3	38.0	24.5	38.1	0.42	-0.42	0.64
3,600.0	1.10	55.46	3,599.3	39.3	26.4	39.5	0.44	-0.44	0.32
3,700.0	0.95	49.49	3,699.3	40.4	27.8	40.5	0.18	-0.15	-5.97
3,800.0	0.96	49.84	3,799.3	41.4	29.1	41.6	0.01	0.01	0.35
3,900.0	0.96	52.25	3,899.2	42.5	30.4	42.7	0.04	0.00	2.41
4,000.0	0.81	51.05	3,999.2	43.4	31.6	43.7	0.15	-0.15	-1.20
4,100.0	0.54	58.15	4,099.2	44.1	32.5	44.4	0.28	-0.27	7.10
4,200.0	0.47	63.10	4,199.2	44.6	33.3	44.8	0.08	-0.07	4.95
4,300.0	0.38	67.21	4,299.2	44.9	34.0	45.1	0.09	-0.09	4.11
4,400.0	0.21	77.52	4,399.2	45.1	34.4	45.3	0.18	-0.17	10.31
4,500.0	0.16	86.03	4,499.2	45.1	34.8	45.3	0.06	-0.05	8.51
4,600.0	0.12	98.79	4,599.2	45.1	35.0	45.3	0.05	-0.04	12.76
4,700.0	0.11	105.63	4,699.2	45.1	35.2	45.3	0.02	-0.01	6.84
4,800.0	0.16	135.52	4,799.2	44.9	35.4	45.2	0.08	0.05	29.89
4,900.0	0.21	146.32	4,899.2	44.7	35.6	44.9	0.06	0.05	10.80
5,000.0	0.20	145.89	4,999.2	44.4	35.8	44.6	0.01	-0.01	-0.43
5,100.0	0.18	164.36	5,099.2	44.1	35.9	44.3	0.06	-0.02	18.47
5,200.0	0.24	184.29	5,199.2	43.7	36.0	44.0	0.09	0.06	19.93

Company:	XTO Energy Inc.	**Local Co-ordinate Reference:**	Well Perla Negra Federal Com #4H
Project:	Lea County, NM (NAD27)	**TVD Reference:**	WELL @ 3807.0usft (Original Well Elev)
Site:	Sec 24, TWN 19-S, RGE 34-E	**MD Reference:**	WELL @ 3807.0usft (Original Well Elev)
Well:	Perla Negra Federal Com #4H	**North Reference:**	Grid
Wellbore:	Original Wellbore	**Survey Calculation Method:**	Minimum Curvature
Design:	Original Wellbore	**Database:**	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,300.0	0.25	189.80	5,299.2	43.3	35.9	43.5	0.03	0.01	5.51
5,400.0	0.25	193.12	5,399.2	42.9	35.8	43.1	0.01	0.00	3.32
5,500.0	0.25	193.60	5,499.2	42.4	35.7	42.7	0.00	0.00	0.48
5,600.0	0.21	197.20	5,599.2	42.1	35.6	42.3	0.04	-0.04	3.60
5,700.0	0.14	187.67	5,699.2	41.8	35.5	42.0	0.08	-0.07	-9.53
5,800.0	0.09	94.60	5,799.2	41.6	35.6	41.9	0.17	-0.05	-93.07
5,900.0	0.12	79.56	5,899.2	41.7	35.8	41.9	0.04	0.03	-15.04
6,000.0	0.11	88.69	5,999.2	41.7	36.0	41.9	0.02	-0.01	9.13
6,100.0	0.07	124.30	6,099.2	41.6	36.1	41.9	0.07	-0.04	35.61
6,200.0	0.26	197.46	6,199.2	41.4	36.1	41.6	0.25	0.19	73.16
6,300.0	0.63	212.05	6,299.2	40.7	35.8	41.0	0.38	0.37	14.59
6,400.0	0.79	214.58	6,399.2	39.7	35.1	39.9	0.16	0.16	2.53
6,500.0	0.76	219.46	6,499.2	38.6	34.3	38.8	0.07	-0.03	4.88
6,600.0	0.40	259.08	6,599.2	38.0	33.5	38.2	0.52	-0.36	39.62
6,700.0	0.36	274.77	6,699.2	38.0	32.8	38.2	0.11	-0.04	15.69
6,800.0	0.33	278.80	6,799.2	38.0	32.2	38.3	0.04	-0.03	4.03
6,900.0	0.14	277.57	6,899.2	38.1	31.8	38.3	0.19	-0.19	-1.23
7,000.0	0.11	218.38	6,999.2	38.0	31.7	38.3	0.13	-0.03	-59.19
7,100.0	0.19	177.25	7,099.2	37.8	31.6	38.0	0.13	0.08	-41.13
7,200.0	0.25	183.61	7,199.2	37.4	31.6	37.6	0.06	0.06	6.36
7,300.0	0.38	213.48	7,299.2	36.9	31.4	37.1	0.21	0.13	29.87
7,400.0	0.57	220.65	7,399.2	36.3	30.9	36.5	0.20	0.19	7.17
7,500.0	0.79	218.91	7,499.2	35.4	30.1	35.6	0.22	0.22	-1.74
7,600.0	0.79	219.21	7,599.2	34.3	29.3	34.5	0.00	0.00	0.30
7,700.0	0.74	221.13	7,699.2	33.3	28.4	33.5	0.06	-0.05	1.92
7,800.0	0.74	224.44	7,799.1	32.3	27.5	32.5	0.04	0.00	3.31
7,900.0	0.73	223.01	7,899.1	31.4	26.6	31.6	0.02	-0.01	-1.43
8,000.0	0.77	220.10	7,999.1	30.4	25.8	30.6	0.06	0.04	-2.91
8,100.0	0.71	222.87	8,099.1	29.4	24.9	29.6	0.07	-0.06	2.77
8,200.0	0.18	223.27	8,199.1	28.9	24.4	29.0	0.53	-0.53	0.40
8,300.0	1.20	48.17	8,299.1	29.5	25.1	29.6	1.38	1.02	-175.10
8,400.0	1.80	43.11	8,399.1	31.3	26.9	31.5	0.61	0.60	-5.06
8,500.0	2.48	39.04	8,499.0	34.1	29.4	34.3	0.70	0.68	-4.07
8,600.0	3.10	37.13	8,598.9	38.0	32.4	38.2	0.63	0.62	-1.91
8,700.0	3.72	31.71	8,698.7	42.9	35.7	43.1	0.70	0.62	-5.42
8,800.0	3.17	3.11	8,798.5	48.4	37.5	48.7	1.78	-0.55	-28.60
8,900.0	1.91	359.15	8,898.4	52.8	37.7	53.1	1.27	-1.26	-3.96
9,000.0	0.54	8.18	8,998.4	55.0	37.7	55.2	1.38	-1.37	9.03
9,100.0	0.42	285.26	9,098.4	55.5	37.4	55.8	0.64	-0.12	-82.92
9,200.0	0.80	253.31	9,198.4	55.4	36.4	55.7	0.50	0.38	-31.95
9,300.0	1.10	252.70	9,298.4	54.9	34.8	55.2	0.30	0.30	-0.61
9,400.0	2.00	257.13	9,398.3	54.3	32.2	54.5	0.91	0.90	4.43
9,500.0	2.37	252.26	9,498.3	53.2	28.5	53.4	0.41	0.37	-4.87

Company:	XTO Energy Inc.	**Local Co-ordinate Reference:**	Well Perla Negra Federal Com #4H
Project:	Lea County, NM (NAD27)	**TVD Reference:**	WELL @ 3807.0usft (Original Well Elev)
Site:	Sec 24, TWN 19-S, RGE 34-E	**MD Reference:**	WELL @ 3807.0usft (Original Well Elev)
Well:	Perla Negra Federal Com #4H	**North Reference:**	Grid
Wellbore:	Original Wellbore	**Survey Calculation Method:**	Minimum Curvature
Design:	Original Wellbore	**Database:**	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,600.0	2.39	245.79	9,598.2	51.8	24.7	51.9	0.27	0.02	-6.47
9,700.0	2.33	250.99	9,698.1	50.2	20.8	50.4	0.22	-0.06	5.20
9,800.0	1.82	256.19	9,798.0	49.2	17.4	49.3	0.54	-0.51	5.20
9,900.0	1.37	258.19	9,898.0	48.6	14.7	48.7	0.45	-0.45	2.00
10,000.0	1.11	262.08	9,998.0	48.2	12.5	48.3	0.27	-0.26	3.89
10,100.0	0.64	234.06	10,098.0	47.7	11.1	47.8	0.62	-0.47	-28.02
10,200.0	0.55	240.88	10,198.0	47.2	10.2	47.2	0.11	-0.09	6.82
10,245.0	0.47	244.58	10,243.0	47.0	9.9	47.1	0.19	-0.18	8.22
10,298.0	1.06	310.22	10,296.0	47.2	9.3	47.3	1.82	1.11	123.85
10,329.0	3.38	336.41	10,326.9	48.2	8.7	48.3	7.98	7.48	84.48
10,361.0	6.52	344.00	10,358.8	50.9	7.9	50.9	10.00	9.81	23.72
10,392.0	10.13	347.18	10,389.5	55.2	6.8	55.2	11.74	11.65	10.26
10,424.0	13.47	349.23	10,420.8	61.6	5.4	61.6	10.52	10.44	6.41
10,455.0	16.76	353.15	10,450.7	69.6	4.2	69.6	11.11	10.61	12.65
10,487.0	19.56	356.15	10,481.1	79.5	3.3	79.5	9.22	8.75	9.38
10,518.0	21.87	357.81	10,510.1	90.5	2.8	90.5	7.69	7.45	5.35
10,550.0	24.34	358.55	10,539.5	103.0	2.4	103.0	7.77	7.72	2.31
10,581.0	26.98	359.09	10,567.5	116.4	2.1	116.5	8.55	8.52	1.74
10,612.0	29.10	358.20	10,594.8	131.0	1.7	131.0	6.97	6.84	-2.87
10,644.0	31.40	359.17	10,622.5	147.1	1.4	147.1	7.35	7.19	3.03
10,675.0	34.83	359.98	10,648.4	164.1	1.3	164.1	11.16	11.06	2.61
10,707.0	38.77	0.79	10,674.1	183.2	1.4	183.2	12.41	12.31	2.53
10,738.0	42.92	0.43	10,697.5	203.5	1.6	203.5	13.41	13.39	-1.16
10,770.0	46.05	0.29	10,720.3	225.9	1.7	225.9	9.79	9.78	-0.44
10,801.0	48.13	359.52	10,741.4	248.6	1.7	248.6	6.95	6.71	-2.48
10,833.0	49.93	359.25	10,762.4	272.8	1.4	272.8	5.66	5.63	-0.84
10,864.0	52.33	359.71	10,781.9	296.9	1.2	296.9	7.83	7.74	1.48
10,896.0	55.42	0.07	10,800.7	322.8	1.2	322.8	9.70	9.66	1.13
10,927.0	59.07	0.18	10,817.5	348.8	1.2	348.8	11.78	11.77	0.35
10,959.0	61.77	0.78	10,833.3	376.6	1.5	376.6	8.59	8.44	1.88
10,990.0	63.27	0.66	10,847.6	404.1	1.8	404.1	4.85	4.84	-0.39
11,022.0	65.70	1.38	10,861.4	433.0	2.3	433.0	7.86	7.59	2.25
11,053.0	69.42	1.31	10,873.2	461.7	3.0	461.7	12.00	12.00	-0.23
11,085.0	72.79	1.31	10,883.6	491.9	3.7	491.9	10.53	10.53	0.00
11,116.0	75.20	1.15	10,892.1	521.7	4.3	521.7	7.79	7.77	-0.52
11,148.0	77.25	1.55	10,899.8	552.8	5.1	552.8	6.52	6.41	1.25
11,179.0	80.65	1.99	10,905.7	583.2	6.0	583.2	11.06	10.97	1.42
11,210.0	84.31	2.34	10,909.7	613.9	7.2	613.9	11.86	11.81	1.13
11,224.2	85.46	2.18	10,911.0	628.0	7.7	628.1	8.18	8.10	-1.13
FTP Interpolated @ 11224'MD									
11,242.0	86.90	1.97	10,912.2	645.8	8.4	645.8	8.18	8.09	-1.18
11,273.0	89.51	2.14	10,913.2	676.7	9.5	676.8	8.44	8.42	0.55
11,368.0	92.93	0.52	10,911.1	771.7	11.7	771.7	3.98	3.60	-1.71
11,431.0	92.93	0.35	10,907.9	834.6	12.2	834.6	0.27	0.00	-0.27

Company:	XTO Energy Inc.	**Local Co-ordinate Reference:**	Well Perla Negra Federal Com #4H
Project:	Lea County, NM (NAD27)	**TVD Reference:**	WELL @ 3807.0usft (Original Well Elev)
Site:	Sec 24, TWN 19-S, RGE 34-E	**MD Reference:**	WELL @ 3807.0usft (Original Well Elev)
Well:	Perla Negra Federal Com #4H	**North Reference:**	Grid
Wellbore:	Original Wellbore	**Survey Calculation Method:**	Minimum Curvature
Design:	Original Wellbore	**Database:**	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,462.0	92.60	359.87	10,906.4	865.5	12.2	865.6	1.88	-1.06	-1.55
11,557.0	92.93	359.57	10,901.9	960.4	11.8	960.5	0.47	0.35	-0.32
11,651.0	93.27	359.56	10,896.8	1,054.3	11.0	1,054.3	0.36	0.36	-0.01
11,745.0	91.47	359.27	10,892.9	1,148.2	10.1	1,148.2	1.94	-1.91	-0.31
11,840.0	90.94	358.95	10,890.9	1,243.2	8.6	1,243.2	0.65	-0.56	-0.34
11,934.0	90.77	359.18	10,889.5	1,337.1	7.1	1,337.2	0.30	-0.18	0.24
12,028.0	90.13	359.55	10,888.7	1,431.1	6.0	1,431.1	0.79	-0.68	0.39
12,123.0	91.19	359.88	10,887.6	1,526.1	5.6	1,526.1	1.17	1.12	0.35
12,217.0	89.93	0.20	10,886.7	1,620.1	5.6	1,620.1	1.38	-1.34	0.34
12,311.0	91.19	0.20	10,885.8	1,714.1	6.0	1,714.1	1.34	1.34	0.00
12,406.0	90.44	0.93	10,884.5	1,809.1	6.9	1,809.1	1.10	-0.79	0.77
12,500.0	90.88	0.90	10,883.4	1,903.1	8.4	1,903.1	0.47	0.47	-0.03
12,594.0	92.57	0.65	10,880.5	1,997.0	9.7	1,997.0	1.82	1.80	-0.27
12,689.0	91.75	0.68	10,877.0	2,092.0	10.8	2,092.0	0.86	-0.86	0.03
12,783.0	92.40	0.70	10,873.6	2,185.9	11.9	2,185.9	0.69	0.69	0.02
12,878.0	91.70	0.42	10,870.2	2,280.8	12.8	2,280.9	0.79	-0.74	-0.29
12,972.0	92.12	359.84	10,867.0	2,374.8	13.0	2,374.8	0.76	0.45	-0.62
13,066.0	90.63	0.21	10,864.8	2,468.7	13.1	2,468.8	1.63	-1.59	0.39
13,161.0	90.94	0.61	10,863.5	2,563.7	13.8	2,563.8	0.53	0.33	0.42
13,255.0	92.34	0.19	10,860.8	2,657.7	14.4	2,657.7	1.55	1.49	-0.45
13,350.0	90.66	0.57	10,858.3	2,752.6	15.0	2,752.7	1.81	-1.77	0.40
13,444.0	91.36	0.73	10,856.6	2,846.6	16.1	2,846.7	0.76	0.74	0.17
13,538.0	90.49	0.69	10,855.1	2,940.6	17.3	2,940.7	0.93	-0.93	-0.04
13,633.0	90.29	0.30	10,854.5	3,035.6	18.1	3,035.6	0.46	-0.21	-0.41
13,727.0	91.19	0.04	10,853.3	3,129.6	18.4	3,129.6	1.00	0.96	-0.28
13,822.0	92.99	359.88	10,849.8	3,224.5	18.3	3,224.6	1.90	1.89	-0.17
13,916.0	91.98	0.36	10,845.7	3,318.4	18.5	3,318.5	1.19	-1.07	0.51
14,010.0	92.29	0.19	10,842.2	3,412.4	19.0	3,412.4	0.38	0.33	-0.18
14,104.0	91.61	0.15	10,839.0	3,506.3	19.2	3,506.4	0.72	-0.72	-0.04
14,198.0	91.73	0.25	10,836.3	3,600.3	19.6	3,600.3	0.17	0.13	0.11
14,293.0	90.52	359.95	10,834.4	3,695.2	19.7	3,695.3	1.31	-1.27	-0.32
14,387.0	91.02	359.77	10,833.2	3,789.2	19.5	3,789.3	0.57	0.53	-0.19
14,481.0	92.54	359.20	10,830.2	3,883.2	18.7	3,883.2	1.73	1.62	-0.61
14,576.0	91.25	359.86	10,827.1	3,978.1	17.9	3,978.2	1.53	-1.36	0.69
14,670.0	89.90	0.47	10,826.1	4,072.1	18.2	4,072.1	1.58	-1.44	0.65
14,765.0	90.07	0.56	10,826.2	4,167.1	19.0	4,167.1	0.20	0.18	0.09
14,859.0	91.81	0.83	10,824.6	4,261.1	20.1	4,261.1	1.87	1.85	0.29
14,953.0	90.27	1.56	10,822.9	4,355.1	22.1	4,355.1	1.81	-1.64	0.78
15,048.0	90.72	2.00	10,822.1	4,450.0	25.1	4,450.1	0.66	0.47	0.46
15,142.0	91.75	2.70	10,820.1	4,543.9	28.9	4,544.0	1.32	1.10	0.74
15,236.0	92.40	2.98	10,816.7	4,637.7	33.6	4,637.8	0.75	0.69	0.30
15,331.0	92.20	2.55	10,812.9	4,732.5	38.1	4,732.7	0.50	-0.21	-0.45
15,425.0	90.63	1.00	10,810.5	4,826.5	41.1	4,826.6	2.35	-1.67	-1.65

Gyrodata
Survey Report

gyrodata
Precision Wellbore Placement

Company:	XTO Energy Inc.	**Local Co-ordinate Reference:**	Well Perla Negra Federal Com #4H
Project:	Lea County, NM (NAD27)	**TVD Reference:**	WELL @ 3807.0usft (Original Well Elev)
Site:	Sec 24, TWN 19-S, RGE 34-E	**MD Reference:**	WELL @ 3807.0usft (Original Well Elev)
Well:	Perla Negra Federal Com #4H	**North Reference:**	Grid
Wellbore:	Original Wellbore	**Survey Calculation Method:**	Minimum Curvature
Design:	Original Wellbore	**Database:**	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,519.0	89.96	1.50	10,810.1	4,920.4	43.1	4,920.6	0.89	-0.71	0.53
15,614.0	90.13	2.73	10,810.0	5,015.4	46.6	5,015.6	1.31	0.18	1.29
15,708.0	89.99	4.15	10,809.9	5,109.2	52.2	5,109.4	1.52	-0.15	1.51
15,802.0	89.73	5.36	10,810.1	5,202.9	60.0	5,203.2	1.32	-0.28	1.29
15,850.3	89.44	6.21	10,810.5	5,250.9	64.9	5,251.2	1.86	-0.60	1.76
LTP Interpolated @ 15850'MD									
15,896.0	89.17	7.01	10,811.0	5,296.3	70.2	5,296.7	1.85	-0.59	1.75
15,932.0	88.84	7.55	10,811.6	5,332.0	74.7	5,332.4	1.76	-0.92	1.50
16,064.0	88.84	7.55	10,814.3	5,462.8	92.1	5,463.3	0.00	0.00	0.00
Straight Line Projection to Bit Depth @ 16064'MD									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
11,224.2	10,911.0	628.0	7.7	FTP Interpolated @ 11224'MD
15,850.3	10,810.5	5,250.9	64.9	LTP Interpolated @ 15850'MD
16,064.0	10,814.3	5,462.8	92.1	Straight Line Projection to Bit Depth @ 16064'MD

Checked By: _____ Approved By: _____ Date: _____