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Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-101
August 1, 2011

Permit 272634

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

1. Operator Name and Address		2. OGRID Number
XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707		5380 3. API Number 30-015-46334
4. Property Code 325754	5. Property Name LOS MEDANOS 36 23 30 STATE	6. Well No. 708H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
O	36	23S	30E		348	S	1931	E	Eddy

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
A	36	23S	30E	A	50	N	330	E	Eddy

9. Pool Information

WILDCAT; BONE SPRING	97944

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	OIL		State	3401
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	15135	2nd Bone Spring Sand		11/15/2019
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ **We will be using a closed-loop system in lieu of lined pits**

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	20	16	64	550	545	0
Int1	14.75	11.75	42	3900	1484	0
Int2	10.875	8.625	32	9540	1511	0
Prod	7.875	5.5	17	15135	703	9040

Casing/Cement Program: Additional Comments

DV tool may be set in 2nd intermediate between 3950-4300'.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	5000	Cameron

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. **I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒, if applicable.** Signature:		**OIL CONSERVATION DIVISION**		
Printed Name:	Electronically filed by Deeann Kemp	Approved By:	Raymond Podany	
Title:	Regulatory	Title:	Geologist	
Email Address:	DeeAnn_Kemp@xtoenergy.com	Approved Date:	10/4/2019	Expiration Date: 10/4/2021
Date:	9/24/2019 Phone: 432-620-6724	Conditions of Approval Attached		

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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	[2] Pool Code	[3] Pool Name
30-015-	97944	Wildcat; Bone Spring

[4] Property Code	[5] Property Name	[6] Well Number
325754	LOS MEDANOS 36 23 30 STATE	708H

[7] OGRID No.	[8] Operator Name	[9] Elevation
005380	XTO Energy, Inc.	3,401'

[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
O	36	23 S	30 E		348	SOUTH	1,931	EAST	EDDY

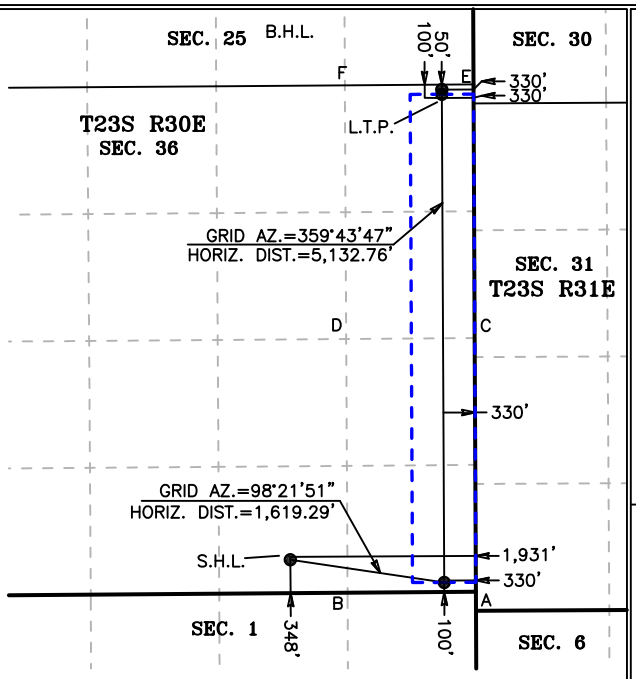
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	36	23 S	30 E		50	NORTH	330	EAST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] 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.

[16]



CORNER COORDINATES TABLE
NAD 27 NME
A – Y= 456,522.0 N, X= 657,097.8 E
B – Y= 456,511.6 N, X= 655,761.5 E
C – Y= 459,163.7 N, X= 657,084.7 E
D – Y= 459,153.7 N, X= 655,746.9 E
E – Y= 461,804.3 N, X= 657,073.0 E
F – Y= 461,794.7 N, X= 655,732.9 E

CORNER COORDINATES TABLE
NAD 83 NME
A – Y= 456,581.1 N, X= 698,281.2 E
B – Y= 456,570.7 N, X= 696,944.9 E
C – Y= 459,222.9 N, X= 698,268.0 E
D – Y= 459,212.9 N, X= 696,930.2 E
E – Y= 461,863.6 N, X= 698,256.2 E
F – Y= 461,854.0 N, X= 696,916.1 E

GEODETIC COORDINATES
SURFACE LOCATION
NAD 83 NME
Y= 456,914.1
X= 696,348.6
LAT.= 32.255137°N
LONG.= 103.831887°W

LAST TAKE POINT
NAD 83 NME
Y= 461,761.2
X= 697,926.7
LAT.= 32.268440°N
LONG.= 103.826709°W

GEODETIC COORDINATES
SURFACE LOCATION
NAD 27 NME
Y= 456,854.9
X= 655,165.2
LAT.= 32.255014°N
LONG.= 103.831400°W

LAST TAKE POINT
NAD 27 NME
Y= 461,701.9
X= 656,743.5
LAT.= 32.268317°N
LONG.= 103.826221°W

FIRST TAKE POINT
NAD 83 NME
Y= 456,678.5
X= 697,950.7
LAT.= 32.254469°N
LONG.= 103.826709°W

BOTTOM HOLE LOCATION
NAD 83 NME
Y= 461,811.2
X= 697,926.5
LAT.= 32.268578°N
LONG.= 103.826709°W

FIRST TAKE POINT
NAD 27 NME
Y= 456,619.4
X= 656,767.3
LAT.= 32.254346°N
LONG.= 103.826222°W

BOTTOM HOLE LOCATION
NAD 27 NME
Y= 461,751.9
X= 656,743.3
LAT.= 32.268455°N
LONG.= 103.826221°W

[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.

Stephanie Rabadue 09/13/2019
Signature Date

Stephanie Rabadue
Printed Name

stephanie_rabadue@xtoenergy.com
E-mail Address

[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.

09-13-2019
Date of Survey

Signatue and Seal of Professional Surveyor:

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

MARK DILLON HARP 23786
Certificate Number AW 2018020802

P:\PROJECTS\2018\2018020802-XTO-LOS_MEDANOS_36_23_30_708H-EDDY_CO\DWG\2018020802-XTO-LOS_MEDANOS_36_23_30_708H_C-102.dwg

Intent [X] As Drilled [ ]

API #

Operator Name:	Property Name:	Well Number
XTO ENERGY, INC	LOS MEDANOS 36 23 30 STATE	708H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
O	36	23S	30E		348'	SOUTH	1931'	EAST	EDDY

Latitude	Longitude	NAD
32.255137	-103.831887	83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
P	36	23S	30E		100'	SOUTH	330'	EAST	EDDY

Latitude	Longitude	NAD
32.254469	-103.826709	83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
A	36	23S	30E		100'	NORTH	330'	EAST	EDDY

Latitude	Longitude	NAD
32.268440	-103.826709	83

Is this well the defining well for the Horizontal Spacing Unit? [N]

Is this well an infill well? [Y]

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #

Operator Name:	Property Name:	Well Number
XTO ENERGY INC	LOS MEDANOS 36 23 30 STATE	708H

KZ 06/29/2018

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

GAS CAPTURE PLAN

Date: 10/4/2019

☒ Original

☐ Amended - Reason for Amendment:

Operator & OGRID No.: [5380] XTO ENERGY, INC

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
LOS MEDANOS 36 23 30 STATE #708H	30-015-46334	O-36-23S-30E	0348S 1931E	1	Flared	Keystone Plant located in Sec. 5, BLK B2, PSL Survey, Winkler, TX. GCP attached

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to ETC Texas Pipeline, Ltd. and will be connected to ETC Texas Pipeline, Ltd. Low Pressure gathering system located in Eddy County, New Mexico. It will require 1306' of pipeline to connect the facility to Low Pressure gathering system. XTO ENERGY, INC provides (periodically) to ETC Texas Pipeline, Ltd. a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, XTO ENERGY, INC and ETC Texas Pipeline, Ltd. have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at ETC Texas Pipeline, Ltd. Processing Plant located in Sec. 05, Twn. 01N, Rng. 01W, Eddy County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on ETC Texas Pipeline, Ltd. system at that time. Based on current information, it is XTO ENERGY, INC's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
  - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
  - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
  - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

PERMIT COMMENTS

Operator Name and Address:	API Number:
XTO ENERGY, INC [5380] 6401 Holiday Hill Road Midland, TX 79707	30-015-46334
	Well: LOS MEDANOS 36 23 30 STATE #708H

Created By	Comment	Comment Date
kkardos	This well is located on an approved drill island and will comply with the stipulations outlined in the 2012 SOPA. XTO requests the option to batch drill the pad.	9/24/2019

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Energy, Minerals and Natural Resources
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1220 S. St Francis Dr.
Santa Fe, NM 87505

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
XTO ENERGY, INC [5380] 6401 Holiday Hill Road Midland, TX 79707	30-015-46334
	Well: LOS MEDANOS 36 23 30 STATE #708H

OCD Reviewer	Condition
rpodany	Will require a directional survey with the C-104
rpodany	Cement is required to circulate on both surface and intermediate1 strings of casing

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State of New Mexico
Energy, Minerals and Natural Resources Department

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

Submit Original
to Appropriate
District Office

GAS CAPTURE PLAN

Date:09/24/19

☒ Original Operator & OGRID No.: XTO ENERGY, INC. [005380]

☐ Amended - Reason for Amendment:

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Los Medanos CTB

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location	Footages	Expected MCF/D	Flared or Vented	Comments
Los Medanos 36-23-30 State 707H		O-36-23S-30E	378'FSL & 1931'FEL	0.7 MMCFD	Flared/Sold	
Los Medanos 36-23-30 State 708H		O-36-23S-30E	348'FSL & 1931'FEL	0.7 MMCFD	Flared/Sold	

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to ETC and will be connected to ETC low/high pressure gathering system located in Lea County, New Mexico. It will require 1306' of pipeline to connect the facility to low/high pressure gathering system. XTO provides (periodically) to ETC a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, XTO and ETC have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at Keystone Plant located in Sec. 5, BLK B2, PSL Survey, Winkler, TX. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on ETC's system at that time. Based on current information, it is XTO's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
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- Compressed Natural Gas – On lease
  - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
  - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

XTO Energy

Project: Eddy County, NM (NAD27) NMEZ Grid
Site: Los Medanos 36-23-30 State
Well: LM 36 23 30 State 708H
Wellbore: 708H Lateral
Design: Plan #3

3401+18 @ 3419.00usft (Prec525)
NAD 1927 (NADCON CONUS)

To convert a Magnetic Direction to a True Direction, Add 6.83° East
To convert a Magnetic Direction to a Grid Direction, Add 6.57°
Magnetic North is 6.83° East of True North (Magnetic Declination)
Magnetic North is 6.57° East of Grid North (Magnetic Convergence)

SECTION DETAILS

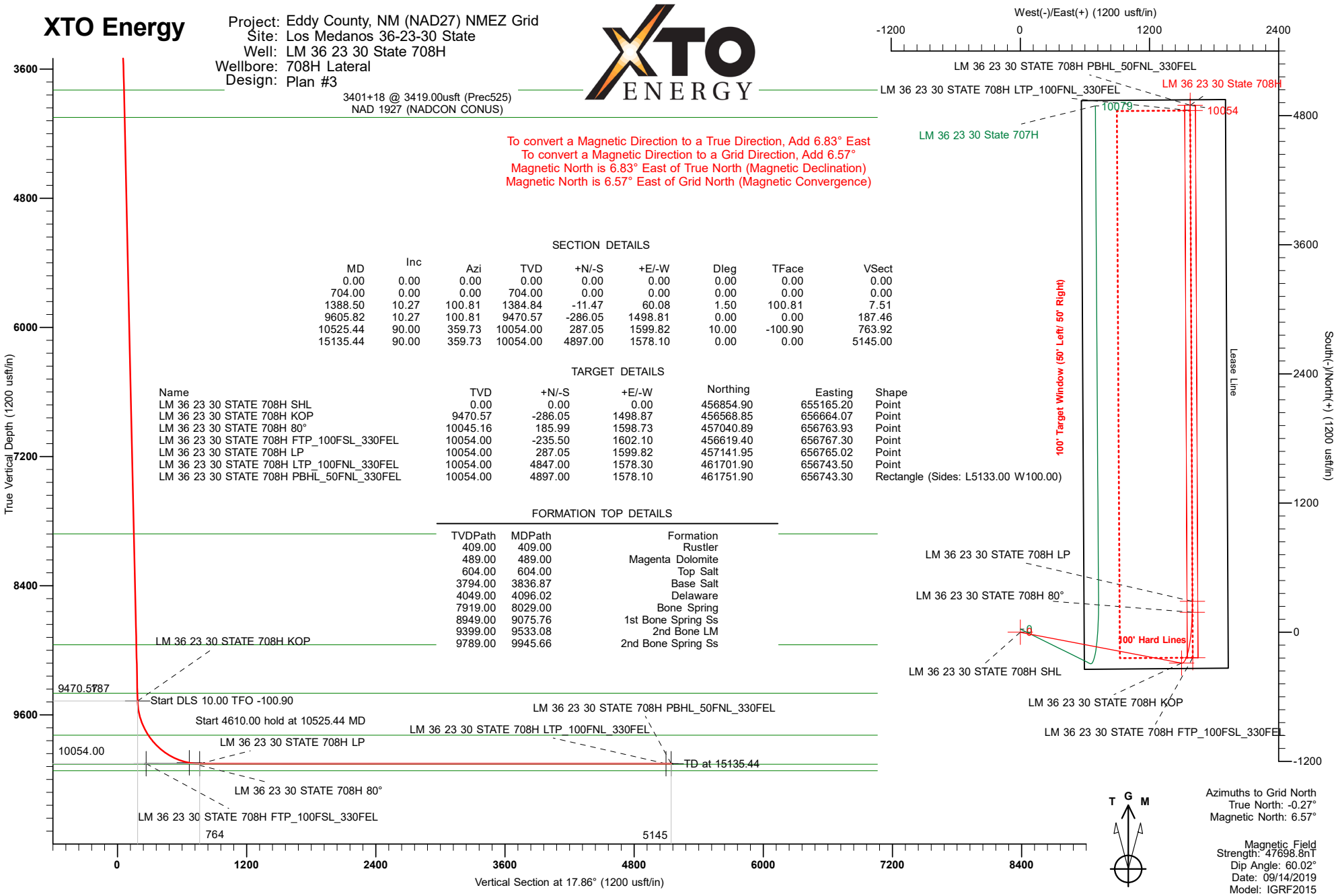
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
704.00	0.00	0.00	704.00	0.00	0.00	0.00	0.00	0.00
1388.50	10.27	100.81	1384.84	-11.47	60.08	1.50	100.81	7.51
9605.82	10.27	100.81	9470.57	-286.05	1498.81	0.00	0.00	187.46
10525.44	90.00	359.73	10054.00	287.05	1599.82	10.00	-100.90	763.92
15135.44	90.00	359.73	10054.00	4897.00	1578.10	0.00	0.00	5145.00

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
LM 36 23 30 STATE 708H SHL	0.00	0.00	0.00	456854.90	655165.20	Point
LM 36 23 30 STATE 708H KOP	9470.57	-286.05	1498.87	456568.85	656664.07	Point
LM 36 23 30 STATE 708H 80°	10045.16	185.99	1598.73	457040.89	656763.93	Point
LM 36 23 30 STATE 708H FTP_100FSL_330FEL	10054.00	-235.50	1602.10	456619.40	656767.30	Point
LM 36 23 30 STATE 708H LP	10054.00	287.05	1599.82	457141.95	656765.02	Point
LM 36 23 30 STATE 708H LTP_100FNL_330FEL	10054.00	4847.00	1578.30	461701.90	656743.50	Point
LM 36 23 30 STATE 708H PBHL_50FNL_330FEL	10054.00	4897.00	1578.10	461751.90	656743.30	Rectangle (Sides: L5133.00 W100.00)

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
409.00	409.00	Rustler
489.00	489.00	Magenta Dolomite
604.00	604.00	Top Salt
3794.00	3836.87	Base Salt
4049.00	4096.02	Delaware
7919.00	8029.00	Bone Spring
8949.00	9075.76	1st Bone Spring Ss
9399.00	9533.08	2nd Bone LM
9789.00	9945.66	2nd Bone Spring Ss



Azimuths to Grid North
True North: -0.27°
Magnetic North: 6.57°

Magnetic Field
Strength: 47698.8nT
Dip Angle: 60.02°
Date: 09/14/2019
Model: IGRF2015

Plan: Plan #3 (LM 36 23 30 State 708H/708H Lateral)
Created By: Mekka Williams
eSomina Well Design
mekka@esominawelldesign.com
17:36, September 18 2019

STRYKER DIRECTIONAL
6701 FM 307
Midland, Texas 79706 - 432-687-1121

Database:	STRYKER_EDM	**Local Co-ordinate Reference:**	Well LM 36 23 30 State 708H - Slot LM 36 23 30 STATE 708H SHL
Company:	XTO Energy	**TVD Reference:**	3401+18 @ 3419.00usft (Prec525)
Project:	Eddy County, NM (NAD27) NMEZ Grid	**MD Reference:**	3401+18 @ 3419.00usft (Prec525)
Site:	Los Medanos 36-23-30 State	**North Reference:**	Grid
Well:	LM 36 23 30 State 708H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	708H Lateral		
Design:	Plan #3		

Project	Eddy County, NM (NAD27) NMEZ Grid		
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	Los Medanos 36-23-30 State				
Site Position:		**Northing:**	456,871.90 usft	**Latitude:**	32° 15' 18.31965009 N
From:	Map	**Easting:**	652,961.40 usft	**Longitude:**	103° 50' 18.70409051 W
Position Uncertainty:	0.00 usft	**Slot Radius:**	13.20 in	**Grid Convergence:**	0.26 °

Well	LM 36 23 30 State 708H - Slot LM 36 23 30 STATE 708H SHL					
Well Position	**+N/-S**	-17.00 usft	**Northing:**	456,854.90 usft	**Latitude:**	32° 15' 18.05017754 N
	+E/-W	2,203.80 usft	**Easting:**	655,165.20 usft	**Longitude:**	103° 49' 53.04173457 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**		**Ground Level:**	3,401.00 usft

Wellbore 708H Lateral

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	09/14/19	6.83	60.02	47,698.81176429

Design Plan #3

Audit Notes:

Version:	**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	17.86

Plan Survey Tool Program **Date** 09/18/19

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	15,135.44	Plan #3 (708H Lateral)	MWD+IFR1+MS	
				OWSG MWD + IFR1 + Multi-St	

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	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	
704.00	0.00	0.00	704.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,388.50	10.27	100.81	1,384.84	-11.47	60.08	1.50	1.50	0.00	100.81	
9,605.82	10.27	100.81	9,470.57	-286.05	1,498.81	0.00	0.00	0.00	0.00	
10,525.44	90.00	359.73	10,054.00	287.05	1,599.82	10.00	8.67	-10.99	-100.90	
15,135.44	90.00	359.73	10,054.00	4,897.00	1,578.10	0.00	0.00	0.00	0.00	LM 36 23 30 STATE 7

Database:	STRYKER_EDM	**Local Co-ordinate Reference:**	Well LM 36 23 30 State 708H - Slot LM 36 23 30 STATE 708H SHL
Company:	XTO Energy	**TVD Reference:**	3401+18 @ 3419.00usft (Prec525)
Project:	Eddy County, NM (NAD27) NMEZ Grid	**MD Reference:**	3401+18 @ 3419.00usft (Prec525)
Site:	Los Medanos 36-23-30 State	**North Reference:**	Grid
Well:	LM 36 23 30 State 708H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	708H Lateral		
Design:	Plan #3		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	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
LM 36 23 30 STATE 708H SHL									
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
409.00	0.00	0.00	409.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
489.00	0.00	0.00	489.00	0.00	0.00	0.00	0.00	0.00	0.00
Magenta Dolomite									
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
604.00	0.00	0.00	604.00	0.00	0.00	0.00	0.00	0.00	0.00
Top Salt									
704.00	0.00	0.00	704.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	1.44	100.81	799.99	-0.23	1.18	0.15	1.50	1.50	0.00
900.00	2.94	100.81	899.91	-0.94	4.94	0.62	1.50	1.50	0.00
1,000.00	4.44	100.81	999.70	-2.15	11.26	1.41	1.50	1.50	0.00
1,100.00	5.94	100.81	1,099.29	-3.84	20.15	2.52	1.50	1.50	0.00
1,200.00	7.44	100.81	1,198.61	-6.03	31.59	3.95	1.50	1.50	0.00
1,300.00	8.94	100.81	1,297.58	-8.70	45.58	5.70	1.50	1.50	0.00
1,388.50	10.27	100.81	1,384.84	-11.47	60.08	7.51	1.50	1.50	0.00
1,400.00	10.27	100.81	1,396.16	-11.85	62.10	7.77	0.00	0.00	0.00
1,500.00	10.27	100.81	1,494.56	-15.19	79.61	9.96	0.00	0.00	0.00
1,600.00	10.27	100.81	1,592.96	-18.53	97.11	12.15	0.00	0.00	0.00
1,700.00	10.27	100.81	1,691.35	-21.88	114.62	14.34	0.00	0.00	0.00
1,800.00	10.27	100.81	1,789.75	-25.22	132.13	16.53	0.00	0.00	0.00
1,900.00	10.27	100.81	1,888.15	-28.56	149.64	18.72	0.00	0.00	0.00
2,000.00	10.27	100.81	1,986.55	-31.90	167.15	20.91	0.00	0.00	0.00
2,100.00	10.27	100.81	2,084.95	-35.24	184.66	23.10	0.00	0.00	0.00
2,200.00	10.27	100.81	2,183.35	-38.58	202.16	25.28	0.00	0.00	0.00
2,300.00	10.27	100.81	2,281.75	-41.93	219.67	27.47	0.00	0.00	0.00
2,400.00	10.27	100.81	2,380.14	-45.27	237.18	29.66	0.00	0.00	0.00
2,500.00	10.27	100.81	2,478.54	-48.61	254.69	31.85	0.00	0.00	0.00
2,600.00	10.27	100.81	2,576.94	-51.95	272.20	34.04	0.00	0.00	0.00
2,700.00	10.27	100.81	2,675.34	-55.29	289.71	36.23	0.00	0.00	0.00
2,800.00	10.27	100.81	2,773.74	-58.63	307.21	38.42	0.00	0.00	0.00
2,900.00	10.27	100.81	2,872.14	-61.97	324.72	40.61	0.00	0.00	0.00
3,000.00	10.27	100.81	2,970.54	-65.32	342.23	42.80	0.00	0.00	0.00
3,100.00	10.27	100.81	3,068.93	-68.66	359.74	44.99	0.00	0.00	0.00
3,200.00	10.27	100.81	3,167.33	-72.00	377.25	47.18	0.00	0.00	0.00
3,300.00	10.27	100.81	3,265.73	-75.34	394.76	49.37	0.00	0.00	0.00
3,400.00	10.27	100.81	3,364.13	-78.68	412.27	51.56	0.00	0.00	0.00
3,500.00	10.27	100.81	3,462.53	-82.02	429.77	53.75	0.00	0.00	0.00
3,600.00	10.27	100.81	3,560.93	-85.37	447.28	55.94	0.00	0.00	0.00
3,700.00	10.27	100.81	3,659.33	-88.71	464.79	58.13	0.00	0.00	0.00
3,800.00	10.27	100.81	3,757.73	-92.05	482.30	60.32	0.00	0.00	0.00
3,836.87	10.27	100.81	3,794.00	-93.28	488.75	61.13	0.00	0.00	0.00
Base Salt									
3,900.00	10.27	100.81	3,856.12	-95.39	499.81	62.51	0.00	0.00	0.00
4,000.00	10.27	100.81	3,954.52	-98.73	517.32	64.70	0.00	0.00	0.00
4,096.02	10.27	100.81	4,049.00	-101.94	534.13	66.80	0.00	0.00	0.00

Database:	STRYKER_EDM	**Local Co-ordinate Reference:**	Well LM 36 23 30 State 708H - Slot LM 36 23 30 STATE 708H SHL
Company:	XTO Energy	**TVD Reference:**	3401+18 @ 3419.00usft (Prec525)
Project:	Eddy County, NM (NAD27) NMEZ Grid	**MD Reference:**	3401+18 @ 3419.00usft (Prec525)
Site:	Los Medanos 36-23-30 State	**North Reference:**	Grid
Well:	LM 36 23 30 State 708H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	708H Lateral		
Design:	Plan #3		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
Delaware									
4,100.00	10.27	100.81	4,052.92	-102.07	534.82	66.89	0.00	0.00	0.00
4,200.00	10.27	100.81	4,151.32	-105.41	552.33	69.08	0.00	0.00	0.00
4,300.00	10.27	100.81	4,249.72	-108.76	569.84	71.27	0.00	0.00	0.00
4,400.00	10.27	100.81	4,348.12	-112.10	587.35	73.46	0.00	0.00	0.00
4,500.00	10.27	100.81	4,446.52	-115.44	604.86	75.65	0.00	0.00	0.00
4,600.00	10.27	100.81	4,544.91	-118.78	622.37	77.84	0.00	0.00	0.00
4,700.00	10.27	100.81	4,643.31	-122.12	639.87	80.03	0.00	0.00	0.00
4,800.00	10.27	100.81	4,741.71	-125.46	657.38	82.22	0.00	0.00	0.00
4,900.00	10.27	100.81	4,840.11	-128.81	674.89	84.41	0.00	0.00	0.00
5,000.00	10.27	100.81	4,938.51	-132.15	692.40	86.60	0.00	0.00	0.00
5,100.00	10.27	100.81	5,036.91	-135.49	709.91	88.79	0.00	0.00	0.00
5,200.00	10.27	100.81	5,135.31	-138.83	727.42	90.98	0.00	0.00	0.00
5,300.00	10.27	100.81	5,233.70	-142.17	744.93	93.17	0.00	0.00	0.00
5,400.00	10.27	100.81	5,332.10	-145.51	762.43	95.36	0.00	0.00	0.00
5,500.00	10.27	100.81	5,430.50	-148.85	779.94	97.55	0.00	0.00	0.00
5,600.00	10.27	100.81	5,528.90	-152.20	797.45	99.74	0.00	0.00	0.00
5,700.00	10.27	100.81	5,627.30	-155.54	814.96	101.93	0.00	0.00	0.00
5,800.00	10.27	100.81	5,725.70	-158.88	832.47	104.12	0.00	0.00	0.00
5,900.00	10.27	100.81	5,824.10	-162.22	849.98	106.31	0.00	0.00	0.00
6,000.00	10.27	100.81	5,922.49	-165.56	867.48	108.50	0.00	0.00	0.00
6,100.00	10.27	100.81	6,020.89	-168.90	884.99	110.69	0.00	0.00	0.00
6,200.00	10.27	100.81	6,119.29	-172.25	902.50	112.88	0.00	0.00	0.00
6,300.00	10.27	100.81	6,217.69	-175.59	920.01	115.07	0.00	0.00	0.00
6,400.00	10.27	100.81	6,316.09	-178.93	937.52	117.26	0.00	0.00	0.00
6,500.00	10.27	100.81	6,414.49	-182.27	955.03	119.45	0.00	0.00	0.00
6,600.00	10.27	100.81	6,512.89	-185.61	972.53	121.64	0.00	0.00	0.00
6,700.00	10.27	100.81	6,611.29	-188.95	990.04	123.83	0.00	0.00	0.00
6,800.00	10.27	100.81	6,709.68	-192.29	1,007.55	126.02	0.00	0.00	0.00
6,900.00	10.27	100.81	6,808.08	-195.64	1,025.06	128.21	0.00	0.00	0.00
7,000.00	10.27	100.81	6,906.48	-198.98	1,042.57	130.40	0.00	0.00	0.00
7,100.00	10.27	100.81	7,004.88	-202.32	1,060.08	132.59	0.00	0.00	0.00
7,200.00	10.27	100.81	7,103.28	-205.66	1,077.59	134.78	0.00	0.00	0.00
7,300.00	10.27	100.81	7,201.68	-209.00	1,095.09	136.96	0.00	0.00	0.00
7,400.00	10.27	100.81	7,300.08	-212.34	1,112.60	139.15	0.00	0.00	0.00
7,500.00	10.27	100.81	7,398.47	-215.69	1,130.11	141.34	0.00	0.00	0.00
7,600.00	10.27	100.81	7,496.87	-219.03	1,147.62	143.53	0.00	0.00	0.00
7,700.00	10.27	100.81	7,595.27	-222.37	1,165.13	145.72	0.00	0.00	0.00
7,800.00	10.27	100.81	7,693.67	-225.71	1,182.64	147.91	0.00	0.00	0.00
7,900.00	10.27	100.81	7,792.07	-229.05	1,200.14	150.10	0.00	0.00	0.00
8,000.00	10.27	100.81	7,890.47	-232.39	1,217.65	152.29	0.00	0.00	0.00
8,029.00	10.27	100.81	7,919.00	-233.36	1,222.73	152.93	0.00	0.00	0.00
Bone Spring									
8,100.00	10.27	100.81	7,988.87	-235.73	1,235.16	154.48	0.00	0.00	0.00
8,200.00	10.27	100.81	8,087.26	-239.08	1,252.67	156.67	0.00	0.00	0.00
8,300.00	10.27	100.81	8,185.66	-242.42	1,270.18	158.86	0.00	0.00	0.00
8,400.00	10.27	100.81	8,284.06	-245.76	1,287.69	161.05	0.00	0.00	0.00
8,500.00	10.27	100.81	8,382.46	-249.10	1,305.20	163.24	0.00	0.00	0.00
8,600.00	10.27	100.81	8,480.86	-252.44	1,322.70	165.43	0.00	0.00	0.00
8,700.00	10.27	100.81	8,579.26	-255.78	1,340.21	167.62	0.00	0.00	0.00
8,800.00	10.27	100.81	8,677.66	-259.13	1,357.72	169.81	0.00	0.00	0.00
8,900.00	10.27	100.81	8,776.06	-262.47	1,375.23	172.00	0.00	0.00	0.00
9,000.00	10.27	100.81	8,874.45	-265.81	1,392.74	174.19	0.00	0.00	0.00

Database:	STRYKER_EDM	**Local Co-ordinate Reference:**	Well LM 36 23 30 State 708H - Slot LM 36 23 30 STATE 708H SHL
Company:	XTO Energy	**TVD Reference:**	3401+18 @ 3419.00usft (Prec525)
Project:	Eddy County, NM (NAD27) NMEZ Grid	**MD Reference:**	3401+18 @ 3419.00usft (Prec525)
Site:	Los Medanos 36-23-30 State	**North Reference:**	Grid
Well:	LM 36 23 30 State 708H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	708H Lateral		
Design:	Plan #3		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,075.76	10.27	100.81	8,949.00	-268.34	1,406.00	175.85	0.00	0.00	0.00
1st Bone Spring Ss									
9,100.00	10.27	100.81	8,972.85	-269.15	1,410.25	176.38	0.00	0.00	0.00
9,200.00	10.27	100.81	9,071.25	-272.49	1,427.75	178.57	0.00	0.00	0.00
9,300.00	10.27	100.81	9,169.65	-275.83	1,445.26	180.76	0.00	0.00	0.00
9,400.00	10.27	100.81	9,268.05	-279.17	1,462.77	182.95	0.00	0.00	0.00
9,500.00	10.27	100.81	9,366.45	-282.52	1,480.28	185.14	0.00	0.00	0.00
9,533.08	10.27	100.81	9,399.00	-283.62	1,486.07	185.87	0.00	0.00	0.00
2nd Bone LM									
9,605.82	10.27	100.81	9,470.57	-286.05	1,498.81	187.46	0.00	0.00	0.00
9,605.83	10.27	100.81	9,470.58	-286.05	1,498.81	187.46	0.00	0.00	0.00
LM 36 23 30 STATE 708H KOP									
9,650.00	10.37	75.96	9,514.06	-285.83	1,506.54	190.04	10.00	0.24	-56.24
9,700.00	12.51	52.94	9,563.09	-281.47	1,515.23	196.86	10.00	4.29	-46.03
9,750.00	15.97	38.12	9,611.56	-272.78	1,523.81	207.75	10.00	6.92	-29.64
9,800.00	20.08	28.83	9,659.10	-259.84	1,532.20	222.64	10.00	8.21	-18.58
9,850.00	24.51	22.68	9,705.36	-242.75	1,540.34	241.42	10.00	8.86	-12.30
9,900.00	29.11	18.35	9,749.98	-221.62	1,548.17	263.93	10.00	9.21	-8.67
9,945.66	33.41	15.37	9,789.00	-198.95	1,555.00	287.60	10.00	9.41	-6.53
2nd Bone Spring Ss									
9,950.00	33.82	15.12	9,792.62	-196.63	1,555.64	290.00	10.00	9.49	-5.71
10,000.00	38.60	12.60	9,832.95	-167.95	1,562.67	319.45	10.00	9.55	-5.04
10,050.00	43.41	10.56	9,870.68	-135.82	1,569.23	352.04	10.00	9.64	-4.08
10,100.00	48.26	8.86	9,905.50	-100.48	1,575.25	387.53	10.00	9.70	-3.41
LM 36 23 30 STATE 708H FTP_100FSL_330FEL									
10,150.00	53.13	7.39	9,937.16	-62.19	1,580.70	425.65	10.00	9.74	-2.93
10,200.00	58.02	6.10	9,965.42	-21.24	1,585.53	466.10	10.00	9.77	-2.58
10,250.00	62.92	4.95	9,990.06	22.05	1,589.71	508.59	10.00	9.80	-2.31
10,300.00	67.82	3.89	10,010.89	67.35	1,593.20	552.78	10.00	9.81	-2.12
10,350.00	72.74	2.90	10,027.76	114.32	1,595.97	598.33	10.00	9.83	-1.98
10,400.00	77.65	1.96	10,040.53	162.60	1,598.02	644.91	10.00	9.83	-1.87
10,423.85	80.00	1.53	10,045.16	185.99	1,598.73	667.40	10.00	9.84	-1.82
LM 36 23 30 STATE 708H 80°									
10,450.00	82.57	1.06	10,049.12	211.83	1,599.31	692.16	10.00	9.84	-1.79
10,500.00	87.50	0.18	10,053.44	261.62	1,599.85	739.72	10.00	9.84	-1.76
10,525.44	90.00	359.73	10,054.00	287.05	1,599.82	763.92	10.00	9.85	-1.75
LM 36 23 30 STATE 708H LP									
10,600.00	90.00	359.73	10,054.00	361.61	1,599.47	834.78	0.00	0.00	0.00
10,700.00	90.00	359.73	10,054.00	461.61	1,599.00	929.81	0.00	0.00	0.00
10,800.00	90.00	359.73	10,054.00	561.61	1,598.53	1,024.85	0.00	0.00	0.00
10,900.00	90.00	359.73	10,054.00	661.61	1,598.06	1,119.88	0.00	0.00	0.00
11,000.00	90.00	359.73	10,054.00	761.61	1,597.59	1,214.91	0.00	0.00	0.00
11,100.00	90.00	359.73	10,054.00	861.60	1,597.12	1,309.95	0.00	0.00	0.00
11,200.00	90.00	359.73	10,054.00	961.60	1,596.65	1,404.98	0.00	0.00	0.00
11,300.00	90.00	359.73	10,054.00	1,061.60	1,596.17	1,500.02	0.00	0.00	0.00
11,400.00	90.00	359.73	10,054.00	1,161.60	1,595.70	1,595.05	0.00	0.00	0.00
11,500.00	90.00	359.73	10,054.00	1,261.60	1,595.23	1,690.09	0.00	0.00	0.00
11,600.00	90.00	359.73	10,054.00	1,361.60	1,594.76	1,785.12	0.00	0.00	0.00
11,700.00	90.00	359.73	10,054.00	1,461.60	1,594.29	1,880.15	0.00	0.00	0.00
11,800.00	90.00	359.73	10,054.00	1,561.60	1,593.82	1,975.19	0.00	0.00	0.00
11,900.00	90.00	359.73	10,054.00	1,661.60	1,593.35	2,070.22	0.00	0.00	0.00
12,000.00	90.00	359.73	10,054.00	1,761.59	1,592.88	2,165.26	0.00	0.00	0.00

Database:	STRYKER_EDM	**Local Co-ordinate Reference:**	Well LM 36 23 30 State 708H - Slot LM 36 23 30 STATE 708H SHL
Company:	XTO Energy	**TVD Reference:**	3401+18 @ 3419.00usft (Prec525)
Project:	Eddy County, NM (NAD27) NMEZ Grid	**MD Reference:**	3401+18 @ 3419.00usft (Prec525)
Site:	Los Medanos 36-23-30 State	**North Reference:**	Grid
Well:	LM 36 23 30 State 708H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	708H Lateral		
Design:	Plan #3		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
12,100.00	90.00	359.73	10,054.00	1,861.59	1,592.40	2,260.29	0.00	0.00	0.00
12,200.00	90.00	359.73	10,054.00	1,961.59	1,591.93	2,355.33	0.00	0.00	0.00
12,300.00	90.00	359.73	10,054.00	2,061.59	1,591.46	2,450.36	0.00	0.00	0.00
12,400.00	90.00	359.73	10,054.00	2,161.59	1,590.99	2,545.39	0.00	0.00	0.00
12,500.00	90.00	359.73	10,054.00	2,261.59	1,590.52	2,640.43	0.00	0.00	0.00
12,600.00	90.00	359.73	10,054.00	2,361.59	1,590.05	2,735.46	0.00	0.00	0.00
12,700.00	90.00	359.73	10,054.00	2,461.59	1,589.58	2,830.50	0.00	0.00	0.00
12,800.00	90.00	359.73	10,054.00	2,561.59	1,589.11	2,925.53	0.00	0.00	0.00
12,900.00	90.00	359.73	10,054.00	2,661.58	1,588.63	3,020.56	0.00	0.00	0.00
13,000.00	90.00	359.73	10,054.00	2,761.58	1,588.16	3,115.60	0.00	0.00	0.00
13,100.00	90.00	359.73	10,054.00	2,861.58	1,587.69	3,210.63	0.00	0.00	0.00
13,200.00	90.00	359.73	10,054.00	2,961.58	1,587.22	3,305.67	0.00	0.00	0.00
13,300.00	90.00	359.73	10,054.00	3,061.58	1,586.75	3,400.70	0.00	0.00	0.00
13,400.00	90.00	359.73	10,054.00	3,161.58	1,586.28	3,495.74	0.00	0.00	0.00
13,500.00	90.00	359.73	10,054.00	3,261.58	1,585.81	3,590.77	0.00	0.00	0.00
13,600.00	90.00	359.73	10,054.00	3,361.58	1,585.34	3,685.80	0.00	0.00	0.00
13,700.00	90.00	359.73	10,054.00	3,461.58	1,584.86	3,780.84	0.00	0.00	0.00
13,800.00	90.00	359.73	10,054.00	3,561.57	1,584.39	3,875.87	0.00	0.00	0.00
13,900.00	90.00	359.73	10,054.00	3,661.57	1,583.92	3,970.91	0.00	0.00	0.00
14,000.00	90.00	359.73	10,054.00	3,761.57	1,583.45	4,065.94	0.00	0.00	0.00
14,100.00	90.00	359.73	10,054.00	3,861.57	1,582.98	4,160.98	0.00	0.00	0.00
14,200.00	90.00	359.73	10,054.00	3,961.57	1,582.51	4,256.01	0.00	0.00	0.00
14,300.00	90.00	359.73	10,054.00	4,061.57	1,582.04	4,351.04	0.00	0.00	0.00
14,400.00	90.00	359.73	10,054.00	4,161.57	1,581.57	4,446.08	0.00	0.00	0.00
14,500.00	90.00	359.73	10,054.00	4,261.57	1,581.09	4,541.11	0.00	0.00	0.00
14,600.00	90.00	359.73	10,054.00	4,361.57	1,580.62	4,636.15	0.00	0.00	0.00
14,700.00	90.00	359.73	10,054.00	4,461.56	1,580.15	4,731.18	0.00	0.00	0.00
14,800.00	90.00	359.73	10,054.00	4,561.56	1,579.68	4,826.22	0.00	0.00	0.00
14,900.00	90.00	359.73	10,054.00	4,661.56	1,579.21	4,921.25	0.00	0.00	0.00
15,000.00	90.00	359.73	10,054.00	4,761.56	1,578.74	5,016.28	0.00	0.00	0.00
15,085.44	90.00	359.73	10,054.00	4,847.00	1,578.34	5,097.48	0.00	0.00	0.00
LM 36 23 30 STATE 708H LTP_100FNL_330FEL									
15,100.00	90.00	359.73	10,054.00	4,861.56	1,578.27	5,111.32	0.00	0.00	0.00
15,135.44	90.00	359.73	10,054.00	4,897.00	1,578.10	5,145.00	0.00	0.00	0.00
LM 36 23 30 STATE 708H PBHL_50FNL_330FEL									

Database:	STRYKER_EDM	**Local Co-ordinate Reference:**	Well LM 36 23 30 State 708H - Slot LM 36 23 30 STATE 708H SHL
Company:	XTO Energy	**TVD Reference:**	3401+18 @ 3419.00usft (Prec525)
Project:	Eddy County, NM (NAD27) NMEZ Grid	**MD Reference:**	3401+18 @ 3419.00usft (Prec525)
Site:	Los Medanos 36-23-30 State	**North Reference:**	Grid
Well:	LM 36 23 30 State 708H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	708H Lateral		
Design:	Plan #3		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
LM 36 23 30 STATE 708 - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	456,854.90	655,165.20	2° 15' 18.05017754 N	3° 49' 53.04173457 W
LM 36 23 30 STATE 708 - plan misses target center by 0.06usft at 9605.83usft MD (9470.58 TVD, -286.05 N, 1498.81 E) - Point	0.00	0.01	9,470.57	-286.05	1,498.87	456,568.85	656,664.07	2° 15' 15.14975760 N	3° 49' 35.60312640 W
LM 36 23 30 STATE 708 - plan hits target center - Point	0.00	0.01	10,045.16	185.99	1,598.73	457,040.89	656,763.93	2° 15' 19.81637344 N	3° 49' 34.41430289 W
LM 36 23 30 STATE 708 - plan hits target center - Point	0.00	0.01	10,054.00	287.05	1,599.82	457,141.95	656,765.02	2° 15' 20.81640661 N	3° 49' 34.39605063 W
LM 36 23 30 STATE 708 - plan misses target center by 202.49usft at 10100.00usft MD (9905.50 TVD, -100.48 N, 1575.25 E) - Point	0.00	0.00	10,054.00	-235.50	1,602.10	456,619.40	656,767.30	2° 15' 15.64517388 N	3° 49' 34.39824411 W
LM 36 23 30 STATE 708 - plan hits target center - Rectangle (sides W100.00 H5,133.00 D0.00)	0.00	0.00	10,054.00	4,897.00	1,578.10	461,751.90	656,743.30	32° 16' 6.43718303 N	3° 49' 34.39534924 W
LM 36 23 30 STATE 708 - plan misses target center by 0.04usft at 15085.44usft MD (10054.00 TVD, 4847.00 N, 1578.34 E) - Point	0.00	0.00	10,054.00	4,847.00	1,578.30	461,701.90	656,743.50	32° 16' 5.94237747 N	3° 49' 34.39577169 W

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
409.00	409.00	Rustler			
489.00	489.00	Magenta Dolomite			
604.00	604.00	Top Salt			
3,836.87	3,794.00	Base Salt			
4,096.02	4,049.00	Delaware			
8,029.00	7,919.00	Bone Spring			
9,075.76	8,949.00	1st Bone Spring Ss			
9,533.08	9,399.00	2nd Bone LM			
9,945.66	9,789.00	2nd Bone Spring Ss			

Anticollision Report

Company:	XTO Energy	**Local Co-ordinate Reference:**	Well LM 36 23 30 State 708H - Slot LM 36 23 30 STATE 708H SHL
Project:	Eddy County, NM (NAD27) NMEZ Grid	**TVD Reference:**	3401+18 @ 3419.00usft (Prec525)
Reference Site:	Los Medanos 36-23-30 State	**MD Reference:**	3401+18 @ 3419.00usft (Prec525)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	LM 36 23 30 State 708H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	708H Lateral	**Database:**	STRYKER_EDM
Reference Design:	Plan #3	**Offset TVD Reference:**	Offset Datum

Reference	Plan #3		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 50.00usft	**Error Model:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum separation factor of 4.00	**Error Surface:**	Ellipsoid Separation
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Survey Tool Program **Date** 09/18/19

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	15,135.44	Plan #3 (708H Lateral)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Los Medanos 36-23-30 State						
23SR30ES36 Offset - 1SH OFFSET - 1SH OFFSET						Out of range
LM 36 23 30 State 707H - 707H Lateral - Plan #2						Out of range
LOS MEDANOS 36-23-30 702H - 702H - 702H AsDrilled						Out of range
LOS MEDANOS 36-23-30 703H - 703H - 703H (AsDrilled						Out of range
Los Medanos 36-23-30 State 401H - 401H L1 - 401H L1						Out of range
Los Medanos 36-23-30 State 401H - 401H L2_ST - 401H						Out of range
Los Medanos 36-23-30 State 701H - 701H L1 - 701H L1						Out of range
Los Medanos 36-23-30 State 801H - 801H L1 - 801H L1						Out of range