Form 3160-5
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

NMOCD
Artesia

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE - Other instructions on page 2

NM OIL CONSERVATION
ARTESIA DISTRICT
MAR 11 2019
RECEIVED

5. Lease Serial No.
NMNM136870

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No. 314121
CORRAL CANYON FEDERAL 24H

2. Name of Operator
XTO ENERGY INCORPORATED
Contact: KELLY KARDOS
E-Mail: kelly_kardos@xtoenergy.com

9. API Well No.
30-015-45433-00-X1

3a. Address
6401 HOLIDAY HILL ROAD BLDG 5
MIDLAND, TX 79707

3b. Phone No. (include area code)
Ph: 432-620-4374

10. Field and Pool or Exploratory Area
CORRAL CANYON

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 10 T25S R29E NENE 185FNL 885FEL
32.151455 N Lat, 103.966599 W Lon

11. County or Parish, State
EDDY COUNTY, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Change to Original APD
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

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

XTO Energy Inc. requests permission to make the following changes to the approved APD:

1. Change well name from Corral Canyon Federal 24H to Corral Canyon 3-34 Fed 108H 322863 (name change sundry submitted 12/11/18, WIS ID447187)

2. Change BHL from 200'FNL & 660'FEL in Sec. 34, T24S, R29E to 200'FNL & 330'FEL in Sec. 3, T25S, R29E. Lease number will change from NMNM136870 to NMNM015302

3. Change formation from Willow Lake, Bone Spring SE to Purple Sage; Wolfcamp (Gas).

4. Drilling Program/Directional Plan

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

ENTERED
AFMSS
3-13-19

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #447811 verified by the BLM Well Information System
For XTO ENERGY INCORPORATED, sent to the Carlsbad
Committed to AFMSS for processing by PRISCILLA PEREZ on 12/14/2018 (19PP0632SE)

Name *(Printed/Typed)* KELLY KARDOS — Title REGULATORY COORDINATOR

Signature (Electronic Submission) — Date 12/14/2018

APPROVED

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By — Title — Date

FEB 21 2019

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office BUREAU OF LAND MANAGEMENT
ROSWELL FIELD MANAGEMENT

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

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

Additional data for EC transaction #447811 that would not fit on the form

32. Additional remarks, continued

Attachments:
1. C102
2. Permitted vs Sundry Sheet
3. Drilling Program
4. Directional Plan
5. BOP/CM/FH
6. GCP
7. Copy on NOI Name Change Sundry

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, NM 87505

NM OIL CONSERVATION
ARTESIA DISTRICT
MAR 11 2019
RECEIVED

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- 45433	98220	PURPLE SAGE; WOLFCAMP

[4] Property Code	[5] Property Name	[6] Well Number
	CORRAL CANYON 3-34 FED	108H

[7] OGRID No.	[8] Operator Name	[9] Elevation
005380	XTO ENERGY, INC.	3,035'

[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	10	25 S	29 E		185	NORTH	884	EAST	EDDY

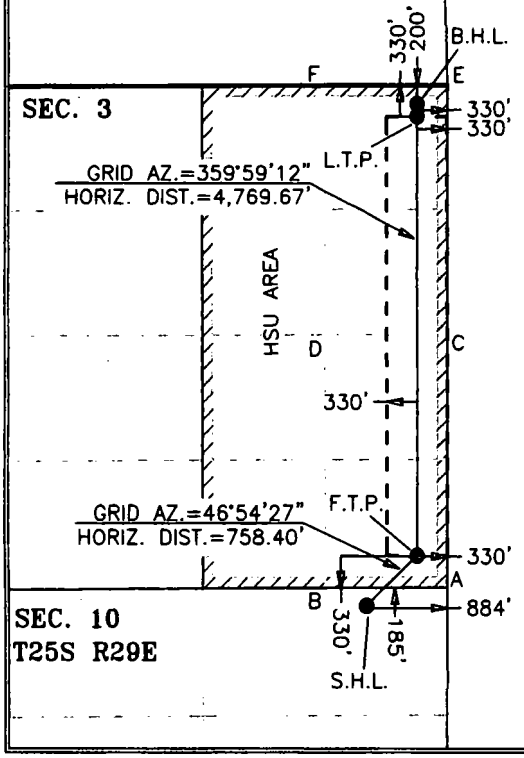
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	3	25 S	29 E		200	NORTH	330	EAST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
319.40			

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]



GEODETIC COORDINATES NAD 27 NME SURFACE LOCATION
Y= 418,969.1
X= 613,649.6
LAT.= 32.151330°N
LONG.= 103.966112°W

GEODETIC COORDINATES NAD 83 NME SURFACE LOCATION
Y= 419,027.6
X= 654,833.9
LAT.= 32.151454°N
LONG.= 103.966599°W

FIRST TAKE POINT NAD 27 NME
Y= 419,487.3
X= 614,203.6
LAT.= 32.152749°N
LONG.= 103.964316°W

FIRST TAKE POINT NAD 83 NME
Y= 419,545.8
X= 655,387.8
LAT.= 32.152873°N
LONG.= 103.964803°W

CORNER COORDINATES TABLE NAD 27 NME
A - Y= 419,159.1 N, X= 614,533.5 E
B - Y= 419,151.6 N, X= 613,208.3 E
C - Y= 421,814.9 N, X= 614,533.4 E
D - Y= 421,806.5 N, X= 613,204.3 E
E - Y= 424,458.2 N, X= 614,532.5 E
F - Y= 424,452.8 N, X= 613,199.9 E

CORNER COORDINATES TABLE NAD 83 NME
A - Y= 419,217.6 N, X= 655,717.8 E
B - Y= 419,210.1 N, X= 654,392.5 E
C - Y= 421,873.4 N, X= 655,717.6 E
D - Y= 421,865.0 N, X= 654,388.5 E
E - Y= 424,516.8 N, X= 655,716.6 E
F - Y= 424,511.4 N, X= 654,384.0 E

LAST TAKE POINT NAD 27 NME
Y= 424,126.8
X= 614,202.6
LAT.= 32.165503°N
LONG.= 103.964268°W

LAST TAKE POINT NAD 83 NME
Y= 424,185.4
X= 655,386.7
LAT.= 32.165627°N
LONG.= 103.964756°W

BOTTOM HOLE LOCATION NAD 27 NME
Y= 424,256.8
X= 614,202.5
LAT.= 32.165861°N
LONG.= 103.964267°W

BOTTOM HOLE LOCATION NAD 83 NME
Y= 424,315.4
X= 655,386.6
LAT.= 32.165984°N
LONG.= 103.964754°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.

Kelly Kardos 11-15-18
Signature Date

Kelly Kardos
Printed Name

kelly_kardos@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.

11-14-2018
Date of Survey

Signatue and Seal of Professional Surveyor:

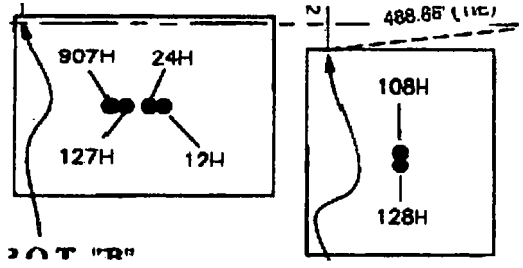
MARK DILLON HARP 23786
Certificate Number

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

AI 2017091543

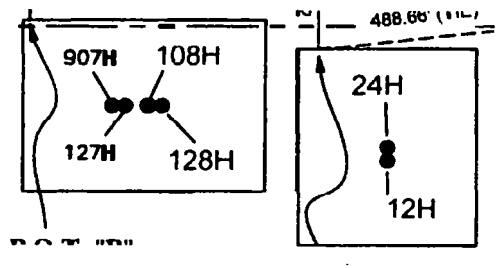
PERMITTED PLAN

Current Well Name	Formation	Permitted SHL	Permitted BHL
CORRAL CANYON 3-34 FED 907H	BONESPRING	A -10-25S-29E 185 FNL & 944 FEL	A -34-24S-29E 200 FNL & 952 FEL
CORRAL CANYON 3-34 FED 127H	WOLFCAMP	A -10-25S-29E 185 FNL & 914 FEL	A -34-24S-29E 200 FNL & 952 FEL
CORRAL CANYON 3-34 FED 108H	WOLFCAMP	A -10-25S-29E 285 FNL & 330 FEL	A -34-24S-29E 200 FNL & 330 FEL
[illegible]	BONESPRING	[illegible]	[illegible]
CORRAL CANYON FEDERAL 12H	BONESPRING	A -10-25S-29E 185 FNL & 835 FEL	P -15-25S-29E 200 FSL & 660 FEL
CORRAL CANYON 3-34 FED 128H	WOLFCAMP	A -10-25S-29E 315 FNL & 330 FEL	A -34-24S-29E 200 FNL & 330 FEL



SUNDRY CHANGES

Well Name Change	Formation	Updated SHL		Updated BHL
CORRAL CANYON 3-34 FED 907H	BONESPRING	A -10-25S-29E	185 FNL & 944 FEL	L1 -3-25S-29E 50 FNL & 961 FEL
CORRAL CANYON 3-34 FED 127H	WOLFCAMP	A -10-25S-29E	185 FNL & 914 FEL	L1 -3-25S-29E 200 FNL & 961 FEL
CORRAL CANYON FEDERAL 24H	BONESPRING	A -10-25S-29E	285 FNL & 330 FEL	L1 -3-25S-29E 50 FNL & 660 FEL
[illegible]	[illegible]	A -10-25S-29E	185'FNL & 884'FEL	[illegible]
CORRAL CANYON 3-34 FED 128H	WOLFCAMP	A -10-25S-29E	185'FNL & 854'FEL	L1 -3-25S-29E 200 FNL & 330 FEL
CORRAL CANYON 10-15 FED 12H	BONESPRING	A -10-25S-29E	315'FNL & 330'FEL	P -15-25S-29E 50 FSL & 660 FEL



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

XTO Energy Inc.
Corral Canyon 3-34 Federal 108H
Projected TD: 15415' MD / 10212' TVD
SHL: 185' FNL & 884' FEL , Section 10, T25S, R29E
BHL: 200' FNL & 330' FEL , Section 3, T25S, R29E
Eddy County, NM

1. Geologic Name of Surface Formation

A. Quaternary

2. Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas:

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	585'	Water
Top of Salt	854'	Water
Base of Salt	2968'	Water
Delaware	3151'	Water
Bone Spring Lm	6892'	Water/Oil/Gas
1st Bone Spring Ss	7825'	Water/Oil/Gas
2nd Bone Spring Ss	8697'	Water/Oil/Gas
3rd Bone Spring Ss	9749'	Water/Oil/Gas
Target/Land Curve	10212'	Water/Oil/Gas

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13-3/8 inch casing @ 647' (100' into the Rustler) and circulating cement back to surface. The salt will be isolated by setting 9-5/8 inch casing at 9100'. A DV tool will be set @ 697' (100' below the surface shoe). Cement will be circulated to surface. An 8-3/4 inch curve and 8-1/2 inch lateral hole will be drilled to MD/TD and 5-1/2 inch casing will be set at TD and cemented back at least 500' into the intermediate casing.

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17-1/2"	0' – 647'	13-3/8"	54.5	STC	J-55	New	1.00	3.91	14.58
12-1/4"	0' – 9100'	9-5/8"	40	LTC	HCL-80	New	1.88	1.53	2.30
8-3/4" x 8-1/2"	0' – 15415'	5-1/2"	17	BTC	P-110	New	1.12	1.41	2.62

- XTO requests to utilize centralizers only in the curve after the KOP and only a minimum of one every other joint.
- 9-5/8" Collapse analyzed using 50% evacuation based on regional experience.
- 5-1/2" tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35

WELLHEAD:

Permanent Wellhead – GE RSH Multibowl System

A. Starting Head: 13-5/8" 5M top flange x 13-3/8" SOW bottom
B. Tubing Head: 13-5/8" 5M bottom flange x 7-1/16" 10M top flange
- Wellhead will be installed by manufacturer's representatives.
- Manufacturer will monitor welding process to ensure appropriate temperature of seal.
- Manufacturer will witness installation of test plug for initial test.
- Operator will test the 9-5/8" casing per BLM Onshore Order 2

4. Cement Program

Surface Casing: 13-3/8", 54.5 New J-55, STC casing to be set at +/- 647'

Lead: 250 sxs EconoCem-HLTRRC (mixed at 12.9 ppg, 1.87 ft3/sx, 10.13 gal/sx water)
Tail: 300 sxs Halcem-C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
Compressives: 12-hr = 900 psi 24 hr = 1500 psi

Intermediate Casing: 9-5/8", 40 New HCL-80, LTC casing to be set at +/- 9100'

First Stage

Lead: 2610 sxs Halcem-C + 2% CaCl (mixed at 12.9 ppg, 1.88 ft3/sx, 9.61 gal/sx water)

Tail: 230 sxs Halcem-C + 2% CaCl (mixed at 14.8 ppg, 1.33 ft3/sx, 6.39 gal/sx water)
Compressives: 12-hr = 900 psi 24 hr = 1500 psi

If losses are severe, a DV tool will be set @ 697' (100' below the surface shoe).

Second Stage

Lead: 230 sxs Halcem-C + 2% CaCl (mixed at 12.9 ppg, 1.88ft3/sx, 9.61 gal/sx water)

Tail: 180 sxs Halcem-C + 2% CaCl (mixed at 14.8 ppg, 1.33ft3/sx, 6.39 gal/sx water)
Compressives: 12-hr = 900 psi 24 hr = 1500 psi

Production Casing: 5-1/2", 17 New P-110, BTC casing to be set at +/- 15415'

Lead: 120 sxs NeoCem (mixed at 10.5 ppg, 2.69 ft3/sx, 12.26 gal/sx water)

Tail: 1180 sxs VersaCem (mixed at 13.2 ppg, 1.61 ft3/sx, 8.38 gal/sx water)
Compressives: 12-hr = 1375 psi 24 hr = 2285 psi

5. Pressure Control Equipment

The blow out preventer equipment (BOP) for this well consists of a 13-5/8" minimum 5M Hydril and a 13-5/8" minimum 5M Double Ram BOP. MASP should not exceed 3064 psi.

All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 50% of the working pressure. When nippling up on the 13-5/8" 5M bradenhead and flange, the BOP test will be limited to 5000 psi. When nippling up on the 9-5/8", the BOP will be tested to a minimum of 5000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 5M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each day.

A variance is requested to allow use of a flex hose as the choke line from the BOP to the Choke Manifold. If this hose is used, a copy of the manufacturer's certification and pressure test chart will be kept on the rig. Attached is an example of a certification and pressure test chart. The manufacturer does not require anchors.

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' to 647'	17-1/2"	FW/Native	8.4-8.8	35-40	NC
647' to 9100'	12-1/4"	Brine/Gel Sweeps	9.8-10.2	30-32	NC
9100' to 15415'	8-3/4" x 8-1/2"	FW / Cut Brine / Polymer / OBM	9.7 - 10	29-32	NC - 20

The necessary mud products for weight addition and fluid loss control will be on location at all times.
Spud with fresh water/native mud. Drill out from under 13-3/8" surface casing with brine solution. A 9.8ppg-10.2ppg brine mud will be used while drilling through the salt formation. Use fibrous materials as needed to control seepage and lost circulation. Pump viscous sweeps as needed for hole cleaning. Pump speed will be recorded on a daily drilling report after mudding up. A Pason or Totco will be used to detect changes in loss or gain of mud volume. A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system.

7. Auxiliary Well Control and Monitoring Equipment

A. A Kelly cock will be in the drill string at all times.
B. A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.
C. H2S monitors will be on location when drilling below the 13-3/8" casing.

8. Logging, Coring and Testing Program

Mud Logger: Mud Logging Unit (2 man) below intermediate casing.

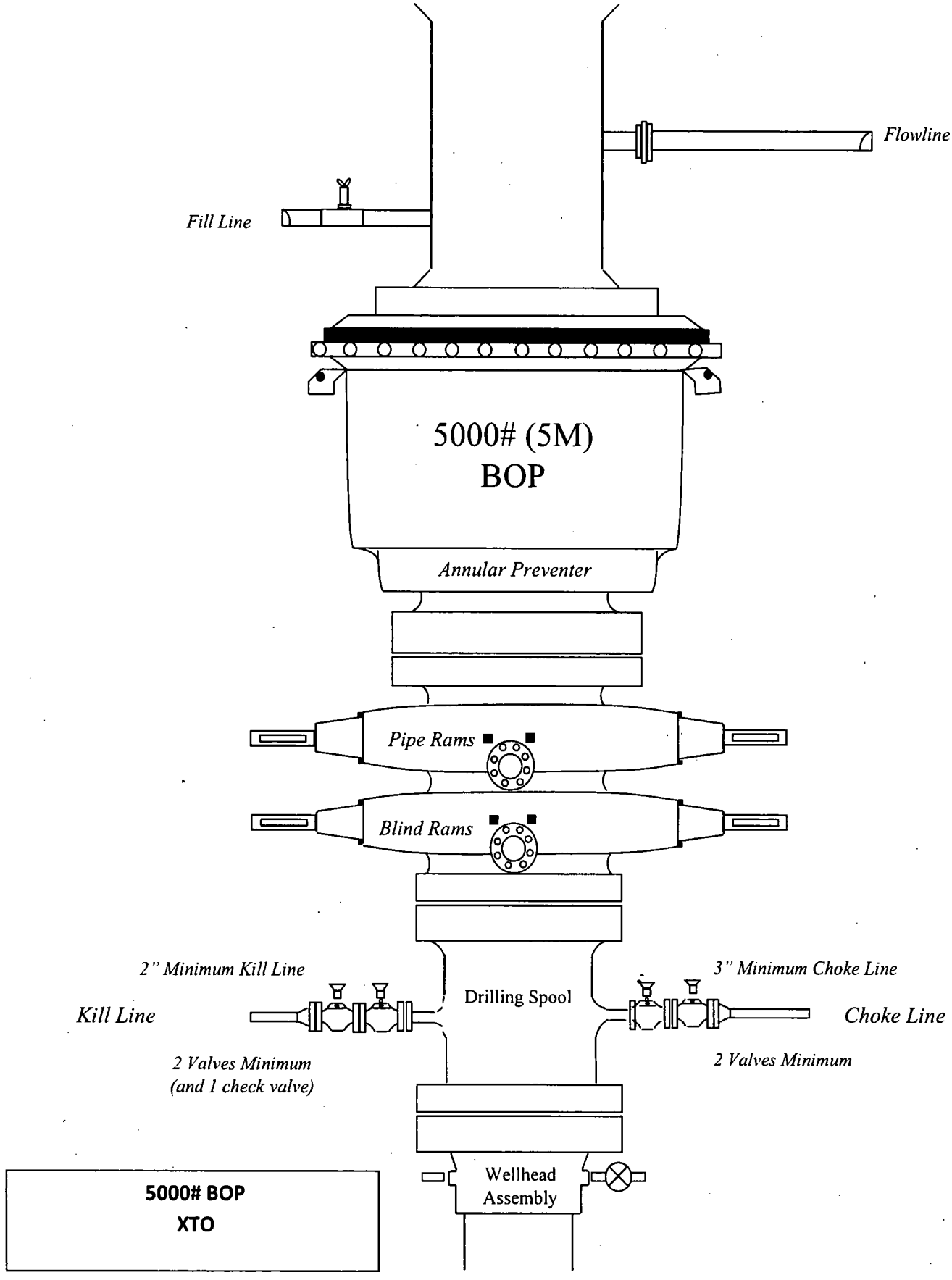
Open hole logging will not be done on this well.

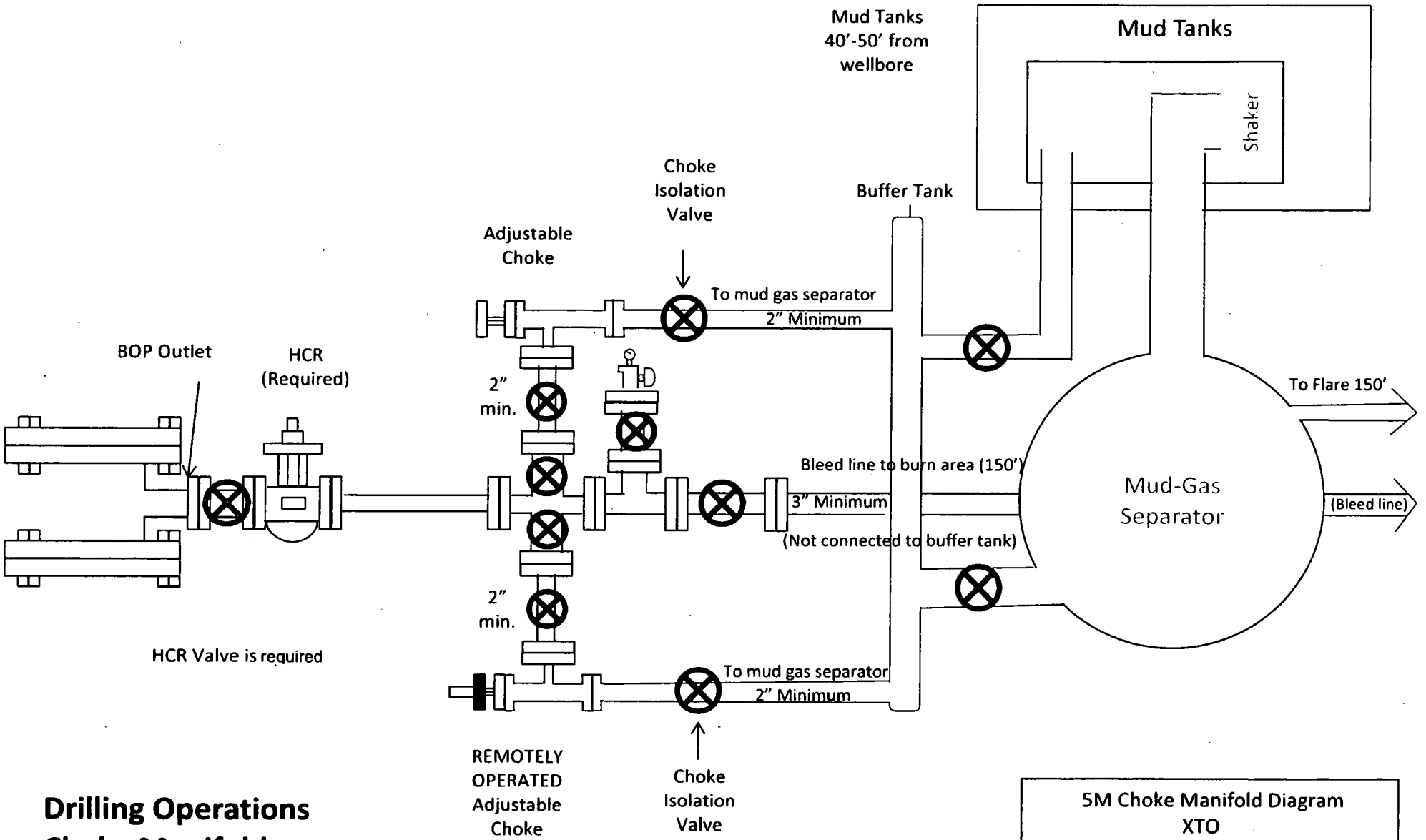
9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 150 to 170 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid. The maximum anticipated bottom hole pressure for this well is 5310 psi.

10. Anticipated Starting Date and Duration of Operations

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

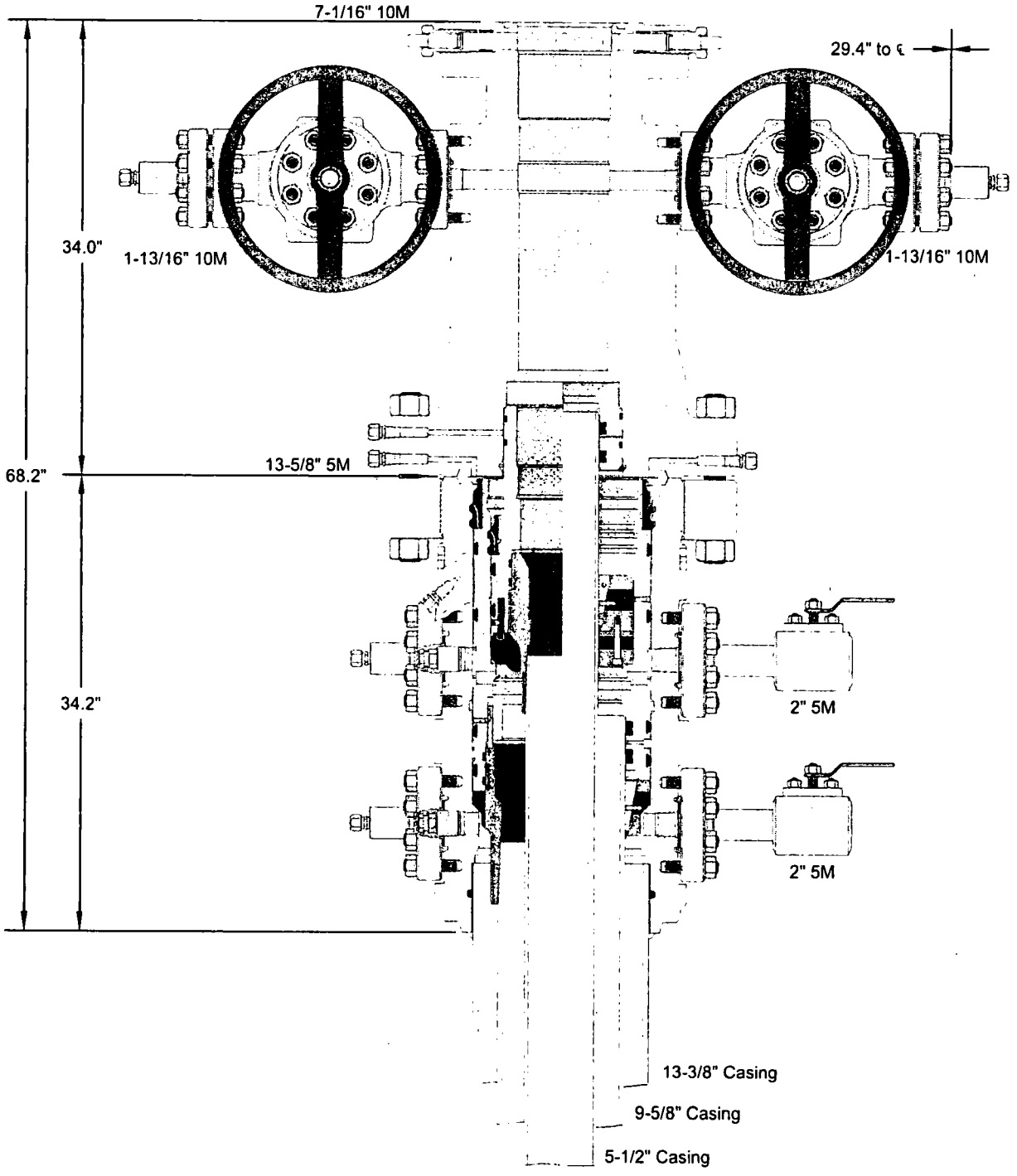

Flowline
Fill Line
5000# (5M)
BOP
Annular Preventer
Pipe Rams
Blind Rams
2" Minimum Kill Line
3" Minimum Choke Line
Kill Line
Drilling Spool
Choke Line
2 Valves Minimum
(and 1 check valve)
2 Valves Minimum
Wellhead
Assembly
5000# BOP
XTO



Drilling Operations
Choke Manifold
5M Service

5M Choke Manifold Diagram
XTO

GE Oil & Gas



ALL DIMENSIONS ARE APPROXIMATE

XTO ENERGY, INC.

13-3/8" x 9-5/8" x 5-1/2" 10M RSH-2 Wellhead Assembly, With T-EBS-F Tubing Head

DRAWN	VJK	16FEB17
APPRV	KN	16FEB17

FOR REFERENCE ONLY
DRAWING NO. 10012842

GATES E & S NORTH AMERICA, INC
DU-TEX
134 44TH STREET
CORPUS CHRISTI, TEXAS 78405

PHONE: 361-887-9807
FAX: 361-887-0812
EMAIL: crpe&s@gates.com
WEB: www.gates.com

GRADE D PRESSURE TEST CERTIFICATE

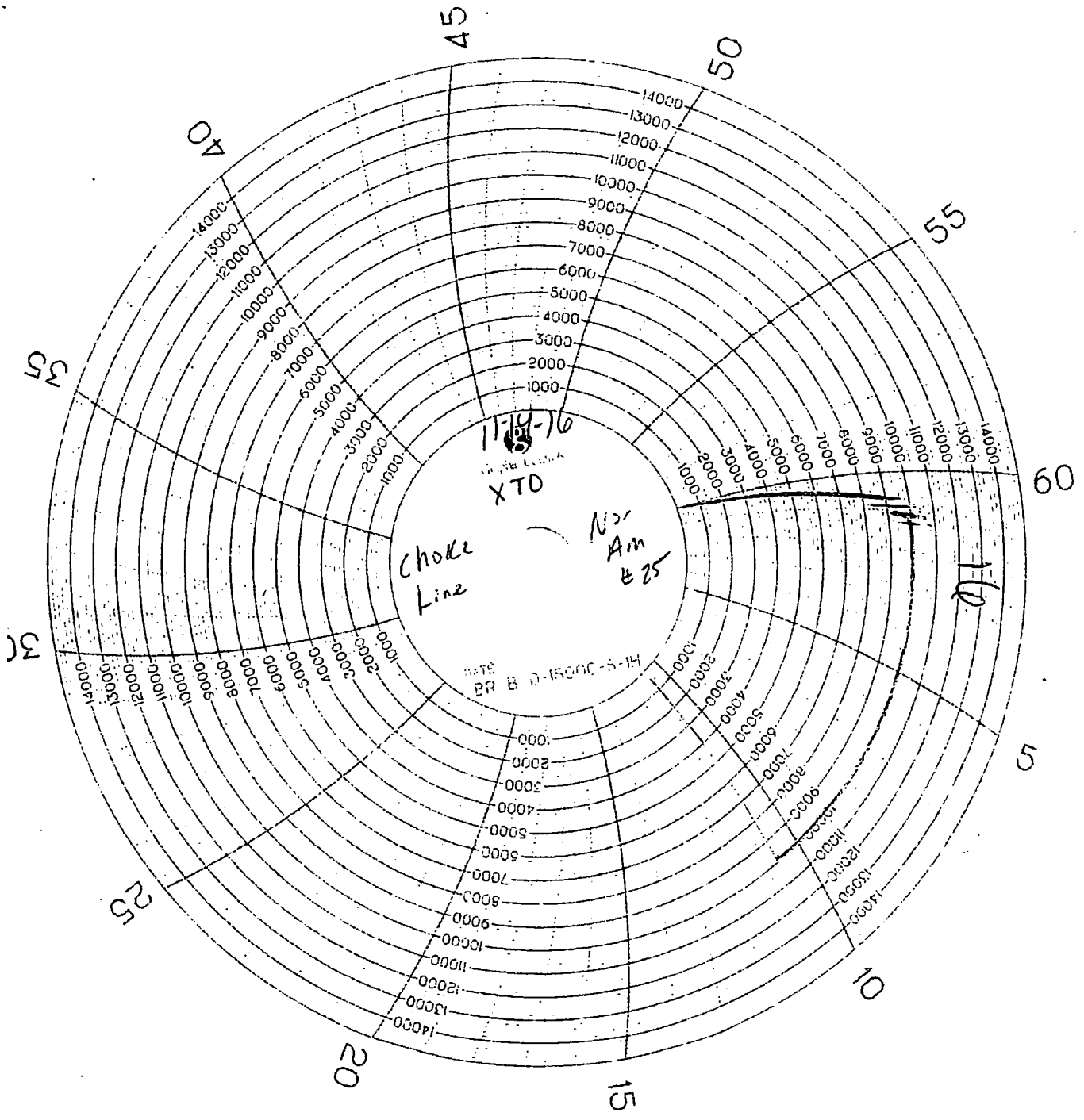
Customer :	AUSTIN DISTRIBUTING	Test Date:	6/8/2014
Customer Ref. :	PENDING	Hose Serial No.:	D-060814-1
Invoice No. :	201709	Created By:	NORMA

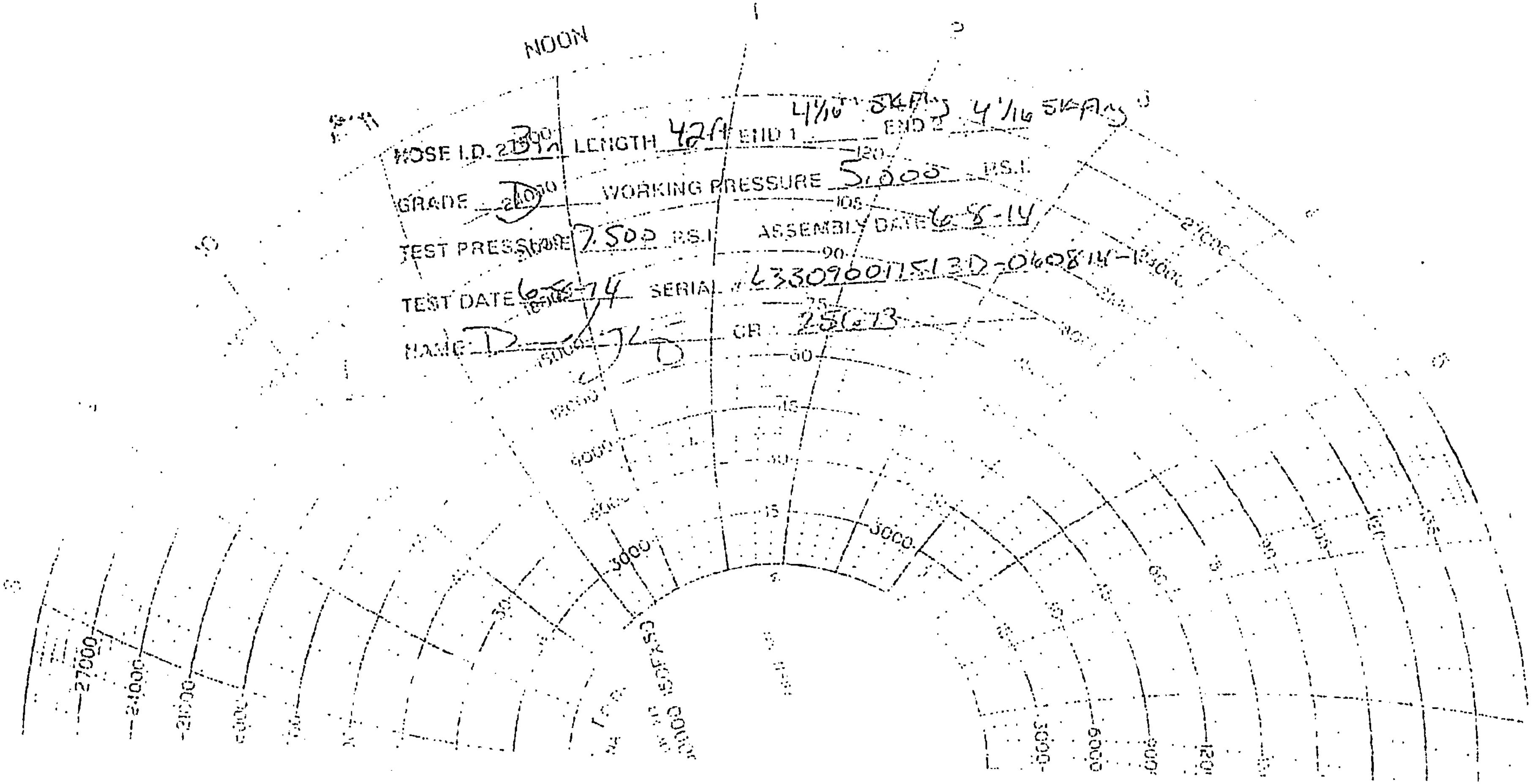
Product Description:	FDJ3.0-2.0R41/16.5KFLGE/E LE

End Fitting 1 :	4 1/16 in.5K FLG	End Fitting 2 :	4 1/16 in.5K FLG
Gates Part No. :	4774-6001	Assembly Code :	L33090011513D-060814-1
Working Pressure :	5,000 PSI	Test Pressure :	7,500 PSI

Gates E & S North America, Inc. certifies that the following hose assembly has been tested to the Gates Oilfield Roughneck Agreement/Specification requirements and passed the 15 minute hydrostatic test per API Spec 7K/Q1, Fifth Edition, June 2010, Test pressure 9.6.7 and per Table 9 to 7,500 psi in accordance with this product number. Hose burst pressure 9.6.7.2 exceeds the minimum of 2.5 times the working pressure per Table 9.

Quality:	QUALITY	Technical Supervisor :	PRODUCTION
Date :	6/8/2014	Date :	6/8/2014
Signature :		Signature :	


11-14-16
XTO
Choke Line
Nor Am #25
45
50
55
60
40
35
30
25
20
15
10
5
14000
13000
12000
11000
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000



NOON
HOSE I.D. 3" LENGTH 42ft END 1 4 1/16" 5K Fig END 2 4 1/16 5K Fig
GRADE D WORKING PRESSURE 5,000 P.S.I.
TEST PRESSURE 7,500 P.S.I. ASSEMBLY DATE 6-8-14
TEST DATE 6-8-14 SERIAL # L330960175I3D-060814-1
CR 25673
NAME

XTO Energy

Project: Eddy County, NM (NAD27) NMEZ Grid
Site: Corral Canyon 3-34 Fed
Well: CORRAL CANYON 3-34 FED 108H
Wellbore: CORRAL CANYON 3-34 FED 108H
Design: Plan #3

3034+27 @ 3061.00usft (ScanProducer)
NAD 1927 (NADCON CONUS)

Start Build 1.00
Start 300.00 hold at 3500.00 MD
Start DLS 2.00 TFO -93.66
Start 5072.43 hold at 4006.51 MD
Start Drop -2.00
CORRAL CANYON 3-34 FED 108H KOP
Start 3.00 hold at 9656.22 MD
Start 330.00 hold at 9326.22 MD
Start DLS 10.00 TFO -90.00
Start Build 10.00
Start 4764.00 hold at 10651.81 MD

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
CORRAL CANYON 3-34 FED 108H SHL	0.00	0.00	0.00	418969.10	613649.60	Point
CORRAL CANYON 3-34 FED 108H KOP	9636.04	-134.00	454.12	418835.10	614103.72	Point
CORRAL CANYON 3-34 FED 108H FTP	10212.00	518.20	554.00	419487.30	614203.60	Point
CORRAL CANYON 3-34 FED 108H LP	10212.00	431.51	546.13	419400.61	614195.73	Point
CORRAL CANYON 3-34 FED 108H LTP	10212.00	5157.70	553.00	424126.80	614202.60	Point
CORRAL CANYON 3-34 FED 108H PBHL_200FNL_330FEL	10212.00	5287.70	552.90	424256.80	614202.50	Rectangle (Sides: L4770.60 W100.00)

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	
3200.00	0.00	0.00	3200.00	0.00	0.00	0.00	0.00	0.00	
3500.00	3.00	160.00	3499.86	-7.38	2.69	1.00	160.00	-7.38	
3800.00	3.00	160.00	3799.45	-22.13	8.06	0.00	0.00	-22.14	
4006.51	4.95	103.52	4005.52	-29.29	18.56	2.00	-93.66	-29.30	
9078.93	4.95	103.52	9059.06	-131.51	443.75	0.00	0.00	-131.66	
9326.22	0.00	0.00	9306.04	-134.00	454.12	2.00	180.00	-134.16	
9656.22	0.00	0.00	9636.04	-134.00	454.12	0.00	0.00	-134.16	
9659.22	0.00	0.00	9639.04	-134.00	454.12	0.00	0.00	-134.16	
10559.22	90.00	9.25	10212.00	431.51	546.22	10.00	9.25	431.32	
10651.81	90.00	359.99	10212.00	523.70	553.67	10.00	-90.00	523.50	
15415.81	90.00	359.99	10212.00	5287.70	552.90	0.00	0.00	5287.51	CORRAL CANYON 3-34 FED 108H PBHL_200FNL_330FEL

FORMATION TOP DETAILS

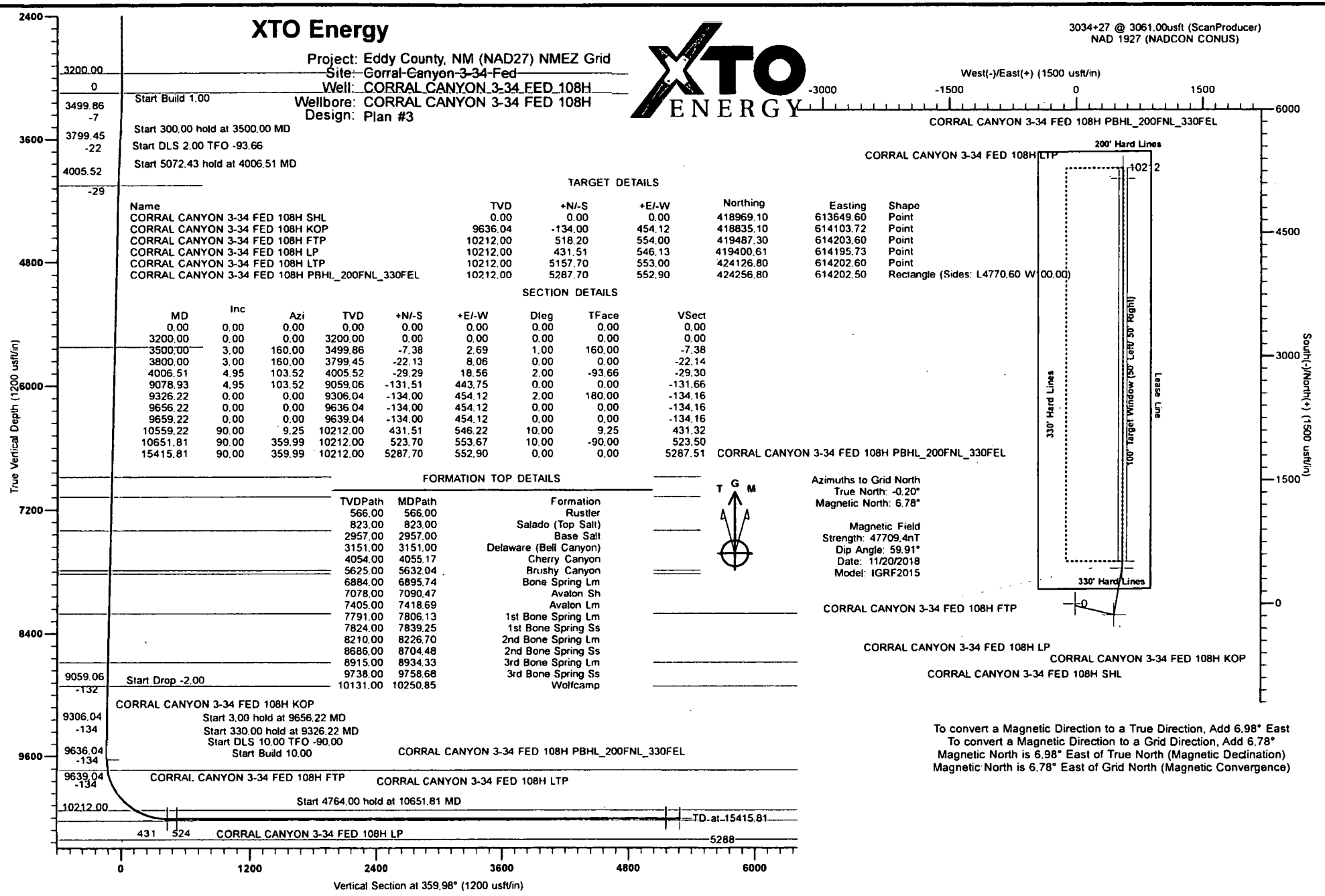
TVDPath	MDPath	Formation
566.00	566.00	Rustler
823.00	823.00	Salado (Top Salt)
2957.00	2957.00	Base Salt
3151.00	3151.00	Delaware (Bell Canyon)
4054.00	4055.17	Cherry Canyon
5625.00	5632.04	Brushy Canyon
6884.00	6895.74	Bone Spring Lm
7078.00	7090.47	Avalon Sh
7405.00	7418.69	Avalon Lm
7791.00	7806.13	1st Bone Spring Lm
7824.00	7839.25	1st Bone Spring Ss
8210.00	8226.70	2nd Bone Spring Lm
8686.00	8704.48	2nd Bone Spring Ss
8915.00	8934.33	3rd Bone Spring Lm
9738.00	9758.68	3rd Bone Spring Ss
10131.00	10250.85	Wolfcamp

T G M

Azimuths to Grid North
True North: -0.20°
Magnetic North: 6.78°

Magnetic Field
Strength: 47709.4nT
Dip Angle: 59.91°
Date: 11/20/2018
Model: IGRF2015

To convert a Magnetic Direction to a True Direction, Add 6.98° East
To convert a Magnetic Direction to a Grid Direction, Add 6.78°
Magnetic North is 6.98° East of True North (Magnetic Declination)
Magnetic North is 6.78° East of Grid North (Magnetic Convergence)



Plan: Plan #3 (CORRAL CANYON 3-34 FED 108H/CORRAL CANYON 3-34 FED 108H)
Created By: Mekka Williams
eSomina Well Design
mekka@esominawelldesign.com
7:56, December 04 2018

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

Database:	STRYKER_EDM	**Local Co-ordinate Reference:**	Well CORRAL CANYON 3-34 FED 108H
Company:	XTO Energy	**TVD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Project:	Eddy County, NM (NAD27) NMEZ Grid	**MD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Site:	Corral Canyon 3-34 Fed	**North Reference:**	Grid
Well:	CORRAL CANYON 3-34 FED 108H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	CORRAL CANYON 3-34 FED 108H		
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	Corral Canyon 3-34 Fed				
Site Position:		**Northing:**	418,968.80 usft	**Latitude:**	32° 9' 4.787 N
From:	Map	**Easting:**	613,589.50 usft	**Longitude:**	103° 57' 58.703 W
Position Uncertainty:	0.00 usft	**Slot Radius:**	13.20 in	**Grid Convergence:**	0.20 °

Well	CORRAL CANYON 3-34 FED 108H					
Well Position	**+N/-S**	0.30 usft	**Northing:**	418,969.10 usft	**Latitude:**	32° 9' 4.788 N
	+E/-W	60.10 usft	**Easting:**	613,649.60 usft	**Longitude:**	103° 57' 58.004 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**		**Ground Level:**	3,034.00 usft

Wellbore	CORRAL CANYON 3-34 FED 108H				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2015	11/20/18	6.98	59.91	47,709.44065566

Design	Plan #3				
Audit Notes:					
Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.00
Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**	
	0.00	0.00	0.00	359.98	

Plan Survey Tool Program **Date** 12/03/18

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	15,415.70	Plan #3 (CORRAL CANYON 3-34	MWD+IFR1+MS	
				OWSG MWD + IFR1 + Multi-St	

Database:	STRYKER_EDM	**Local Co-ordinate Reference:**	Well CORRAL CANYON 3-34 FED 108H
Company:	XTO Energy	**TVD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Project:	Eddy County, NM (NAD27) NMEZ Grid	**MD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Site:	Corral Canyon 3-34 Fed	**North Reference:**	Grid
Well:	CORRAL CANYON 3-34 FED 108H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	CORRAL CANYON 3-34 FED 108H		
Design:	Plan #3		

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	
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,500.00	3.00	160.00	3,499.86	-7.38	2.69	1.00	1.00	0.00	160.00	
3,800.00	3.00	160.00	3,799.45	-22.13	8.06	0.00	0.00	0.00	0.00	
4,006.51	4.95	103.52	4,005.52	-29.29	18.56	2.00	0.94	-27.35	-93.66	
9,078.93	4.95	103.52	9,059.06	-131.51	443.75	0.00	0.00	0.00	0.00	
9,326.22	0.00	0.00	9,306.04	-134.00	454.12	2.00	-2.00	0.00	180.00	
9,656.22	0.00	0.00	9,636.04	-134.00	454.12	0.00	0.00	0.00	0.00	
9,659.22	0.00	0.00	9,639.04	-134.00	454.12	0.00	0.00	0.00	0.00	
10,559.22	90.00	9.25	10,212.00	431.51	546.22	10.00	10.00	0.00	9.25	
10,651.81	90.00	359.99	10,212.00	523.70	553.67	10.00	0.00	-10.00	-90.00	
15,415.81	90.00	359.99	10,212.00	5,287.70	552.90	0.00	0.00	0.00	0.00	CORRAL CANYON 3

Database:	STRYKER_EDM	**Local Co-ordinate Reference:**	Well CORRAL CANYON 3-34 FED 108H
Company:	XTO Energy	**TVD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Project:	Eddy County, NM (NAD27) NMEZ Grid	**MD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Site:	Corral Canyon 3-34 Fed	**North Reference:**	Grid
Well:	CORRAL CANYON 3-34 FED 108H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	CORRAL CANYON 3-34 FED 108H		
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
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
566.00	0.00	0.00	566.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
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
823.00	0.00	0.00	823.00	0.00	0.00	0.00	0.00	0.00	0.00
Salado (Top Salt)									
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
2,300.00	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
2,957.00	0.00	0.00	2,957.00	0.00	0.00	0.00	0.00	0.00	0.00
Base Salt									
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
3,151.00	0.00	0.00	3,151.00	0.00	0.00	0.00	0.00	0.00	0.00
Delaware (Bell Canyon)									
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	1.00	160.00	3,299.99	-0.82	0.30	-0.82	1.00	1.00	0.00
3,400.00	2.00	160.00	3,399.96	-3.28	1.19	-3.28	1.00	1.00	0.00
3,500.00	3.00	160.00	3,499.86	-7.38	2.69	-7.38	1.00	1.00	0.00
3,600.00	3.00	160.00	3,599.73	-12.30	4.48	-12.30	0.00	0.00	0.00
3,700.00	3.00	160.00	3,699.59	-17.21	6.27	-17.22	0.00	0.00	0.00
3,800.00	3.00	160.00	3,799.45	-22.13	8.06	-22.14	0.00	0.00	0.00
3,900.00	3.50	125.18	3,899.30	-26.35	11.44	-26.35	2.00	0.50	-34.82
4,006.51	4.95	103.52	4,005.52	-29.29	18.56	-29.30	2.00	1.36	-20.34
4,055.17	4.95	103.52	4,054.00	-30.27	22.64	-30.28	0.00	0.00	0.00
Cherry Canyon									
4,100.00	4.95	103.52	4,098.67	-31.18	26.40	-31.19	0.00	0.00	0.00
4,200.00	4.95	103.52	4,198.29	-33.19	34.78	-33.21	0.00	0.00	0.00
4,300.00	4.95	103.52	4,297.92	-35.21	43.16	-35.22	0.00	0.00	0.00

Database:	STRYKER_EDM	**Local Co-ordinate Reference:**	Well CORRAL CANYON 3-34 FED 108H
Company:	XTO Energy	**TVD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Project:	Eddy County, NM (NAD27) NMEZ Grid	**MD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Site:	Corral Canyon 3-34 Fed	**North Reference:**	Grid
Well:	CORRAL CANYON 3-34 FED 108H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	CORRAL CANYON 3-34 FED 108H		
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)
4,400.00	4.95	103.52	4,397.55	-37.22	51.55	-37.24	0.00	0.00	0.00
4,500.00	4.95	103.52	4,497.18	-39.24	59.93	-39.26	0.00	0.00	0.00
4,600.00	4.95	103.52	4,596.81	-41.25	68.31	-41.28	0.00	0.00	0.00
4,700.00	4.95	103.52	4,696.43	-43.27	76.69	-43.30	0.00	0.00	0.00
4,800.00	4.95	103.52	4,796.06	-45.28	85.08	-45.31	0.00	0.00	0.00
4,900.00	4.95	103.52	4,895.69	-47.30	93.46	-47.33	0.00	0.00	0.00
5,000.00	4.95	103.52	4,995.32	-49.31	101.84	-49.35	0.00	0.00	0.00
5,100.00	4.95	103.52	5,094.94	-51.33	110.22	-51.37	0.00	0.00	0.00
5,200.00	4.95	103.52	5,194.57	-53.34	118.61	-53.39	0.00	0.00	0.00
5,300.00	4.95	103.52	5,294.20	-55.36	126.99	-55.40	0.00	0.00	0.00
5,400.00	4.95	103.52	5,393.83	-57.37	135.37	-57.42	0.00	0.00	0.00
5,500.00	4.95	103.52	5,493.45	-59.39	143.75	-59.44	0.00	0.00	0.00
5,600.00	4.95	103.52	5,593.08	-61.40	152.13	-61.46	0.00	0.00	0.00
5,632.04	4.95	103.52	5,625.00	-62.05	154.82	-62.10	0.00	0.00	0.00
Brushy Canyon									
5,700.00	4.95	103.52	5,692.71	-63.42	160.52	-63.48	0.00	0.00	0.00
5,800.00	4.95	103.52	5,792.34	-65.43	168.90	-65.49	0.00	0.00	0.00
5,900.00	4.95	103.52	5,891.97	-67.45	177.28	-67.51	0.00	0.00	0.00
6,000.00	4.95	103.52	5,991.59	-69.46	185.66	-69.53	0.00	0.00	0.00
6,100.00	4.95	103.52	6,091.22	-71.48	194.05	-71.55	0.00	0.00	0.00
6,200.00	4.95	103.52	6,190.85	-73.49	202.43	-73.57	0.00	0.00	0.00
6,300.00	4.95	103.52	6,290.48	-75.51	210.81	-75.58	0.00	0.00	0.00
6,400.00	4.95	103.52	6,390.10	-77.52	219.19	-77.60	0.00	0.00	0.00
6,500.00	4.95	103.52	6,489.73	-79.54	227.58	-79.62	0.00	0.00	0.00
6,600.00	4.95	103.52	6,589.36	-81.55	235.96	-81.64	0.00	0.00	0.00
6,700.00	4.95	103.52	6,688.99	-83.57	244.34	-83.66	0.00	0.00	0.00
6,800.00	4.95	103.52	6,788.61	-85.58	252.72	-85.67	0.00	0.00	0.00
6,895.74	4.95	103.52	6,884.00	-87.51	260.75	-87.61	0.00	0.00	0.00
Bone Spring Lm									
6,900.00	4.95	103.52	6,888.24	-87.60	261.10	-87.69	0.00	0.00	0.00
7,000.00	4.95	103.52	6,987.87	-89.62	269.49	-89.71	0.00	0.00	0.00
7,090.47	4.95	103.52	7,078.00	-91.44	277.07	-91.53	0.00	0.00	0.00
Avalon Sh									
7,100.00	4.95	103.52	7,087.50	-91.63	277.87	-91.73	0.00	0.00	0.00
7,200.00	4.95	103.52	7,187.13	-93.65	286.25	-93.75	0.00	0.00	0.00
7,300.00	4.95	103.52	7,286.75	-95.66	294.63	-95.76	0.00	0.00	0.00
7,400.00	4.95	103.52	7,386.38	-97.68	303.02	-97.78	0.00	0.00	0.00
7,418.69	4.95	103.52	7,405.00	-98.05	304.58	-98.16	0.00	0.00	0.00
Avalon Lm									
7,500.00	4.95	103.52	7,486.01	-99.69	311.40	-99.80	0.00	0.00	0.00
7,600.00	4.95	103.52	7,585.64	-101.71	319.78	-101.82	0.00	0.00	0.00
7,700.00	4.95	103.52	7,685.26	-103.72	328.16	-103.84	0.00	0.00	0.00
7,800.00	4.95	103.52	7,784.89	-105.74	336.55	-105.85	0.00	0.00	0.00
7,806.13	4.95	103.52	7,791.00	-105.86	337.06	-105.98	0.00	0.00	0.00
1st Bone Spring Lm									
7,839.25	4.95	103.52	7,824.00	-106.53	339.84	-106.65	0.00	0.00	0.00
1st Bone Spring Ss									
7,900.00	4.95	103.52	7,884.52	-107.75	344.93	-107.87	0.00	0.00	0.00
8,000.00	4.95	103.52	7,984.15	-109.77	353.31	-109.89	0.00	0.00	0.00
8,100.00	4.95	103.52	8,083.77	-111.78	361.69	-111.91	0.00	0.00	0.00
8,200.00	4.95	103.52	8,183.40	-113.80	370.07	-113.93	0.00	0.00	0.00
8,226.70	4.95	103.52	8,210.00	-114.33	372.31	-114.46	0.00	0.00	0.00
2nd Bone Spring Lm									

Database:	STRYKER_EDM	**Local Co-ordinate Reference:**	Well CORRAL CANYON 3-34 FED 108H
Company:	XTO Energy	**TVD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Project:	Eddy County, NM (NAD27) NMEZ Grid	**MD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Site:	Corral Canyon 3-34 Fed	**North Reference:**	Grid
Well:	CORRAL CANYON 3-34 FED 108H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	CORRAL CANYON 3-34 FED 108H		
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)
8,300.00	4.95	103.52	8,283.03	-115.81	378.46	-115.94	0.00	0.00	0.00
8,400.00	4.95	103.52	8,382.66	-117.83	386.84	-117.96	0.00	0.00	0.00
8,500.00	4.95	103.52	8,482.29	-119.84	395.22	-119.98	0.00	0.00	0.00
8,600.00	4.95	103.52	8,581.91	-121.86	403.60	-122.00	0.00	0.00	0.00
8,700.00	4.95	103.52	8,681.54	-123.87	411.99	-124.02	0.00	0.00	0.00
8,704.48	4.95	103.52	8,686.00	-123.96	412.36	-124.11	0.00	0.00	0.00
2nd Bone Spring Ss									
8,800.00	4.95	103.52	8,781.17	-125.89	420.37	-126.03	0.00	0.00	0.00
8,900.00	4.95	103.52	8,880.80	-127.90	428.75	-128.05	0.00	0.00	0.00
8,934.33	4.95	103.52	8,915.00	-128.59	431.63	-128.74	0.00	0.00	0.00
3rd Bone Spring Lm									
9,000.00	4.95	103.52	8,980.42	-129.92	437.13	-130.07	0.00	0.00	0.00
9,078.93	4.95	103.52	9,059.06	-131.51	443.75	-131.66	0.00	0.00	0.00
9,100.00	4.52	103.52	9,080.06	-131.91	445.44	-132.07	2.00	-2.00	0.00
9,200.00	2.52	103.52	9,179.86	-133.35	451.42	-133.51	2.00	-2.00	0.00
9,300.00	0.52	103.52	9,279.82	-133.97	454.00	-134.13	2.00	-2.00	0.00
9,326.22	0.00	0.00	9,306.04	-134.00	454.12	-134.16	2.00	-2.00	0.00
9,400.00	0.00	0.00	9,379.82	-134.00	454.12	-134.16	0.00	0.00	0.00
9,500.00	0.00	0.00	9,479.82	-134.00	454.12	-134.16	0.00	0.00	0.00
9,600.00	0.00	0.00	9,579.82	-134.00	454.12	-134.16	0.00	0.00	0.00
9,656.22	0.00	0.00	9,636.04	-134.00	454.12	-134.16	0.00	0.00	0.00
9,659.22	0.00	0.00	9,639.04	-134.00	454.12	-134.16	0.00	0.00	0.00
9,700.00	4.08	9.25	9,679.79	-132.57	454.35	-132.73	10.00	10.00	0.00
9,750.00	9.08	9.25	9,729.44	-126.92	455.27	-127.08	10.00	10.00	0.00
9,758.68	9.95	9.25	9,738.00	-125.50	455.50	-125.66	10.00	10.00	0.00
3rd Bone Spring Ss									
9,800.00	14.08	9.25	9,778.41	-117.01	456.89	-117.17	10.00	10.00	0.00
9,850.00	19.08	9.25	9,826.32	-102.94	459.18	-103.10	10.00	10.00	0.00
9,900.00	24.08	9.25	9,872.80	-84.79	462.13	-84.96	10.00	10.00	0.00
9,950.00	29.08	9.25	9,917.50	-62.72	465.73	-62.88	10.00	10.00	0.00
10,000.00	34.08	9.25	9,960.08	-36.89	469.94	-37.05	10.00	10.00	0.00
10,050.00	39.08	9.25	10,000.22	-7.49	474.72	-7.65	10.00	10.00	0.00
10,100.00	44.08	9.25	10,037.61	25.25	480.06	25.09	10.00	10.00	0.00
10,150.00	49.08	9.25	10,071.97	61.09	485.89	60.92	10.00	10.00	0.00
10,200.00	54.08	9.25	10,103.03	99.74	492.19	99.56	10.00	10.00	0.00
10,250.00	59.08	9.25	10,130.56	140.91	498.89	140.74	10.00	10.00	0.00
10,250.85	59.16	9.25	10,131.00	141.63	499.01	141.46	10.00	10.00	0.00
Wolfcamp									
10,300.00	64.08	9.25	10,154.35	184.30	505.96	184.12	10.00	10.00	0.00
10,350.00	69.08	9.25	10,174.22	229.57	513.33	229.39	10.00	10.00	0.00
10,400.00	74.08	9.25	10,190.02	276.38	520.95	276.19	10.00	10.00	0.00
10,450.00	79.08	9.25	10,201.62	324.36	528.77	324.18	10.00	10.00	0.00
10,500.00	84.08	9.25	10,208.94	373.16	536.72	372.98	10.00	10.00	0.00
10,550.00	89.08	9.25	10,211.92	422.41	544.74	422.22	10.00	10.00	0.00
10,559.22	90.00	9.25	10,212.00	431.51	546.22	431.32	10.00	10.00	0.00
10,600.00	90.00	5.17	10,212.00	471.96	551.34	471.77	10.00	0.00	-10.00
10,651.81	90.00	359.99	10,212.00	523.70	553.67	523.50	10.00	0.00	-10.00
10,700.00	90.00	359.99	10,212.00	571.89	553.66	571.70	0.00	0.00	0.00
10,800.00	90.00	359.99	10,212.00	671.89	553.65	671.70	0.00	0.00	0.00
10,900.00	90.00	359.99	10,212.00	771.89	553.63	771.70	0.00	0.00	0.00
11,000.00	90.00	359.99	10,212.00	871.89	553.61	871.70	0.00	0.00	0.00
11,100.00	90.00	359.99	10,212.00	971.89	553.60	971.70	0.00	0.00	0.00
11,200.00	90.00	359.99	10,212.00	1,071.89	553.58	1,071.70	0.00	0.00	0.00
11,300.00	90.00	359.99	10,212.00	1,171.89	553.56	1,171.70	0.00	0.00	0.00

Database:	STRYKER_EDM	**Local Co-ordinate Reference:**	Well CORRAL CANYON 3-34 FED 108H
Company:	XTO Energy	**TVD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Project:	Eddy County, NM (NAD27) NMEZ Grid	**MD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Site:	Corral Canyon 3-34 Fed	**North Reference:**	Grid
Well:	CORRAL CANYON 3-34 FED 108H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	CORRAL CANYON 3-34 FED 108H		
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)
11,400.00	90.00	359.99	10,212.00	1,271.89	553.55	1,271.70	0.00	0.00	0.00
11,500.00	90.00	359.99	10,212.00	1,371.89	553.53	1,371.70	0.00	0.00	0.00
11,600.00	90.00	359.99	10,212.00	1,471.89	553.52	1,471.70	0.00	0.00	0.00
11,700.00	90.00	359.99	10,212.00	1,571.89	553.50	1,571.70	0.00	0.00	0.00
11,800.00	90.00	359.99	10,212.00	1,671.89	553.48	1,671.70	0.00	0.00	0.00
11,900.00	90.00	359.99	10,212.00	1,771.89	553.47	1,771.70	0.00	0.00	0.00
12,000.00	90.00	359.99	10,212.00	1,871.89	553.45	1,871.70	0.00	0.00	0.00
12,100.00	90.00	359.99	10,212.00	1,971.89	553.44	1,971.70	0.00	0.00	0.00
12,200.00	90.00	359.99	10,212.00	2,071.89	553.42	2,071.70	0.00	0.00	0.00
12,300.00	90.00	359.99	10,212.00	2,171.89	553.40	2,171.70	0.00	0.00	0.00
12,400.00	90.00	359.99	10,212.00	2,271.89	553.39	2,271.70	0.00	0.00	0.00
12,500.00	90.00	359.99	10,212.00	2,371.89	553.37	2,371.70	0.00	0.00	0.00
12,600.00	90.00	359.99	10,212.00	2,471.89	553.35	2,471.70	0.00	0.00	0.00
12,700.00	90.00	359.99	10,212.00	2,571.89	553.34	2,571.70	0.00	0.00	0.00
12,800.00	90.00	359.99	10,212.00	2,671.89	553.32	2,671.70	0.00	0.00	0.00
12,900.00	90.00	359.99	10,212.00	2,771.89	553.31	2,771.70	0.00	0.00	0.00
13,000.00	90.00	359.99	10,212.00	2,871.89	553.29	2,871.70	0.00	0.00	0.00
13,100.00	90.00	359.99	10,212.00	2,971.89	553.27	2,971.70	0.00	0.00	0.00
13,200.00	90.00	359.99	10,212.00	3,071.89	553.26	3,071.70	0.00	0.00	0.00
13,300.00	90.00	359.99	10,212.00	3,171.89	553.24	3,171.70	0.00	0.00	0.00
13,400.00	90.00	359.99	10,212.00	3,271.89	553.23	3,271.70	0.00	0.00	0.00
13,500.00	90.00	359.99	10,212.00	3,371.89	553.21	3,371.70	0.00	0.00	0.00
13,600.00	90.00	359.99	10,212.00	3,471.89	553.19	3,471.70	0.00	0.00	0.00
13,700.00	90.00	359.99	10,212.00	3,571.89	553.18	3,571.70	0.00	0.00	0.00
13,800.00	90.00	359.99	10,212.00	3,671.89	553.16	3,671.70	0.00	0.00	0.00
13,900.00	90.00	359.99	10,212.00	3,771.89	553.14	3,771.70	0.00	0.00	0.00
14,000.00	90.00	359.99	10,212.00	3,871.89	553.13	3,871.70	0.00	0.00	0.00
14,100.00	90.00	359.99	10,212.00	3,971.89	553.11	3,971.70	0.00	0.00	0.00
14,200.00	90.00	359.99	10,212.00	4,071.89	553.10	4,071.70	0.00	0.00	0.00
14,300.00	90.00	359.99	10,212.00	4,171.89	553.08	4,171.70	0.00	0.00	0.00
14,400.00	90.00	359.99	10,212.00	4,271.89	553.06	4,271.70	0.00	0.00	0.00
14,500.00	90.00	359.99	10,212.00	4,371.89	553.05	4,371.70	0.00	0.00	0.00
14,600.00	90.00	359.99	10,212.00	4,471.89	553.03	4,471.70	0.00	0.00	0.00
14,700.00	90.00	359.99	10,212.00	4,571.89	553.02	4,571.70	0.00	0.00	0.00
14,800.00	90.00	359.99	10,212.00	4,671.89	553.00	4,671.70	0.00	0.00	0.00
14,900.00	90.00	359.99	10,212.00	4,771.89	552.98	4,771.70	0.00	0.00	0.00
15,000.00	90.00	359.99	10,212.00	4,871.89	552.97	4,871.70	0.00	0.00	0.00
15,100.00	90.00	359.99	10,212.00	4,971.89	552.95	4,971.70	0.00	0.00	0.00
15,200.00	90.00	359.99	10,212.00	5,071.89	552.93	5,071.70	0.00	0.00	0.00
15,300.00	90.00	359.99	10,212.00	5,171.89	552.92	5,171.70	0.00	0.00	0.00
15,400.00	90.00	359.99	10,212.00	5,271.89	552.90	5,271.70	0.00	0.00	0.00
15,415.81	90.00	359.99	10,212.00	5,287.70	552.90	5,287.51	0.00	0.00	0.00

Database:	STRYKER_EDM	**Local Co-ordinate Reference:**	Well CORRAL CANYON 3-34 FED 108H
Company:	XTO Energy	**TVD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Project:	Eddy County, NM (NAD27) NMEZ Grid	**MD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Site:	Corral Canyon 3-34 Fed	**North Reference:**	Grid
Well:	CORRAL CANYON 3-34 FED 108H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	CORRAL CANYON 3-34 FED 108H		
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
CORRAL CANYON 3-34 - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	418,969.10	613,649.60	32° 9' 4.788 N	103° 57' 58.004 W
CORRAL CANYON 3-34 - plan hits target center - Point	0.00	0.00	9,636.04	-134.00	454.12	418,835.10	614,103.72	32° 9' 3.447 N	103° 57' 52.727 W
CORRAL CANYON 3-34 - plan hits target center - Rectangle (sides W100.00 H4,770.60 D0.00)	0.00	0.00	10,212.00	5,287.70	552.90	424,256.80	614,202.50	32° 9' 57.098 N	103° 57' 51.361 W
CORRAL CANYON 3-34 - plan misses target center by 0.08usft at 15285.81usft MD (10212.00 TVD, 5157.70 N, 552.92 E) - Point	0.00	0.00	10,212.00	5,157.70	553.00	424,126.80	614,202.60	32° 9' 55.812 N	103° 57' 51.365 W
CORRAL CANYON 3-34 - plan misses target center by 0.09usft at 10559.20usft MD (10212.00 TVD, 431.50 N, 546.22 E) - Point	0.00	0.00	10,212.00	431.51	546.13	419,400.61	614,195.73	32° 9' 9.040 N	103° 57' 51.634 W
CORRAL CANYON 3-34 - plan misses target center by 0.36usft at 10646.33usft MD (10212.00 TVD, 518.22 N, 553.64 E) - Point	0.00	0.00	10,212.00	518.20	554.00	419,487.30	614,203.60	32° 9' 9.898 N	103° 57' 51.539 W

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
566.00	566.00	Rustler			
823.00	823.00	Salado (Top Salt)			
2,957.00	2,957.00	Base Salt			
3,151.00	3,151.00	Delaware (Bell Canyon)			
4,055.17	4,054.00	Cherry Canyon			
5,632.04	5,625.00	Brushy Canyon			
6,895.74	6,884.00	Bone Spring Lm			
7,090.47	7,078.00	Avalon Sh			
7,418.69	7,405.00	Avalon Lm			
7,806.13	7,791.00	1st Bone Spring Lm			
7,839.25	7,824.00	1st Bone Spring Ss			
8,226.70	8,210.00	2nd Bone Spring Lm			
8,704.48	8,686.00	2nd Bone Spring Ss			
8,934.33	8,915.00	3rd Bone Spring Lm			
9,758.68	9,738.00	3rd Bone Spring Ss			
10,250.85	10,131.00	Wolfcamp			

Anticollision Report

Company:	XTO Energy	**Local Co-ordinate Reference:**	Well CORRAL CANYON 3-34 FED 108H
Project:	Eddy County, NM (NAD27) NMEZ Grid	**TVD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Reference Site:	Corral Canyon 3-34 Fed	**MD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	CORRAL CANYON 3-34 FED 108H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	CORRAL CANYON 3-34 FED 108H	**Database:**	STRYKER_EDM
Reference Design:	Plan #3	**Offset TVD Reference:**	Reference 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 ellipse separation of 300.00 usft	**Error Surface:**	Ellipsoid Separation
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Survey Tool Program **Date** 12/03/18

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	15,415.70	Plan #3 (CORRAL CANYON 3-34 FED 10	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
Corral Canyon 3-34 Fed						
CORRAL CANYON 3-34 FED 127H - CORRAL CANYON	3,200.00	3,200.00	30.00	7.51	1.334	Level 3, CC
CORRAL CANYON 3-34 FED 127H - CORRAL CANYON	3,300.00	3,299.99	30.31	7.12	1.307	Level 3, ES
CORRAL CANYON 3-34 FED 127H - CORRAL CANYON	3,350.00	3,349.98	30.72	7.19	1.306	Level 3, SF
CORRAL CANYON 3-34 FED 128H - CORRAL CANYON	3,517.62	3,517.38	28.16	3.49	1.141	Level 2, CC
CORRAL CANYON 3-34 FED 128H - CORRAL CANYON	3,550.00	3,549.57	28.29	3.40	1.137	Level 2, ES, SF
CORRAL CANYON 3-34 FED 907H - CORRAL CANYON	3,200.00	3,200.00	60.10	37.61	2.673	CC
CORRAL CANYON 3-34 FED 907H - CORRAL CANYON	3,300.00	3,299.99	60.40	37.21	2.605	ES
CORRAL CANYON 3-34 FED 907H - CORRAL CANYON	3,450.00	3,449.92	62.15	37.94	2.567	SF

Offset Design Corral Canyon 3-34 Fed - CORRAL CANYON 3-34 FED 127H - CORRAL CANYON 3-34 FED 127H - P

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-90.19	-0.10	-30.00	30.00				
50.00	50.00	50.00	50.00	0.04	0.07	-90.19	-0.10	-30.00	30.00	29.89	0.11	281.308	
100.00	100.00	100.00	100.00	0.13	0.13	-90.19	-0.10	-30.00	30.00	29.74	0.26	114.642	
150.00	150.00	150.00	150.00	0.31	0.31	-90.19	-0.10	-30.00	30.00	29.38	0.62	48.375	
200.00	200.00	200.00	200.00	0.49	0.49	-90.19	-0.10	-30.00	30.00	29.02	0.98	30.655	
250.00	250.00	250.00	250.00	0.67	0.67	-90.19	-0.10	-30.00	30.00	28.66	1.34	22.437	
300.00	300.00	300.00	300.00	0.85	0.85	-90.19	-0.10	-30.00	30.00	28.30	1.70	17.693	
350.00	350.00	350.00	350.00	1.03	1.03	-90.19	-0.10	-30.00	30.00	27.95	2.05	14.605	
400.00	400.00	400.00	400.00	1.21	1.21	-90.19	-0.10	-30.00	30.00	27.59	2.41	12.435	
450.00	450.00	450.00	450.00	1.39	1.39	-90.19	-0.10	-30.00	30.00	27.23	2.77	10.827	
500.00	500.00	500.00	500.00	1.56	1.56	-90.19	-0.10	-30.00	30.00	26.87	3.13	9.586	
550.00	550.00	550.00	550.00	1.74	1.74	-90.19	-0.10	-30.00	30.00	26.51	3.49	8.601	
600.00	600.00	600.00	600.00	1.92	1.92	-90.19	-0.10	-30.00	30.00	26.15	3.85	7.800	
650.00	650.00	650.00	650.00	2.10	2.10	-90.19	-0.10	-30.00	30.00	25.80	4.20	7.135	
700.00	700.00	700.00	700.00	2.28	2.28	-90.19	-0.10	-30.00	30.00	25.44	4.56	6.574	
750.00	750.00	750.00	750.00	2.46	2.46	-90.19	-0.10	-30.00	30.00	25.08	4.92	6.095	
800.00	800.00	800.00	800.00	2.64	2.64	-90.19	-0.10	-30.00	30.00	24.72	5.28	5.682	
850.00	850.00	850.00	850.00	2.82	2.82	-90.19	-0.10	-30.00	30.00	24.36	5.64	5.320	
900.00	900.00	900.00	900.00	3.00	3.00	-90.19	-0.10	-30.00	30.00	24.00	6.00	5.002	
950.00	950.00	950.00	950.00	3.18	3.18	-90.19	-0.10	-30.00	30.00	23.64	6.36	4.720	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	XTO Energy	**Local Co-ordinate Reference:**	Well CORRAL CANYON 3-34 FED 108H
Project:	Eddy County, NM (NAD27) NMEZ Grid	**TVD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Reference Site:	Corral Canyon 3-34 Fed	**MD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	CORRAL CANYON 3-34 FED 108H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	CORRAL CANYON 3-34 FED 108H	**Database:**	STRYKER_EDM
Reference Design:	Plan #3	**Offset TVD Reference:**	Reference Datum

Offset Design Corral Canyon 3-34 Fed - CORRAL CANYON 3-34 FED 127H - CORRAL CANYON 3-34 FED 127H - P — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+MS — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
1,000.00	1,000.00	1,000.00	1,000.00	3.36	3.36	-90.19	-0.10	-30.00	30.00	23.29	6.71	4.468	
1,050.00	1,050.00	1,050.00	1,050.00	3.54	3.54	-90.19	-0.10	-30.00	30.00	22.93	7.07	4.242	
1,100.00	1,100.00	1,100.00	1,100.00	3.72	3.72	-90.19	-0.10	-30.00	30.00	22.57	7.43	4.037	
1,150.00	1,150.00	1,150.00	1,150.00	3.89	3.89	-90.19	-0.10	-30.00	30.00	22.21	7.79	3.851	
1,200.00	1,200.00	1,200.00	1,200.00	4.07	4.07	-90.19	-0.10	-30.00	30.00	21.85	8.15	3.682	
1,250.00	1,250.00	1,250.00	1,250.00	4.25	4.25	-90.19	-0.10	-30.00	30.00	21.49	8.51	3.527	
1,300.00	1,300.00	1,300.00	1,300.00	4.43	4.43	-90.19	-0.10	-30.00	30.00	21.14	8.87	3.384	
1,350.00	1,350.00	1,350.00	1,350.00	4.61	4.61	-90.19	-0.10	-30.00	30.00	20.78	9.22	3.253	
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	-90.19	-0.10	-30.00	30.00	20.42	9.58	3.131	
1,450.00	1,450.00	1,450.00	1,450.00	4.97	4.97	-90.19	-0.10	-30.00	30.00	20.06	9.94	3.018	
1,500.00	1,500.00	1,500.00	1,500.00	5.15	5.15	-90.19	-0.10	-30.00	30.00	19.70	10.30	2.913	
1,550.00	1,550.00	1,550.00	1,550.00	5.33	5.33	-90.19	-0.10	-30.00	30.00	19.34	10.66	2.815	
1,600.00	1,600.00	1,600.00	1,600.00	5.51	5.51	-90.19	-0.10	-30.00	30.00	18.98	11.02	2.723	
1,650.00	1,650.00	1,650.00	1,650.00	5.69	5.69	-90.19	-0.10	-30.00	30.00	18.63	11.37	2.638	
1,700.00	1,700.00	1,700.00	1,700.00	5.87	5.87	-90.19	-0.10	-30.00	30.00	18.27	11.73	2.557	
1,750.00	1,750.00	1,750.00	1,750.00	6.05	6.05	-90.19	-0.10	-30.00	30.00	17.91	12.09	2.481	
1,800.00	1,800.00	1,800.00	1,800.00	6.22	6.22	-90.19	-0.10	-30.00	30.00	17.55	12.45	2.410	
1,850.00	1,850.00	1,850.00	1,850.00	6.40	6.40	-90.19	-0.10	-30.00	30.00	17.19	12.81	2.342	
1,900.00	1,900.00	1,900.00	1,900.00	6.58	6.58	-90.19	-0.10	-30.00	30.00	16.83	13.17	2.278	
1,950.00	1,950.00	1,950.00	1,950.00	6.76	6.76	-90.19	-0.10	-30.00	30.00	16.48	13.53	2.218	
2,000.00	2,000.00	2,000.00	2,000.00	6.94	6.94	-90.19	-0.10	-30.00	30.00	16.12	13.88	2.161	
2,050.00	2,050.00	2,050.00	2,050.00	7.12	7.12	-90.19	-0.10	-30.00	30.00	15.76	14.24	2.106	
2,100.00	2,100.00	2,100.00	2,100.00	7.30	7.30	-90.19	-0.10	-30.00	30.00	15.40	14.60	2.055	
2,150.00	2,150.00	2,150.00	2,150.00	7.48	7.48	-90.19	-0.10	-30.00	30.00	15.04	14.96	2.005	
2,200.00	2,200.00	2,200.00	2,200.00	7.66	7.66	-90.19	-0.10	-30.00	30.00	14.68	15.32	1.959	
2,250.00	2,250.00	2,250.00	2,250.00	7.84	7.84	-90.19	-0.10	-30.00	30.00	14.32	15.68	1.914	
2,300.00	2,300.00	2,300.00	2,300.00	8.02	8.02	-90.19	-0.10	-30.00	30.00	13.97	16.03	1.871	
2,350.00	2,350.00	2,350.00	2,350.00	8.20	8.20	-90.19	-0.10	-30.00	30.00	13.61	16.39	1.830	
2,400.00	2,400.00	2,400.00	2,400.00	8.38	8.38	-90.19	-0.10	-30.00	30.00	13.25	16.75	1.791	
2,450.00	2,450.00	2,450.00	2,450.00	8.55	8.55	-90.19	-0.10	-30.00	30.00	12.89	17.11	1.753	
2,500.00	2,500.00	2,500.00	2,500.00	8.73	8.73	-90.19	-0.10	-30.00	30.00	12.53	17.47	1.717	
2,550.00	2,550.00	2,550.00	2,550.00	8.91	8.91	-90.19	-0.10	-30.00	30.00	12.17	17.83	1.683	
2,600.00	2,600.00	2,600.00	2,600.00	9.09	9.09	-90.19	-0.10	-30.00	30.00	11.81	18.19	1.650	
2,650.00	2,650.00	2,650.00	2,650.00	9.27	9.27	-90.19	-0.10	-30.00	30.00	11.46	18.54	1.618	
2,700.00	2,700.00	2,700.00	2,700.00	9.45	9.45	-90.19	-0.10	-30.00	30.00	11.10	18.90	1.587	
2,750.00	2,750.00	2,750.00	2,750.00	9.63	9.63	-90.19	-0.10	-30.00	30.00	10.74	19.26	1.558	
2,800.00	2,800.00	2,800.00	2,800.00	9.81	9.81	-90.19	-0.10	-30.00	30.00	10.38	19.62	1.529	
2,850.00	2,850.00	2,850.00	2,850.00	9.99	9.99	-90.19	-0.10	-30.00	30.00	10.02	19.98	1.502	
2,900.00	2,900.00	2,900.00	2,900.00	10.17	10.17	-90.19	-0.10	-30.00	30.00	9.66	20.34	1.475	Level 3
2,950.00	2,950.00	2,950.00	2,950.00	10.35	10.35	-90.19	-0.10	-30.00	30.00	9.31	20.69	1.450	Level 3
3,000.00	3,000.00	3,000.00	3,000.00	10.53	10.53	-90.19	-0.10	-30.00	30.00	8.95	21.05	1.425	Level 3
3,050.00	3,050.00	3,050.00	3,050.00	10.71	10.71	-90.19	-0.10	-30.00	30.00	8.59	21.41	1.401	Level 3
3,100.00	3,100.00	3,100.00	3,100.00	10.88	10.88	-90.19	-0.10	-30.00	30.00	8.23	21.77	1.378	Level 3
3,150.00	3,150.00	3,150.00	3,150.00	11.06	11.06	-90.19	-0.10	-30.00	30.00	7.87	22.13	1.356	Level 3
3,200.00	3,200.00	3,200.00	3,200.00	11.24	11.24	-90.19	-0.10	-30.00	30.00	7.51	22.49	1.334	Level 3, CC
3,250.00	3,250.00	3,250.00	3,250.00	11.41	11.42	110.20	-0.10	-30.00	30.07	7.24	22.84	1.317	Level 3
3,300.00	3,299.99	3,299.99	3,299.99	11.58	11.60	111.36	-0.10	-30.00	30.31	7.12	23.19	1.307	Level 3, ES
3,350.00	3,349.98	3,349.98	3,349.98	11.75	11.78	113.25	-0.10	-30.00	30.72	7.19	23.53	1.306	Level 3, SF
3,400.00	3,399.96	3,399.96	3,399.96	11.91	11.96	115.81	-0.10	-30.00	31.36	7.49	23.87	1.314	Level 3
3,450.00	3,449.92	3,449.92	3,449.92	12.07	12.14	118.94	-0.10	-30.00	32.26	8.05	24.21	1.332	Level 3
3,500.00	3,499.86	3,499.86	3,499.86	12.24	12.32	122.52	-0.10	-30.00	33.49	8.93	24.55	1.364	Level 3
3,550.00	3,549.79	3,549.79	3,549.79	12.40	12.50	126.13	-0.10	-30.00	34.96	10.07	24.89	1.405	Level 3

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	XTO Energy	**Local Co-ordinate Reference:**	Well CORRAL CANYON 3-34 FED 108H
Project:	Eddy County, NM (NAD27) NMEZ Grid	**TVD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Reference Site:	Corral Canyon 3-34 Fed	**MD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	CORRAL CANYON 3-34 FED 108H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	CORRAL CANYON 3-34 FED 108H	**Database:**	STRYKER_EDM
Reference Design:	Plan #3	**Offset TVD Reference:**	Reference Datum

Offset Design Corral Canyon 3-34 Fed - CORRAL CANYON 3-34 FED 127H - CORRAL CANYON 3-34 FED 127H - P — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+MS — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
3,600.00	3,599.73	3,599.73	3,599.73	12.56	12.68	129.44	-0.10	-30.00	36.57	11.33	25.24	1.449	Level 3
3,650.00	3,649.66	3,649.66	3,649.66	12.73	12.86	132.47	-0.10	-30.00	38.29	12.71	25.58	1.497	Level 3
3,700.00	3,699.59	3,699.59	3,699.59	12.89	13.03	135.22	-0.10	-30.00	40.10	14.18	25.92	1.547	
3,750.00	3,749.52	3,749.52	3,749.52	13.06	13.21	137.74	-0.10	-30.00	42.00	15.73	26.27	1.599	
3,800.00	3,799.45	3,799.45	3,799.45	13.22	13.39	140.03	-0.10	-30.00	43.97	17.36	26.61	1.652	
3,850.00	3,849.38	3,849.38	3,849.38	13.39	13.57	160.47	-0.10	-30.00	46.26	19.30	26.96	1.716	
3,900.00	3,899.30	3,899.30	3,899.30	13.55	13.75	177.16	-0.10	-30.00	49.06	21.75	27.30	1.797	
3,950.00	3,949.19	3,949.19	3,949.19	13.73	13.93	-170.99	-0.10	-30.00	52.35	24.69	27.65	1.893	
4,000.00	3,999.04	3,999.04	3,999.04	13.90	14.11	-163.22	-0.10	-30.00	56.13	28.13	28.00	2.005	
4,050.00	4,048.85	4,048.85	4,048.85	14.07	14.29	-163.52	-0.10	-30.00	60.25	31.90	28.35	2.125	
4,100.00	4,098.67	4,098.67	4,098.67	14.25	14.46	-164.61	-0.10	-30.00	64.40	35.69	28.70	2.243	
4,150.00	4,148.48	4,148.48	4,148.48	14.42	14.64	-165.56	-0.10	-30.00	68.56	39.51	29.05	2.360	
4,200.00	4,198.29	4,198.29	4,198.29	14.59	14.82	-166.41	-0.10	-30.00	72.75	43.34	29.40	2.474	
4,250.00	4,248.11	4,248.11	4,248.11	14.77	15.00	-167.16	-0.10	-30.00	76.94	47.19	29.76	2.586	
4,300.00	4,297.92	4,297.92	4,297.92	14.94	15.18	-167.84	-0.10	-30.00	81.15	51.05	30.11	2.696	
4,350.00	4,347.74	4,347.74	4,347.74	15.11	15.36	-168.45	-0.10	-30.00	85.37	54.91	30.46	2.803	
4,400.00	4,397.55	4,397.55	4,397.55	15.29	15.54	-169.00	-0.10	-30.00	89.60	58.79	30.81	2.908	
4,450.00	4,447.36	4,447.36	4,447.36	15.46	15.71	-169.50	-0.10	-30.00	93.84	62.67	31.16	3.011	
4,500.00	4,497.18	4,497.18	4,497.18	15.64	15.89	-169.96	-0.10	-30.00	98.08	66.57	31.51	3.112	
4,550.00	4,546.99	4,546.99	4,546.99	15.81	16.07	-170.38	-0.10	-30.00	102.32	70.46	31.86	3.211	
4,600.00	4,596.81	4,596.81	4,596.81	15.99	16.25	-170.77	-0.10	-30.00	106.58	74.36	32.22	3.308	
4,650.00	4,646.62	4,646.62	4,646.62	16.15	16.43	-171.13	-0.10	-30.00	110.84	78.27	32.57	3.403	
4,700.00	4,696.43	4,696.43	4,696.43	16.34	16.61	-171.46	-0.10	-30.00	115.10	82.18	32.92	3.496	
4,750.00	4,746.25	4,746.78	4,746.78	16.51	16.78	-171.90	-0.39	-30.00	119.26	85.99	33.27	3.585	
4,800.00	4,796.06	4,797.19	4,797.18	16.69	16.95	-172.59	-1.34	-30.00	123.19	89.57	33.61	3.665	
4,850.00	4,845.87	4,847.59	4,847.55	16.85	17.11	-173.53	-2.95	-30.00	126.91	92.96	33.95	3.738	
4,900.00	4,895.69	4,897.96	4,897.87	17.04	17.28	-174.69	-5.23	-30.00	130.45	96.16	34.29	3.805	
4,950.00	4,945.50	4,948.29	4,948.12	17.21	17.44	-176.05	-8.17	-30.00	133.84	99.22	34.62	3.866	
5,000.00	4,995.32	4,998.56	4,998.26	17.39	17.60	-177.61	-11.76	-30.00	137.12	102.16	34.96	3.922	
5,050.00	5,045.13	5,048.62	5,048.14	17.57	17.76	-179.34	-15.97	-30.00	140.34	105.04	35.29	3.976	
5,100.00	5,094.94	5,098.33	5,097.66	17.74	17.93	178.96	-20.30	-30.00	143.64	108.01	35.63	4.031	
5,150.00	5,144.76	5,148.04	5,147.18	17.92	18.09	177.34	-24.63	-30.00	147.07	111.10	35.97	4.089	
5,200.00	5,194.57	5,197.75	5,196.70	18.09	18.25	175.79	-28.97	-30.00	150.61	114.30	36.31	4.148	
5,250.00	5,244.39	5,247.47	5,246.23	18.27	18.41	174.31	-33.30	-30.00	154.25	117.61	36.64	4.210	
5,300.00	5,294.20	5,297.18	5,295.75	18.45	18.57	172.91	-37.63	-30.00	157.99	121.01	36.98	4.272	
5,350.00	5,344.01	5,346.89	5,345.27	18.62	18.74	171.56	-41.96	-30.00	161.83	124.51	37.32	4.336	
5,400.00	5,393.83	5,396.60	5,394.80	18.80	18.90	170.28	-46.30	-30.00	165.74	128.09	37.66	4.401	
5,450.00	5,443.64	5,446.31	5,444.32	18.98	19.06	-169.06	-50.63	-30.00	169.74	131.74	38.00	4.467	
5,500.00	5,493.45	5,496.03	5,493.84	19.15	19.23	167.90	-54.96	-30.00	173.81	135.47	38.34	4.534	
5,550.00	5,543.27	5,545.74	5,543.37	19.33	19.39	166.79	-59.29	-30.00	177.95	139.27	38.68	4.601	
5,600.00	5,593.08	5,595.45	5,592.89	19.51	19.55	165.73	-63.63	-30.00	182.15	143.13	39.02	4.668	
5,650.00	5,642.90	5,645.16	5,642.41	19.69	19.72	164.72	-67.96	-30.00	186.41	147.05	39.36	4.736	
5,700.00	5,692.71	5,694.87	5,691.93	19.86	19.88	163.75	-72.29	-30.00	190.73	151.03	39.70	4.804	
5,750.00	5,742.52	5,744.59	5,741.46	20.04	20.05	162.83	-76.62	-30.00	195.09	155.05	40.04	4.873	
5,800.00	5,792.34	5,794.30	5,790.98	20.22	20.21	161.95	-80.96	-30.00	199.51	159.13	40.38	4.941	
5,850.00	5,842.15	5,844.01	5,840.50	20.40	20.38	161.10	-85.29	-30.00	203.97	163.25	40.72	5.009	
5,900.00	5,891.97	5,893.72	5,890.03	20.57	20.55	160.29	-89.62	-30.00	208.47	167.41	41.07	5.077	
5,950.00	5,941.78	5,943.44	5,939.56	20.75	20.71	159.52	-93.96	-30.00	213.02	171.61	41.41	5.144	
6,000.00	5,991.59	5,993.53	5,989.49	20.93	20.88	158.86	-97.97	-30.00	217.55	175.80	41.75	5.210	
6,050.00	6,041.41	6,043.69	6,039.53	21.11	21.05	158.40	-101.34	-30.00	222.02	179.92	42.10	5.273	
6,100.00	6,091.22	6,093.91	6,089.67	21.28	21.22	158.12	-104.06	-30.00	226.41	183.96	42.45	5.334	
6,150.00	6,141.03	6,144.16	6,139.88	21.46	21.38	158.02	-106.11	-30.00	230.70	187.91	42.80	5.391	

Company:	XTO Energy	**Local Co-ordinate Reference:**	Well CORRAL CANYON 3-34 FED 108H
Project:	Eddy County, NM (NAD27) NMEZ Grid	**TVD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Reference Site:	Corral Canyon 3-34 Fed	**MD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	CORRAL CANYON 3-34 FED 108H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	CORRAL CANYON 3-34 FED 108H	**Database:**	STRYKER_EDM
Reference Design:	Plan #3	**Offset TVD Reference:**	Reference Datum

Offset Design Corral Canyon 3-34 Fed - CORRAL CANYON 3-34 FED 127H - CORRAL CANYON 3-34 FED 127H - P — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+MS — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,200.00	6,190.85	6,194.43	6,190.13	21.64	21.55	158.08	-107.50	-30.00	234.90	191.76	43.15	5.444	
6,250.00	6,240.66	6,244.70	6,240.39	21.82	21.73	158.29	-108.24	-30.00	239.01	195.51	43.50	5.495	
6,300.00	6,290.48	6,294.78	6,290.48	22.00	21.90	158.64	-108.36	-30.00	243.04	199.19	43.85	5.542	
6,350.00	6,340.29	6,344.59	6,340.29	22.17	22.08	159.01	-108.36	-30.00	247.06	202.86	44.21	5.589	
6,400.00	6,390.10	6,394.41	6,390.10	22.35	22.26	159.36	-108.36	-30.00	251.09	206.53	44.56	5.635	
6,450.00	6,439.92	6,444.22	6,439.92	22.53	22.43	159.70	-108.36	-30.00	255.13	210.22	44.92	5.680	
6,500.00	6,489.73	6,494.04	6,489.73	22.71	22.61	160.03	-108.36	-30.00	259.18	213.91	45.27	5.725	
6,550.00	6,539.55	6,543.85	6,539.55	22.89	22.79	160.35	-108.36	-30.00	263.24	217.61	45.63	5.770	
6,600.00	6,589.36	6,593.66	6,589.36	23.07	22.97	160.66	-108.36	-30.00	267.31	221.32	45.98	5.813	
6,650.00	6,639.17	6,643.48	6,639.17	23.25	23.14	160.96	-108.36	-30.00	271.38	225.04	46.34	5.857	
6,700.00	6,688.99	6,693.29	6,688.99	23.42	23.32	161.25	-108.36	-30.00	275.46	228.77	46.69	5.900	
6,750.00	6,738.80	6,743.10	6,738.80	23.60	23.50	161.54	-108.36	-30.00	279.54	232.50	47.05	5.942	
6,800.00	6,788.61	6,792.92	6,788.61	23.78	23.68	161.81	-108.36	-30.00	283.64	236.24	47.40	5.984	
6,850.00	6,838.43	6,842.73	6,838.43	23.96	23.85	162.08	-108.36	-30.00	287.74	239.98	47.76	6.025	
6,900.00	6,888.24	6,892.55	6,888.24	24.14	24.03	162.34	-108.36	-30.00	291.84	243.73	48.11	6.066	
6,950.00	6,938.06	6,942.36	6,938.06	24.32	24.21	162.60	-108.36	-30.00	295.96	247.49	48.47	6.106	
7,000.00	6,987.87	6,992.17	6,987.87	24.50	24.39	162.84	-108.36	-30.00	300.07	251.25	48.82	6.146	
7,050.00	7,037.68	7,041.99	7,037.68	24.68	24.56	163.08	-108.36	-30.00	304.20	255.02	49.18	6.185	
7,100.00	7,087.50	7,091.80	7,087.50	24.85	24.74	163.31	-108.36	-30.00	308.32	258.79	49.54	6.224	
7,150.00	7,137.31	7,141.62	7,137.31	25.03	24.92	163.54	-108.36	-30.00	312.46	262.56	49.89	6.263	
7,200.00	7,187.13	7,191.43	7,187.13	25.21	25.10	163.76	-108.36	-30.00	316.59	266.35	50.25	6.301	
7,250.00	7,236.94	7,241.24	7,236.94	25.39	25.28	163.98	-108.36	-30.00	320.74	270.13	50.60	6.338	
7,300.00	7,286.75	7,291.06	7,286.75	25.57	25.45	164.19	-108.36	-30.00	324.88	273.92	50.96	6.375	
7,350.00	7,336.57	7,340.87	7,336.57	25.75	25.63	164.39	-108.36	-30.00	329.03	277.72	51.32	6.412	
7,400.00	7,386.38	7,390.68	7,386.38	25.93	25.81	164.59	-108.36	-30.00	333.19	281.52	51.67	6.448	
7,450.00	7,436.19	7,440.50	7,436.19	26.11	25.99	164.79	-108.36	-30.00	337.35	285.32	52.03	6.484	
7,500.00	7,486.01	7,490.31	7,486.01	26.29	26.16	164.97	-108.36	-30.00	341.51	289.12	52.38	6.519	
7,550.00	7,535.82	7,540.13	7,535.82	26.47	26.34	165.16	-108.36	-30.00	345.67	292.93	52.74	6.554	
7,600.00	7,585.64	7,589.94	7,585.64	26.65	26.52	165.34	-108.36	-30.00	349.84	296.75	53.10	6.589	
7,650.00	7,635.45	7,639.75	7,635.45	26.83	26.70	165.52	-108.36	-30.00	354.02	300.56	53.45	6.623	
7,700.00	7,685.26	7,689.57	7,685.26	27.01	26.88	165.69	-108.36	-30.00	358.19	304.38	53.81	6.657	
7,750.00	7,735.08	7,739.38	7,735.08	27.19	27.05	165.86	-108.36	-30.00	362.37	308.21	54.17	6.690	
7,800.00	7,784.89	7,789.20	7,784.89	27.36	27.23	166.02	-108.36	-30.00	366.55	312.03	54.52	6.723	
7,850.00	7,834.71	7,839.01	7,834.71	27.54	27.41	166.18	-108.36	-30.00	370.74	315.86	54.88	6.756	
7,900.00	7,884.52	7,888.82	7,884.52	27.72	27.59	166.34	-108.36	-30.00	374.93	319.69	55.24	6.788	
7,950.00	7,934.33	7,938.64	7,934.33	27.90	27.76	166.49	-108.36	-30.00	379.12	323.53	55.59	6.820	
8,000.00	7,984.15	7,988.45	7,984.15	28.08	27.94	166.65	-108.36	-30.00	383.31	327.36	55.95	6.851	
8,050.00	8,033.96	8,038.26	8,033.96	28.25	28.12	166.79	-108.36	-30.00	387.51	331.20	56.31	6.882	
8,100.00	8,083.77	8,088.08	8,083.77	28.44	28.30	166.94	-108.36	-30.00	391.71	335.04	56.66	6.913	
8,150.00	8,133.59	8,137.89	8,133.59	28.62	28.48	167.08	-108.36	-30.00	395.91	338.89	57.02	6.943	
8,200.00	8,183.40	8,187.71	8,183.40	28.80	28.65	167.22	-108.36	-30.00	400.11	342.73	57.38	6.973	
8,250.00	8,233.22	8,237.52	8,233.22	28.98	28.83	167.35	-108.36	-30.00	404.32	346.58	57.73	7.003	
8,300.00	8,283.03	8,287.33	8,283.03	29.16	29.01	167.48	-108.36	-30.00	408.52	350.43	58.09	7.032	
8,350.00	8,332.84	8,337.15	8,332.84	29.34	29.19	167.61	-108.36	-30.00	412.73	354.29	58.45	7.062	
8,400.00	8,382.66	8,386.96	8,382.66	29.52	29.37	167.74	-108.36	-30.00	416.95	358.14	58.81	7.090	
8,450.00	8,432.47	8,436.78	8,432.47	29.70	29.54	167.86	-108.36	-30.00	421.16	362.00	59.16	7.119	
8,500.00	8,482.29	8,486.59	8,482.29	29.88	29.72	167.99	-108.36	-30.00	425.38	365.86	59.52	7.147	
8,550.00	8,532.10	8,536.40	8,532.10	30.06	29.90	168.11	-108.36	-30.00	429.59	369.72	59.88	7.175	
8,600.00	8,581.91	8,586.22	8,581.91	30.24	30.08	168.22	-108.36	-30.00	433.81	373.58	60.23	7.202	
8,650.00	8,631.73	8,636.03	8,631.73	30.42	30.25	168.34	-108.36	-30.00	438.04	377.44	60.59	7.229	
8,700.00	8,681.54	8,685.84	8,681.54	30.60	30.43	168.45	-108.36	-30.00	442.26	381.31	60.95	7.256	
8,750.00	8,731.35	8,735.66	8,731.35	30.78	30.61	168.56	-108.36	-30.00	446.48	385.18	61.31	7.283	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	XTO Energy	**Local Co-ordinate Reference:**	Well CORRAL CANYON 3-34 FED 108H
Project:	Eddy County, NM (NAD27) NMEZ Grid	**TVD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Reference Site:	Corral Canyon 3-34 Fed	**MD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	CORRAL CANYON 3-34 FED 108H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	CORRAL CANYON 3-34 FED 108H	**Database:**	STRYKER_EDM
Reference Design:	Plan #3	**Offset TVD Reference:**	Reference Datum

Offset Design Corral Canyon 3-34 Fed - CORRAL CANYON 3-34 FED 127H - CORRAL CANYON 3-34 FED 127H - P

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,800.00	8,781.17	8,785.47	8,781.17	30.95	30.79	168.67	-108.36	-30.00	450.71	389.05	61.66	7.309	
8,850.00	8,830.98	8,835.29	8,830.98	31.14	30.97	168.78	-108.36	-30.00	454.94	392.92	62.02	7.335	
8,900.00	8,880.80	8,885.10	8,880.80	31.32	31.14	168.88	-108.36	-30.00	459.17	396.79	62.38	7.361	
8,950.00	8,930.61	8,934.91	8,930.61	31.50	31.32	168.98	-108.36	-30.00	463.40	400.66	62.74	7.386	
9,000.00	8,980.42	8,984.73	8,980.42	31.68	31.50	169.09	-108.36	-30.00	467.63	404.54	63.09	7.412	
9,050.00	9,030.24	9,034.54	9,030.24	31.86	31.68	169.18	-108.36	-30.00	471.86	408.41	63.45	7.437	
9,100.00	9,080.06	9,084.36	9,080.06	32.04	31.86	169.29	-108.36	-30.00	476.02	412.21	63.81	7.460	
9,150.00	9,129.93	9,134.24	9,129.93	32.22	32.03	169.38	-108.36	-30.00	479.47	415.31	64.17	7.472	
9,200.00	9,179.86	9,184.17	9,179.86	32.40	32.21	169.44	-108.36	-30.00	482.07	417.54	64.52	7.471	
9,250.00	9,229.83	9,234.14	9,229.83	32.58	32.39	169.49	-108.36	-30.00	483.80	418.92	64.88	7.457	
9,300.00	9,279.82	9,284.13	9,279.82	32.76	32.57	169.51	-108.36	-30.00	484.68	419.44	65.24	7.430	
9,350.00	9,329.82	9,334.13	9,329.82	32.93	32.75	-86.97	-108.36	-30.00	484.80	419.21	65.59	7.392	
9,400.00	9,379.82	9,384.13	9,379.82	33.11	32.93	-86.97	-108.36	-30.00	484.80	418.86	65.94	7.352	
9,450.00	9,429.82	9,434.13	9,429.82	33.28	33.11	-86.97	-108.36	-30.00	484.80	418.51	66.29	7.313	
9,500.00	9,479.82	9,484.13	9,479.82	33.45	33.29	-86.97	-108.36	-30.00	484.80	418.16	66.64	7.275	
9,550.00	9,529.82	9,534.13	9,529.82	33.63	33.46	-86.97	-108.36	-30.00	484.80	417.80	66.99	7.236	
9,600.00	9,579.82	9,584.13	9,579.82	33.80	33.64	-86.97	-108.36	-30.00	484.80	417.45	67.35	7.199	
9,650.00	9,629.82	9,634.13	9,629.82	33.97	33.82	-86.97	-108.36	-30.00	484.80	417.10	67.70	7.161	
9,700.00	9,679.79	9,684.09	9,679.79	34.15	34.00	-96.37	-108.36	-30.00	484.96	416.91	68.05	7.126	
9,750.00	9,729.44	9,733.75	9,729.44	34.32	34.18	-96.97	-108.36	-30.00	485.63	417.23	68.40	7.100	
9,800.00	9,778.41	9,782.71	9,778.41	34.49	34.35	-97.99	-108.36	-30.00	486.96	418.21	68.75	7.083	
9,850.00	9,826.32	9,830.62	9,826.32	34.66	34.52	-99.35	-108.36	-30.00	489.21	420.12	69.09	7.081	
9,900.00	9,872.80	9,876.46	9,872.15	34.82	34.69	-100.87	-107.67	-30.05	492.72	423.30	69.42	7.098	
9,950.00	9,917.50	9,922.59	9,918.07	34.97	34.85	-102.29	-103.57	-30.35	497.76	428.02	69.74	7.137	

Anticollision Report

Company:	XTO Energy	**Local Co-ordinate Reference:**	Well CORRAL CANYON 3-34 FED 108H
Project:	Eddy County, NM (NAD27) NMEZ Grid	**TVD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Reference Site:	Corral Canyon 3-34 Fed	**MD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	CORRAL CANYON 3-34 FED 108H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	CORRAL CANYON 3-34 FED 108H	**Database:**	STRYKER_EDM
Reference Design:	Plan #3	**Offset TVD Reference:**	Reference Datum

Offset Design Corral Canyon 3-34 Fed - CORRAL CANYON 3-34 FED 128H - CORRAL CANYON 3-34 FED 128H - P

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	29.90	29.90				
50.00	50.00	50.00	50.00	0.04	0.07	90.00	0.00	29.90	29.90	29.79	0.11	280.368	
100.00	100.00	100.00	100.00	0.13	0.13	90.00	0.00	29.90	29.90	29.64	0.26	114.260	
150.00	150.00	150.00	150.00	0.31	0.31	90.00	0.00	29.90	29.90	29.28	0.62	48.214	
200.00	200.00	200.00	200.00	0.49	0.49	90.00	0.00	29.90	29.90	28.92	0.98	30.553	
250.00	250.00	250.00	250.00	0.67	0.67	90.00	0.00	29.90	29.90	28.56	1.34	22.362	
300.00	300.00	300.00	300.00	0.85	0.85	90.00	0.00	29.90	29.90	28.20	1.70	17.634	
350.00	350.00	350.00	350.00	1.03	1.03	90.00	0.00	29.90	29.90	27.85	2.05	14.557	
400.00	400.00	400.00	400.00	1.21	1.21	90.00	0.00	29.90	29.90	27.49	2.41	12.394	
450.00	450.00	450.00	450.00	1.39	1.39	90.00	0.00	29.90	29.90	27.13	2.77	10.790	
500.00	500.00	500.00	500.00	1.56	1.56	90.00	0.00	29.90	29.90	26.77	3.13	9.554	
550.00	550.00	550.00	550.00	1.74	1.74	90.00	0.00	29.90	29.90	26.41	3.49	8.572	
600.00	600.00	600.00	600.00	1.92	1.92	90.00	0.00	29.90	29.90	26.05	3.85	7.774	
650.00	650.00	650.00	650.00	2.10	2.10	90.00	0.00	29.90	29.90	25.70	4.20	7.111	
700.00	700.00	700.00	700.00	2.28	2.28	90.00	0.00	29.90	29.90	25.34	4.56	6.552	
750.00	750.00	750.00	750.00	2.46	2.46	90.00	0.00	29.90	29.90	24.98	4.92	6.075	
800.00	800.00	800.00	800.00	2.64	2.64	90.00	0.00	29.90	29.90	24.62	5.28	5.663	
850.00	850.00	850.00	850.00	2.82	2.82	90.00	0.00	29.90	29.90	24.26	5.64	5.303	
900.00	900.00	900.00	900.00	3.00	3.00	90.00	0.00	29.90	29.90	23.90	6.00	4.986	
950.00	950.00	950.00	950.00	3.18	3.18	90.00	0.00	29.90	29.90	23.54	6.36	4.704	
1,000.00	1,000.00	1,000.00	1,000.00	3.36	3.36	90.00	0.00	29.90	29.90	23.19	6.71	4.453	
1,050.00	1,050.00	1,050.00	1,050.00	3.54	3.54	90.00	0.00	29.90	29.90	22.83	7.07	4.228	
1,100.00	1,100.00	1,100.00	1,100.00	3.72	3.72	90.00	0.00	29.90	29.90	22.47	7.43	4.024	
1,150.00	1,150.00	1,150.00	1,150.00	3.89	3.89	90.00	0.00	29.90	29.90	22.11	7.79	3.838	
1,200.00	1,200.00	1,200.00	1,200.00	4.07	4.07	90.00	0.00	29.90	29.90	21.75	8.15	3.670	
1,250.00	1,250.00	1,250.00	1,250.00	4.25	4.25	90.00	0.00	29.90	29.90	21.39	8.51	3.515	
1,300.00	1,300.00	1,300.00	1,300.00	4.43	4.43	90.00	0.00	29.90	29.90	21.03	8.87	3.373	
1,350.00	1,350.00	1,350.00	1,350.00	4.61	4.61	90.00	0.00	29.90	29.90	20.68	9.22	3.242	
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	90.00	0.00	29.90	29.90	20.32	9.58	3.120	
1,450.00	1,450.00	1,450.00	1,450.00	4.97	4.97	90.00	0.00	29.90	29.90	19.96	9.94	3.008	
1,500.00	1,500.00	1,500.00	1,500.00	5.15	5.15	90.00	0.00	29.90	29.90	19.60	10.30	2.903	
1,550.00	1,550.00	1,550.00	1,550.00	5.33	5.33	90.00	0.00	29.90	29.90	19.24	10.66	2.806	
1,600.00	1,600.00	1,600.00	1,600.00	5.51	5.51	90.00	0.00	29.90	29.90	18.88	11.02	2.714	
1,650.00	1,650.00	1,650.00	1,650.00	5.69	5.69	90.00	0.00	29.90	29.90	18.53	11.37	2.629	
1,700.00	1,700.00	1,700.00	1,700.00	5.87	5.87	90.00	0.00	29.90	29.90	18.17	11.73	2.548	
1,750.00	1,750.00	1,750.00	1,750.00	6.05	6.05	90.00	0.00	29.90	29.90	17.81	12.09	2.473	
1,800.00	1,800.00	1,800.00	1,800.00	6.22	6.22	90.00	0.00	29.90	29.90	17.45	12.45	2.402	
1,850.00	1,850.00	1,850.00	1,850.00	6.40	6.40	90.00	0.00	29.90	29.90	17.09	12.81	2.334	
1,900.00	1,900.00	1,900.00	1,900.00	6.58	6.58	90.00	0.00	29.90	29.90	16.73	13.17	2.271	
1,950.00	1,950.00	1,950.00	1,950.00	6.76	6.76	90.00	0.00	29.90	29.90	16.37	13.53	2.211	
2,000.00	2,000.00	2,000.00	2,000.00	6.94	6.94	90.00	0.00	29.90	29.90	16.02	13.88	2.154	
2,050.00	2,050.00	2,050.00	2,050.00	7.12	7.12	90.00	0.00	29.90	29.90	15.66	14.24	2.099	
2,100.00	2,100.00	2,100.00	2,100.00	7.30	7.30	90.00	0.00	29.90	29.90	15.30	14.60	2.048	
2,150.00	2,150.00	2,150.00	2,150.00	7.48	7.48	90.00	0.00	29.90	29.90	14.94	14.96	1.999	
2,200.00	2,200.00	2,200.00	2,200.00	7.66	7.66	90.00	0.00	29.90	29.90	14.58	15.32	1.952	
2,250.00	2,250.00	2,250.00	2,250.00	7.84	7.84	90.00	0.00	29.90	29.90	14.22	15.68	1.907	
2,300.00	2,300.00	2,300.00	2,300.00	8.02	8.02	90.00	0.00	29.90	29.90	13.87	16.03	1.865	
2,350.00	2,350.00	2,350.00	2,350.00	8.20	8.20	90.00	0.00	29.90	29.90	13.51	16.39	1.824	
2,400.00	2,400.00	2,400.00	2,400.00	8.38	8.38	90.00	0.00	29.90	29.90	13.15	16.75	1.785	
2,450.00	2,450.00	2,450.00	2,450.00	8.55	8.55	90.00	0.00	29.90	29.90	12.79	17.11	1.748	
2,500.00	2,500.00	2,500.00	2,500.00	8.73	8.73	90.00	0.00	29.90	29.90	12.43	17.47	1.712	
2,550.00	2,550.00	2,550.00	2,550.00	8.91	8.91	90.00	0.00	29.90	29.90	12.07	17.83	1.677	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	XTO Energy	**Local Co-ordinate Reference:**	Well CORRAL CANYON 3-34 FED 108H
Project:	Eddy County, NM (NAD27) NMEZ Grid	**TVD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Reference Site:	Corral Canyon 3-34 Fed	**MD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	CORRAL CANYON 3-34 FED 108H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	CORRAL CANYON 3-34 FED 108H	**Database:**	STRYKER_EDM
Reference Design:	Plan #3	**Offset TVD Reference:**	Reference Datum

Offset Design Corral Canyon 3-34 Fed - CORRAL CANYON 3-34 FED 128H - CORRAL CANYON 3-34 FED 128H - P — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+MS — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,600.00	2,600.00	2,600.00	2,600.00	9.09	9.09	90.00	0.00	29.90	29.90	11.71	18.19	1.644	
2,650.00	2,650.00	2,650.00	2,650.00	9.27	9.27	90.00	0.00	29.90	29.90	11.36	18.54	1.612	
2,700.00	2,700.00	2,700.00	2,700.00	9.45	9.45	90.00	0.00	29.90	29.90	11.00	18.90	1.582	
2,750.00	2,750.00	2,750.00	2,750.00	9.63	9.63	90.00	0.00	29.90	29.90	10.64	19.26	1.552	
2,800.00	2,800.00	2,800.00	2,800.00	9.81	9.81	90.00	0.00	29.90	29.90	10.28	19.62	1.524	
2,850.00	2,850.00	2,850.00	2,850.00	9.99	9.99	90.00	0.00	29.90	29.90	9.92	19.98	1.497	Level 3
2,900.00	2,900.00	2,900.00	2,900.00	10.17	10.17	90.00	0.00	29.90	29.90	9.56	20.34	1.470	Level 3
2,950.00	2,950.00	2,950.00	2,950.00	10.35	10.35	90.00	0.00	29.90	29.90	9.21	20.69	1.445	Level 3
3,000.00	3,000.00	3,000.00	3,000.00	10.53	10.53	90.00	0.00	29.90	29.90	8.85	21.05	1.420	Level 3
3,050.00	3,050.00	3,050.00	3,050.00	10.71	10.71	90.00	0.00	29.90	29.90	8.49	21.41	1.396	Level 3
3,100.00	3,100.00	3,100.00	3,100.00	10.88	10.88	90.00	0.00	29.90	29.90	8.13	21.77	1.373	Level 3
3,150.00	3,150.00	3,150.00	3,150.00	11.06	11.06	90.00	0.00	29.90	29.90	7.77	22.13	1.351	Level 3
3,200.00	3,200.00	3,200.00	3,200.00	11.24	11.24	90.00	0.00	29.90	29.90	7.41	22.49	1.330	Level 3
3,250.00	3,250.00	3,250.00	3,250.00	11.41	11.42	-70.39	0.00	29.90	29.83	6.99	22.84	1.306	Level 3
3,300.00	3,299.99	3,299.99	3,299.99	11.58	11.60	-71.59	0.00	29.90	29.61	6.43	23.19	1.277	Level 3
3,350.00	3,349.98	3,349.98	3,349.98	11.75	11.78	-73.62	0.00	29.90	29.29	5.76	23.53	1.245	Level 2
3,400.00	3,399.96	3,399.96	3,399.96	11.91	11.96	-76.53	0.00	29.90	28.89	5.02	23.87	1.211	Level 2
3,450.00	3,449.92	3,449.92	3,449.92	12.07	12.14	-80.37	0.00	29.90	28.50	4.29	24.21	1.177	Level 2
3,500.00	3,499.86	3,499.86	3,499.86	12.24	12.32	-85.18	0.00	29.90	28.20	3.65	24.55	1.148	Level 2
3,517.62	3,517.46	3,517.38	3,517.38	12.29	12.38	-87.06	0.02	29.92	28.16	3.49	24.67	1.141	Level 2 CC
3,550.00	3,549.79	3,549.57	3,549.57	12.40	12.50	-90.65	0.15	30.05	28.29	3.40	24.89	1.137	Level 2, ES, SF
3,600.00	3,599.73	3,599.25	3,599.25	12.56	12.67	-96.31	0.61	30.51	29.06	3.84	25.22	1.152	Level 2
3,650.00	3,649.66	3,648.90	3,648.89	12.73	12.85	-101.82	1.37	31.27	30.52	4.97	25.55	1.194	Level 2
3,700.00	3,699.59	3,698.51	3,698.47	12.89	13.02	-106.89	2.43	32.33	32.66	6.79	25.87	1.262	Level 3
3,750.00	3,749.52	3,748.07	3,747.99	13.06	13.20	-111.34	3.80	33.70	35.46	9.26	26.20	1.353	Level 3
3,800.00	3,799.45	3,797.57	3,797.43	13.22	13.37	-115.13	5.46	35.36	38.87	12.35	26.52	1.466	Level 3
3,850.00	3,849.38	3,847.38	3,847.17	13.39	13.55	-99.76	7.31	37.21	42.27	15.40	26.87	1.573	
3,900.00	3,899.30	3,897.23	3,896.96	13.56	13.73	-87.13	9.15	39.05	45.03	17.81	27.22	1.654	
3,950.00	3,949.19	3,947.19	3,946.84	13.73	13.90	-78.18	10.75	41.19	47.15	19.57	27.57	1.710	
4,000.00	3,999.04	3,997.23	3,996.80	13.90	14.08	-71.90	11.77	44.00	48.53	20.60	27.93	1.738	
4,050.00	4,048.85	4,047.34	4,046.79	14.07	14.25	-72.59	12.23	47.47	49.40	21.11	28.28	1.747	
4,100.00	4,098.67	4,097.49	4,096.77	14.25	14.42	-73.18	12.11	51.61	50.13	21.49	28.63	1.751	
4,150.00	4,148.48	4,147.55	4,146.60	14.42	14.60	-72.97	11.52	56.27	50.73	21.75	28.98	1.750	
4,200.00	4,198.29	4,197.55	4,196.37	14.59	14.77	-72.68	10.90	60.98	51.32	22.00	29.33	1.750	
4,250.00	4,248.11	4,247.54	4,246.14	14.77	14.94	-72.41	10.27	65.69	51.92	22.25	29.67	1.750	
4,300.00	4,297.92	4,297.54	4,295.91	14.94	15.11	-72.14	9.64	70.39	52.51	22.49	30.02	1.749	
4,350.00	4,347.74	4,347.53	4,345.68	15.11	15.28	-71.87	9.02	75.10	53.10	22.74	30.36	1.749	
4,400.00	4,397.55	4,397.53	4,395.45	15.29	15.46	-71.61	8.39	79.81	53.70	22.99	30.71	1.749	
4,450.00	4,447.36	4,447.53	4,445.22	15.46	15.63	-71.36	7.76	84.52	54.30	23.25	31.05	1.749	
4,500.00	4,497.18	4,497.52	4,494.99	15.64	15.80	-71.11	7.14	89.23	54.90	23.50	31.40	1.748	
4,550.00	4,546.99	4,547.52	4,544.76	15.81	15.97	-70.87	6.51	93.93	55.50	23.75	31.75	1.748	
4,600.00	4,596.81	4,597.51	4,594.53	15.99	16.15	-70.64	5.88	98.64	56.10	24.00	32.09	1.748	
4,650.00	4,646.62	4,647.51	4,644.30	16.16	16.32	-70.40	5.26	103.35	56.70	24.26	32.44	1.748	
4,700.00	4,696.43	4,697.51	4,694.07	16.34	16.49	-70.18	4.63	108.06	57.30	24.51	32.79	1.748	
4,750.00	4,746.25	4,747.50	4,743.84	16.51	16.67	-69.95	4.00	112.77	57.91	24.77	33.14	1.747	
4,800.00	4,796.06	4,797.50	4,793.61	16.69	16.84	-69.74	3.38	117.47	58.51	25.02	33.49	1.747	
4,850.00	4,845.87	4,847.49	4,843.38	16.86	17.02	-69.52	2.75	122.18	59.11	25.28	33.84	1.747	
4,900.00	4,895.69	4,897.49	4,893.15	17.04	17.19	-69.31	2.12	126.89	59.72	25.53	34.19	1.747	
4,950.00	4,945.50	4,947.48	4,942.92	17.21	17.37	-69.11	1.50	131.60	60.33	25.79	34.54	1.747	
5,000.00	4,995.32	4,997.48	4,992.69	17.39	17.54	-68.91	0.87	136.30	60.93	26.05	34.89	1.747	
5,050.00	5,045.13	5,047.48	5,042.46	17.57	17.72	-68.71	0.24	141.01	61.54	26.30	35.24	1.746	
5,100.00	5,094.94	5,097.47	5,092.23	17.74	17.89	-68.52	-0.38	145.72	62.15	26.56	35.59	1.746	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	XTO Energy	**Local Co-ordinate Reference:**	Well CORRAL CANYON 3-34 FED 108H
Project:	Eddy County, NM (NAD27) NMEZ Grid	**TVD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Reference Site:	Corral Canyon 3-34 Fed	**MD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	CORRAL CANYON 3-34 FED 108H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	CORRAL CANYON 3-34 FED 108H	**Database:**	STRYKER_EDM
Reference Design:	Plan #3	**Offset TVD Reference:**	Reference Datum

Offset Design Corral Canyon 3-34 Fed - CORRAL CANYON 3-34 FED 128H - CORRAL CANYON 3-34 FED 128H - P

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,150.00	5,144.76	5,147.47	5,142.00	17.92	18.07	-68.33	-1.01	150.43	62.76	26.82	35.94	1.745	
5,200.00	5,194.57	5,197.46	5,191.77	18.09	18.24	-68.15	-1.64	155.14	63.37	27.08	36.29	1.746	
5,250.00	5,244.39	5,247.46	5,241.54	18.27	18.42	-67.96	-2.27	159.84	63.98	27.34	36.64	1.746	
5,300.00	5,294.20	5,297.46	5,291.31	18.45	18.59	-67.79	-2.89	164.55	64.59	27.60	36.99	1.746	
5,350.00	5,344.01	5,347.45	5,341.08	18.62	18.77	-67.61	-3.52	169.26	65.20	27.86	37.35	1.746	
5,400.00	5,393.83	5,397.45	5,390.85	18.80	18.94	-67.44	-4.15	173.97	65.82	28.12	37.70	1.746	
5,450.00	5,443.64	5,447.44	5,440.62	18.98	19.12	-67.27	-4.77	178.68	66.43	28.38	38.05	1.746	
5,500.00	5,493.45	5,497.44	5,490.39	19.15	19.29	-67.10	-5.40	183.38	67.04	28.64	38.40	1.746	
5,550.00	5,543.27	5,547.43	5,540.16	19.33	19.47	-66.94	-6.03	188.09	67.66	28.90	38.76	1.746	
5,600.00	5,593.08	5,597.43	5,589.93	19.51	19.65	-66.78	-6.65	192.80	68.27	29.16	39.11	1.746	
5,650.00	5,642.90	5,647.43	5,639.70	19.69	19.82	-66.63	-7.28	197.51	68.89	29.42	39.46	1.746	
5,700.00	5,692.71	5,697.42	5,689.46	19.86	20.00	-66.47	-7.91	202.21	69.50	29.69	39.82	1.746	
5,750.00	5,742.52	5,747.42	5,739.23	20.04	20.18	-66.32	-8.53	206.92	70.12	29.95	40.17	1.746	
5,800.00	5,792.34	5,797.41	5,789.00	20.22	20.35	-66.17	-9.16	211.63	70.74	30.21	40.53	1.745	
5,850.00	5,842.15	5,847.41	5,838.77	20.40	20.53	-66.03	-9.79	216.34	71.36	30.47	40.88	1.745	
5,900.00	5,891.97	5,897.41	5,888.54	20.57	20.71	-65.88	-10.41	221.05	71.97	30.74	41.23	1.745	
5,950.00	5,941.78	5,947.40	5,938.31	20.75	20.88	-65.74	-11.04	225.75	72.59	31.00	41.59	1.745	
6,000.00	5,991.59	5,997.40	5,988.08	20.93	21.06	-65.60	-11.67	230.46	73.21	31.27	41.94	1.745	
6,050.00	6,041.41	6,047.39	6,037.85	21.11	21.24	-65.47	-12.29	235.17	73.83	31.53	42.30	1.745	
6,100.00	6,091.22	6,097.39	6,087.62	21.28	21.42	-65.33	-12.92	239.88	74.45	31.79	42.65	1.745	
6,150.00	6,141.03	6,147.39	6,137.39	21.46	21.59	-65.20	-13.55	244.59	75.07	32.06	43.01	1.745	
6,200.00	6,190.85	6,197.38	6,187.16	21.64	21.77	-65.07	-14.17	249.29	75.69	32.32	43.37	1.745	
6,250.00	6,240.66	6,247.38	6,236.93	21.82	21.95	-64.94	-14.80	254.00	76.31	32.59	43.72	1.745	
6,300.00	6,290.48	6,297.37	6,286.70	22.00	22.13	-64.82	-15.43	258.71	76.93	32.85	44.08	1.745	
6,350.00	6,340.29	6,347.37	6,336.47	22.17	22.30	-64.69	-16.06	263.42	77.55	33.12	44.43	1.745	
6,400.00	6,390.10	6,397.36	6,386.24	22.35	22.48	-64.57	-16.68	268.13	78.17	33.38	44.79	1.745	
6,450.00	6,439.92	6,447.36	6,436.01	22.53	22.66	-64.45	-17.31	272.83	78.80	33.65	45.15	1.745	
6,500.00	6,489.73	6,497.36	6,485.78	22.71	22.84	-64.33	-17.94	277.54	79.42	33.92	45.50	1.745	
6,550.00	6,539.55	6,547.35	6,535.55	22.89	23.01	-64.22	-18.56	282.25	80.04	34.18	45.86	1.745	
6,600.00	6,589.36	6,597.35	6,585.32	23.07	23.19	-64.10	-19.19	286.96	80.66	34.45	46.22	1.745	
6,650.00	6,639.17	6,647.34	6,635.09	23.25	23.37	-63.99	-19.82	291.66	81.29	34.72	46.57	1.745	
6,700.00	6,688.99	6,697.34	6,684.86	23.42	23.55	-63.88	-20.44	296.37	81.91	34.98	46.93	1.745	
6,750.00	6,738.80	6,747.34	6,734.63	23.60	23.73	-63.77	-21.07	301.08	82.54	35.25	47.29	1.745	
6,800.00	6,788.61	6,797.33	6,784.40	23.78	23.90	-63.66	-21.70	305.79	83.16	35.52	47.64	1.745	
6,850.00	6,838.43	6,847.33	6,834.17	23.96	24.08	-63.56	-22.32	310.50	83.78	35.78	48.00	1.745	
6,900.00	6,888.24	6,897.32	6,883.94	24.14	24.26	-63.45	-22.95	315.20	84.41	36.05	48.36	1.745	
6,950.00	6,938.06	6,947.32	6,933.71	24.32	24.44	-63.35	-23.58	319.91	85.03	36.32	48.72	1.746	
7,000.00	6,987.87	6,997.31	6,983.48	24.50	24.62	-63.25	-24.20	324.62	85.66	36.59	49.07	1.746	
7,050.00	7,037.68	7,047.31	7,033.25	24.68	24.80	-63.15	-24.83	329.33	86.29	36.85	49.43	1.746	
7,100.00	7,087.50	7,097.31	7,083.02	24.85	24.98	-63.05	-25.46	334.04	86.91	37.12	49.79	1.746	
7,150.00	7,137.31	7,147.30	7,132.79	25.03	25.15	-62.95	-26.08	338.74	87.54	37.39	50.15	1.746	
7,200.00	7,187.13	7,197.30	7,182.56	25.21	25.33	-62.86	-26.71	343.45	88.16	37.66	50.51	1.746	
7,250.00	7,236.94	7,247.29	7,232.33	25.39	25.51	-62.76	-27.34	348.16	88.79	37.93	50.86	1.746	
7,300.00	7,286.75	7,297.29	7,282.10	25.57	25.69	-62.67	-27.96	352.87	89.42	38.20	51.22	1.746	
7,350.00	7,336.57	7,347.29	7,331.87	25.75	25.87	-62.58	-28.59	357.58	90.04	38.46	51.58	1.746	
7,400.00	7,386.38	7,397.28	7,381.64	25.93	26.05	-62.49	-29.22	362.28	90.67	38.73	51.94	1.746	
7,450.00	7,436.19	7,447.28	7,431.41	26.11	26.23	-62.40	-29.85	366.99	91.30	39.00	52.30	1.746	
7,500.00	7,486.01	7,497.27	7,481.18	26.29	26.41	-62.31	-30.47	371.70	91.93	39.27	52.66	1.746	
7,550.00	7,535.82	7,547.27	7,530.95	26.47	26.59	-62.23	-31.10	376.41	92.56	39.54	53.01	1.746	
7,600.00	7,585.64	7,597.27	7,580.72	26.65	26.76	-62.14	-31.73	381.11	93.18	39.81	53.37	1.746	
7,650.00	7,635.45	7,647.26	7,630.49	26.83	26.94	-62.06	-32.35	385.82	93.81	40.08	53.73	1.746	
7,700.00	7,685.26	7,697.26	7,680.26	27.01	27.12	-61.97	-32.98	390.53	94.44	40.35	54.09	1.746	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	XTO Energy	**Local Co-ordinate Reference:**	Well CORRAL CANYON 3-34 FED 108H
Project:	Eddy County, NM (NAD27) NMEZ Grid	**TVD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Reference Site:	Corral Canyon 3-34 Fed	**MD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	CORRAL CANYON 3-34 FED 108H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	CORRAL CANYON 3-34 FED 108H	**Database:**	STRYKER_EDM
Reference Design:	Plan #3	**Offset TVD Reference:**	Reference Datum

Offset Design Corral Canyon 3-34 Fed - CORRAL CANYON 3-34 FED 128H - CORRAL CANYON 3-34 FED 128H - P — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+MS — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,750.00	7,735.08	7,747.25	7,730.02	27.19	27.30	-61.89	-33.61	395.24	95.07	40.62	54.45	1.746	
7,800.00	7,784.89	7,797.25	7,779.79	27.36	27.48	-61.81	-34.23	399.95	95.70	40.89	54.81	1.746	
7,850.00	7,834.71	7,847.24	7,829.56	27.54	27.66	-61.73	-34.86	404.65	96.33	41.16	55.17	1.746	
7,900.00	7,884.52	7,897.24	7,879.33	27.72	27.84	-61.65	-35.49	409.36	96.96	41.43	55.53	1.746	
7,950.00	7,934.33	7,947.24	7,929.10	27.90	28.02	-61.57	-36.11	414.07	97.59	41.70	55.89	1.746	
8,000.00	7,984.15	7,997.23	7,978.87	28.08	28.20	-61.50	-36.74	418.78	98.22	41.97	56.25	1.746	
8,050.00	8,033.96	8,047.23	8,028.64	28.25	28.38	-61.42	-37.37	423.49	98.85	42.24	56.61	1.746	
8,100.00	8,083.77	8,097.22	8,078.41	28.44	28.56	-61.35	-37.99	428.19	99.48	42.51	56.97	1.746	
8,150.00	8,133.59	8,147.22	8,128.18	28.62	28.74	-61.27	-38.62	432.90	100.11	42.78	57.33	1.746	
8,200.00	8,183.40	8,197.22	8,177.95	28.80	28.92	-61.20	-39.25	437.61	100.74	43.05	57.69	1.746	
8,250.00	8,233.22	8,247.21	8,227.72	28.98	29.10	-61.13	-39.87	442.32	101.37	43.32	58.05	1.746	
8,300.00	8,283.03	8,297.21	8,277.49	29.16	29.28	-61.05	-40.50	447.02	102.00	43.59	58.41	1.746	
8,350.00	8,332.84	8,347.20	8,327.26	29.34	29.46	-60.98	-41.13	451.73	102.63	43.86	58.77	1.746	
8,400.00	8,382.66	8,397.20	8,377.03	29.52	29.64	-60.91	-41.75	456.44	103.26	44.13	59.13	1.746	
8,450.00	8,432.47	8,447.19	8,426.80	29.70	29.82	-60.85	-42.38	461.15	103.89	44.41	59.49	1.746	
8,500.00	8,482.29	8,497.19	8,476.57	29.88	30.00	-60.78	-43.01	465.86	104.52	44.68	59.85	1.747	
8,550.00	8,532.10	8,547.19	8,526.34	30.06	30.18	-60.71	-43.64	470.56	105.16	44.95	60.21	1.747	
8,600.00	8,581.91	8,597.18	8,576.11	30.24	30.36	-60.64	-44.26	475.27	105.79	45.22	60.57	1.747	
8,650.00	8,631.73	8,647.18	8,625.88	30.42	30.54	-60.58	-44.89	479.98	106.42	45.49	60.93	1.747	
8,700.00	8,681.54	8,697.17	8,675.65	30.60	30.72	-60.51	-45.52	484.69	107.05	45.76	61.29	1.747	
8,750.00	8,731.35	8,747.17	8,725.42	30.78	30.90	-60.45	-46.14	489.40	107.68	46.03	61.65	1.747	
8,800.00	8,781.17	8,797.17	8,775.19	30.96	31.08	-60.39	-46.77	494.10	108.31	46.31	62.01	1.747	
8,850.00	8,830.98	8,847.16	8,824.96	31.14	31.26	-60.33	-47.40	498.81	108.95	46.58	62.37	1.747	
8,900.00	8,880.80	8,897.16	8,874.73	31.32	31.44	-60.26	-48.02	503.52	109.58	46.85	62.73	1.747	
8,950.00	8,930.61	8,947.15	8,924.50	31.50	31.62	-60.20	-48.65	508.23	110.21	47.12	63.09	1.747	
9,000.00	8,980.42	8,997.15	8,974.27	31.68	31.80	-60.14	-49.28	512.94	110.84	47.39	63.45	1.747	
9,050.00	9,030.24	9,047.15	9,024.04	31.86	31.98	-60.08	-49.90	517.64	111.48	47.67	63.81	1.747	
9,100.00	9,080.06	9,097.14	9,073.81	32.04	32.16	-59.99	-50.53	522.35	112.15	47.98	64.17	1.748	
9,150.00	9,129.93	9,147.12	9,123.56	32.22	32.34	-59.60	-51.16	527.06	113.19	48.66	64.53	1.754	
9,200.00	9,179.86	9,197.08	9,173.29	32.40	32.52	-58.85	-51.78	531.76	114.68	49.79	64.89	1.767	
9,250.00	9,229.83	9,246.98	9,222.97	32.58	32.70	-57.76	-52.41	536.46	116.66	51.41	65.25	1.788	
9,300.00	9,279.82	9,296.83	9,272.60	32.76	32.88	-56.37	-53.03	541.15	119.16	53.56	65.60	1.816	
9,350.00	9,329.82	9,348.02	9,323.59	32.93	33.06	48.68	-53.62	545.55	121.90	55.92	65.98	1.848	
9,400.00	9,379.82	9,399.37	9,374.82	33.11	33.25	49.91	-54.08	549.04	124.19	57.84	66.35	1.872	
9,450.00	9,429.82	9,450.83	9,426.22	33.28	33.43	50.79	-54.43	551.63	125.91	59.21	66.70	1.888	
9,500.00	9,479.82	9,502.37	9,477.73	33.45	33.61	51.34	-54.65	553.31	127.04	59.99	67.05	1.895	
9,550.00	9,529.82	9,553.96	9,529.31	33.63	33.79	51.59	-54.75	554.07	127.56	60.18	67.38	1.893	
9,600.00	9,579.82	9,604.48	9,579.82	33.80	33.97	51.61	-54.76	554.12	127.59	59.87	67.72	1.884	
9,650.00	9,629.82	9,654.48	9,629.82	33.97	34.14	51.61	-54.76	554.12	127.59	59.52	68.07	1.874	
9,700.00	9,679.79	9,704.44	9,679.79	34.15	34.32	42.87	-54.76	554.12	126.52	58.11	68.41	1.849	
9,750.00	9,729.44	9,754.10	9,729.44	34.32	34.49	44.98	-54.76	554.12	122.38	53.63	68.75	1.780	
9,800.00	9,778.41	9,803.06	9,778.41	34.49	34.66	48.99	-54.76	554.12	115.46	46.38	69.08	1.671	
9,850.00	9,826.32	9,850.97	9,826.32	34.66	34.83	55.37	-54.76	554.12	106.47	37.09	69.38	1.535	
9,900.00	9,872.80	9,896.10	9,871.44	34.82	34.99	64.14	-54.20	554.12	96.95	27.25	69.70	1.391	Level 3
9,950.00	9,917.50	9,940.82	9,916.00	34.97	35.14	74.46	-50.47	554.12	89.25	19.29	69.96	1.276	Level 3
10,000.00	9,960.08	9,986.80	9,961.35	35.11	35.30	86.28	-43.04	554.12	84.42	14.39	70.02	1.206	Level 2
10,039.31	9,991.86	10,023.91	9,997.44	35.22	35.43	96.25	-34.40	554.12	83.18	13.53	69.65	1.194	Level 2
10,050.00	10,000.22	10,034.16	10,007.30	35.24	35.46	99.00	-31.60	554.11	83.27	13.82	69.45	1.199	Level 2
10,100.00	10,037.61	10,083.07	10,053.55	35.37	35.62	111.69	-15.85	554.11	86.19	18.33	67.86	1.270	Level 3
10,150.00	10,071.97	10,133.71	10,099.92	35.48	35.78	123.45	4.56	554.11	92.90	27.46	65.44	1.420	Level 3
10,200.00	10,103.03	10,186.26	10,145.89	35.59	35.94	133.76	29.97	554.10	102.66	40.08	62.58	1.640	
10,250.00	10,130.56	10,240.91	10,191.03	35.68	36.09	142.56	60.75	554.09	114.59	55.06	59.53	1.925	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	XTO Energy	**Local Co-ordinate Reference:**	Well CORRAL CANYON 3-34 FED 108H
Project:	Eddy County, NM (NAD27) NMEZ Grid	**TVD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Reference Site:	Corral Canyon 3-34 Fed	**MD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	CORRAL CANYON 3-34 FED 108H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	CORRAL CANYON 3-34 FED 108H	**Database:**	STRYKER_EDM
Reference Design:	Plan #3	**Offset TVD Reference:**	Reference Datum

Offset Design Corral Canyon 3-34 Fed - CORRAL CANYON 3-34 FED 128H - CORRAL CANYON 3-34 FED 128H - P

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,300.00	10,154.35	10,297.89	10,234.74	35.77	36.24	149.99	97.26	554.09	127.89	71.52	56.37	2.269	
10,350.00	10,174.22	10,357.39	10,276.29	35.85	36.37	156.33	139.82	554.08	141.89	88.73	53.16	2.669	
10,400.00	10,190.02	10,419.62	10,314.76	35.92	36.50	161.80	188.69	554.06	156.04	106.06	49.97	3.122	
10,450.00	10,201.62	10,484.74	10,349.11	35.98	36.62	166.61	243.97	554.05	169.87	122.92	46.95	3.618	
10,500.00	10,208.94	10,552.86	10,378.08	36.04	36.73	170.91	305.57	554.04	182.97	138.70	44.28	4.133	
10,550.00	10,211.92	10,623.99	10,400.32	36.08	36.82	174.84	373.09	554.02	194.97	152.79	42.17	4.623	
10,600.00	10,212.00	10,698.68	10,414.48	36.11	36.90	178.60	446.38	554.01	204.11	163.23	40.88	4.993	
10,650.00	10,212.00	10,774.38	10,419.00	36.15	36.96	179.91	521.89	553.99	207.00	166.43	40.57	5.102	
10,692.82	10,212.00	10,817.20	10,419.00	36.19	36.99	179.93	564.71	553.98	207.00	166.28	40.72	5.084	
10,700.00	10,212.00	10,824.38	10,419.00	36.20	37.00	179.91	571.89	553.98	207.00	166.26	40.74	5.081	
10,750.00	10,212.00	10,874.38	10,419.00	36.25	37.04	179.91	621.89	553.97	207.00	166.07	40.93	5.058	
10,800.00	10,212.00	10,924.38	10,419.00	36.30	37.08	179.91	671.89	553.95	207.00	165.88	41.12	5.034	
10,850.00	10,212.00	10,974.38	10,419.00	36.35	37.13	179.92	721.89	553.94	207.00	165.66	41.34	5.008	
10,900.00	10,212.00	11,024.38	10,419.00	36.42	37.18	179.92	771.89	553.93	207.00	165.44	41.56	4.981	
10,950.00	10,212.00	11,074.38	10,419.00	36.49	37.24	179.92	821.89	553.92	207.00	165.20	41.80	4.952	
11,000.00	10,212.00	11,124.38	10,419.00	36.56	37.30	179.92	871.89	553.91	207.00	164.95	42.05	4.923	
11,050.00	10,212.00	11,174.38	10,419.00	36.63	37.37	179.92	921.89	553.90	207.00	164.68	42.32	4.892	
11,100.00	10,212.00	11,224.38	10,419.00	36.71	37.44	179.92	971.89	553.89	207.00	164.41	42.59	4.860	
11,150.00	10,212.00	11,274.38	10,419.00	36.79	37.51	179.92	1,021.89	553.87	207.00	164.12	42.88	4.827	
11,200.00	10,212.00	11,324.38	10,419.00	36.87	37.59	179.92	1,071.89	553.86	207.00	163.82	43.18	4.794	
11,250.00	10,212.00	11,374.38	10,419.00	36.96	37.67	179.92	1,121.89	553.85	207.00	163.50	43.50	4.759	
11,300.00	10,212.00	11,424.38	10,419.00	37.05	37.76	179.92	1,171.89	553.84	207.00	163.18	43.82	4.724	
11,350.00	10,212.00	11,474.38	10,419.00	37.15	37.85	179.92	1,221.89	553.83	207.00	162.84	44.16	4.687	
11,400.00	10,212.00	11,524.38	10,419.00	37.25	37.94	179.93	1,271.89	553.82	207.00	162.49	44.51	4.651	
11,450.00	10,212.00	11,574.38	10,419.00	37.35	38.04	179.93	1,321.89	553.81	207.00	162.13	44.87	4.613	
11,500.00	10,212.00	11,624.38	10,419.00	37.46	38.14	179.93	1,371.89	553.79	207.00	161.76	45.24	4.576	
11,550.00	10,212.00	11,674.38	10,419.00	37.57	38.24	179.93	1,421.89	553.78	207.00	161.38	45.62	4.537	
11,600.00	10,212.00	11,724.38	10,419.00	37.68	38.35	179.93	1,471.89	553.77	207.00	160.99	46.01	4.499	
11,650.00	10,212.00	11,774.38	10,419.00	37.80	38.46	179.93	1,521.89	553.76	207.00	160.59	46.41	4.460	
11,700.00	10,212.00	11,824.38	10,419.00	37.92	38.58	179.93	1,571.89	553.75	207.00	160.18	46.82	4.421	
11,750.00	10,212.00	11,874.38	10,419.00	38.04	38.70	179.93	1,621.89	553.74	207.00	159.76	47.24	4.382	
11,800.00	10,212.00	11,924.38	10,419.00	38.17	38.82	179.93	1,671.89	553.73	207.00	159.33	47.67	4.343	
11,850.00	10,212.00	11,974.38	10,419.00	38.30	38.94	179.93	1,721.89	553.71	207.00	158.89	48.11	4.303	
11,900.00	10,212.00	12,024.38	10,419.00	38.43	39.07	179.93	1,771.89	553.70	207.00	158.45	48.55	4.263	
11,950.00	10,212.00	12,074.38	10,419.00	38.57	39.20	179.94	1,821.89	553.69	207.00	157.99	49.01	4.224	
12,000.00	10,212.00	12,124.38	10,419.00	38.71	39.34	179.94	1,871.89	553.68	207.00	157.53	49.47	4.184	
12,050.00	10,212.00	12,174.38	10,419.00	38.85	39.47	179.94	1,921.89	553.67	207.00	157.06	49.94	4.145	
12,100.00	10,212.00	12,224.38	10,419.00	39.00	39.62	179.94	1,971.89	553.66	207.00	156.58	50.42	4.105	
12,150.00	10,212.00	12,274.38	10,419.00	39.15	39.76	179.94	2,021.89	553.65	207.00	156.09	50.91	4.066	
12,200.00	10,212.00	12,324.38	10,419.00	39.30	39.91	179.94	2,071.89	553.63	207.00	155.60	51.40	4.027	
12,250.00	10,212.00	12,374.38	10,419.00	39.45	40.06	179.94	2,121.89	553.62	207.00	155.10	51.90	3.988	
12,300.00	10,212.00	12,424.38	10,419.00	39.62	40.21	179.94	2,171.89	553.61	207.00	154.59	52.41	3.950	
12,350.00	10,212.00	12,474.38	10,419.00	39.78	40.37	179.94	2,221.89	553.60	207.00	154.07	52.93	3.911	
12,400.00	10,212.00	12,524.38	10,419.00	39.95	40.53	179.94	2,271.89	553.59	207.00	153.55	53.45	3.873	
12,450.00	10,212.00	12,574.38	10,419.00	40.11	40.69	179.95	2,321.89	553.58	207.00	153.03	53.97	3.835	
12,500.00	10,212.00	12,624.38	10,419.00	40.28	40.86	179.95	2,371.89	553.57	207.00	152.49	54.51	3.798	
12,550.00	10,212.00	12,674.38	10,419.00	40.46	41.02	179.95	2,421.89	553.55	207.00	151.95	55.05	3.760	
12,600.00	10,212.00	12,724.38	10,419.00	40.64	41.20	179.95	2,471.89	553.54	207.00	151.41	55.59	3.724	
12,650.00	10,212.00	12,774.38	10,419.00	40.82	41.37	179.95	2,521.89	553.53	207.00	150.86	56.14	3.687	
12,700.00	10,212.00	12,824.38	10,419.00	41.00	41.55	179.95	2,571.89	553.52	207.00	150.30	56.70	3.651	
12,750.00	10,212.00	12,874.38	10,419.00	41.18	41.73	179.95	2,621.89	553.51	207.00	149.74	57.26	3.615	
12,800.00	10,212.00	12,924.38	10,419.00	41.37	41.91	179.95	2,671.89	553.50	207.00	149.17	57.83	3.580	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	XTO Energy	**Local Co-ordinate Reference:**	Well CORRAL CANYON 3-34 FED 108H
Project:	Eddy County, NM (NAD27) NMEZ Grid	**TVD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Reference Site:	Corral Canyon 3-34 Fed	**MD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	CORRAL CANYON 3-34 FED 108H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	CORRAL CANYON 3-34 FED 108H	**Database:**	STRYKER_EDM
Reference Design:	Plan #3	**Offset TVD Reference:**	Reference Datum

Offset Design Corral Canyon 3-34 Fed - CORRAL CANYON 3-34 FED 128H - CORRAL CANYON 3-34 FED 128H - P

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
12,850.00	10,212.00	12,974.38	10,419.00	41.56	42.09	179.95	2,721.89	553.49	207.00	148.60	58.40	3.544	
12,900.00	10,212.00	13,024.38	10,419.00	41.75	42.28	179.95	2,771.89	553.47	207.00	148.02	58.98	3.510	
12,950.00	10,212.00	13,074.38	10,419.00	41.95	42.47	179.95	2,821.89	553.46	207.00	147.44	59.56	3.475	
13,000.00	10,212.00	13,124.38	10,419.00	42.15	42.66	179.96	2,871.89	553.45	207.00	146.85	60.15	3.442	
13,050.00	10,212.00	13,174.38	10,419.00	42.35	42.86	179.96	2,921.89	553.44	207.00	146.26	60.74	3.408	
13,100.00	10,212.00	13,224.38	10,419.00	42.55	43.06	179.96	2,971.89	553.43	207.00	145.67	61.33	3.375	
13,150.00	10,212.00	13,274.38	10,419.00	42.75	43.26	179.96	3,021.89	553.42	207.00	145.07	61.93	3.342	
13,200.00	10,212.00	13,324.38	10,419.00	42.97	43.46	179.96	3,071.89	553.41	207.00	144.47	62.53	3.310	
13,250.00	10,212.00	13,374.38	10,419.00	43.18	43.67	179.96	3,121.89	553.39	207.00	143.86	63.14	3.278	
13,300.00	10,212.00	13,424.38	10,419.00	43.39	43.87	179.96	3,171.89	553.38	207.00	143.25	63.75	3.247	
13,350.00	10,212.00	13,474.38	10,419.00	43.61	44.08	179.96	3,221.89	553.37	207.00	142.63	64.37	3.216	
13,400.00	10,212.00	13,524.38	10,419.00	43.82	44.30	179.96	3,271.89	553.36	207.00	142.01	64.99	3.185	
13,450.00	10,212.00	13,574.38	10,419.00	44.04	44.51	179.96	3,321.89	553.35	207.00	141.39	65.61	3.155	
13,500.00	10,212.00	13,624.38	10,419.00	44.27	44.73	179.96	3,371.89	553.34	207.00	140.77	66.23	3.125	
13,550.00	10,212.00	13,674.38	10,419.00	44.49	44.95	179.97	3,421.89	553.33	207.00	140.14	66.86	3.096	
13,600.00	10,212.00	13,724.38	10,419.00	44.72	45.17	179.97	3,471.89	553.31	207.00	139.50	67.50	3.067	
13,650.00	10,212.00	13,774.38	10,419.00	44.95	45.39	179.97	3,521.89	553.30	207.00	138.87	68.13	3.038	
13,700.00	10,212.00	13,824.38	10,419.00	45.17	45.62	179.97	3,571.89	553.29	207.00	138.23	68.77	3.010	
13,750.00	10,212.00	13,874.38	10,419.00	45.41	45.84	179.97	3,621.89	553.28	207.00	137.59	69.41	2.982	
13,800.00	10,212.00	13,924.38	10,419.00	45.64	46.07	179.97	3,671.89	553.27	207.00	136.94	70.06	2.955	
13,850.00	10,212.00	13,974.38	10,419.00	45.88	46.31	179.97	3,721.89	553.26	207.00	136.30	70.70	2.928	
13,900.00	10,212.00	14,024.38	10,419.00	46.12	46.54	179.97	3,771.89	553.25	207.00	135.65	71.35	2.901	
13,950.00	10,212.00	14,074.38	10,419.00	46.36	46.77	179.97	3,821.89	553.23	207.00	134.99	72.01	2.875	
14,000.00	10,212.00	14,124.38	10,419.00	46.60	47.01	179.97	3,871.89	553.22	207.00	134.34	72.66	2.849	
14,050.00	10,212.00	14,174.38	10,419.00	46.84	47.25	179.97	3,921.89	553.21	207.00	133.68	73.32	2.823	
14,100.00	10,212.00	14,224.38	10,419.00	47.09	47.49	179.98	3,971.89	553.20	207.00	133.02	73.98	2.798	
14,150.00	10,212.00	14,274.38	10,419.00	47.34	47.74	179.98	4,021.89	553.19	207.00	132.36	74.64	2.773	
14,200.00	10,212.00	14,324.38	10,419.00	47.59	47.98	179.98	4,071.89	553.18	207.00	131.69	75.31	2.749	
14,250.00	10,212.00	14,374.38	10,419.00	47.84	48.23	179.98	4,121.89	553.17	207.00	131.03	75.97	2.725	
14,300.00	10,212.00	14,424.38	10,419.00	48.09	48.48	179.98	4,171.89	553.15	207.00	130.36	76.64	2.701	
14,350.00	10,212.00	14,474.38	10,419.00	48.35	48.73	179.98	4,221.89	553.14	207.00	129.69	77.31	2.677	
14,400.00	10,212.00	14,524.38	10,419.00	48.60	48.98	179.98	4,271.89	553.13	207.00	129.01	77.99	2.654	
14,450.00	10,212.00	14,574.38	10,419.00	48.86	49.23	179.98	4,321.89	553.12	207.00	128.34	78.66	2.631	
14,500.00	10,212.00	14,624.38	10,419.00	49.12	49.49	179.98	4,371.89	553.11	207.00	127.66	79.34	2.609	
14,550.00	10,212.00	14,674.38	10,419.00	49.38	49.74	179.98	4,421.89	553.10	207.00	126.98	80.02	2.587	
14,600.00	10,212.00	14,724.38	10,419.00	49.65	50.00	179.98	4,471.89	553.09	207.00	126.30	80.70	2.565	
14,650.00	10,212.00	14,774.38	10,419.00	49.91	50.26	179.99	4,521.89	553.07	207.00	125.61	81.39	2.543	
14,700.00	10,212.00	14,824.38	10,419.00	50.18	50.52	179.99	4,571.89	553.06	207.00	124.93	82.07	2.522	
14,750.00	10,212.00	14,874.38	10,419.00	50.45	50.79	179.99	4,621.89	553.05	207.00	124.24	82.76	2.501	
14,800.00	10,212.00	14,924.38	10,419.00	50.71	51.05	179.99	4,671.89	553.04	207.00	123.55	83.45	2.481	
14,850.00	10,212.00	14,974.38	10,419.00	50.98	51.32	179.99	4,721.89	553.03	207.00	122.86	84.14	2.460	
14,900.00	10,212.00	15,024.38	10,419.00	51.26	51.58	179.99	4,771.89	553.02	207.00	122.17	84.83	2.440	
14,950.00	10,212.00	15,074.38	10,419.00	51.53	51.85	179.99	4,821.89	553.01	207.00	121.48	85.52	2.420	
15,000.00	10,212.00	15,124.38	10,419.00	51.80	52.12	179.99	4,871.89	552.99	207.00	120.78	86.22	2.401	
15,050.00	10,212.00	15,174.38	10,419.00	52.08	52.40	179.99	4,921.89	552.98	207.00	120.09	86.91	2.382	
15,100.00	10,212.00	15,224.38	10,419.00	52.35	52.67	179.99	4,971.89	552.97	207.00	119.39	87.61	2.363	
15,139.74	10,212.00	15,264.12	10,419.00	52.58	52.89	179.99	5,011.63	552.96	207.00	118.83	88.17	2.348	
15,150.00	10,212.00	15,274.38	10,419.00	52.64	52.94	180.00	5,021.89	552.96	207.00	118.69	88.31	2.344	
15,200.00	10,212.00	15,324.38	10,419.00	52.92	53.22	180.00	5,071.89	552.95	207.00	117.99	89.01	2.326	
15,250.00	10,212.00	15,374.38	10,419.00	53.20	53.50	180.00	5,121.89	552.94	207.00	117.28	89.72	2.307	
15,300.00	10,212.00	15,424.38	10,419.00	53.48	53.78	180.00	5,171.89	552.93	207.00	116.58	90.42	2.289	
15,350.00	10,212.00	15,474.38	10,419.00	53.75	54.06	180.00	5,221.89	552.92	207.00	115.89	91.12	2.272	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	XTO Energy	**Local Co-ordinate Reference:**	Well CORRAL CANYON 3-34 FED 108H
Project:	Eddy County, NM (NAD27) NMEZ Grid	**TVD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Reference Site:	Corral Canyon 3-34 Fed	**MD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	CORRAL CANYON 3-34 FED 108H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	CORRAL CANYON 3-34 FED 108H	**Database:**	STRYKER_EDM
Reference Design:	Plan #3	**Offset TVD Reference:**	Reference Datum

Offset Design Corral Canyon 3-34 Fed - CORRAL CANYON 3-34 FED 128H - CORRAL CANYON 3-34 FED 128H - P

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,400.00	10,212.00	15,524.38	10,419.00	54.05	54.34	180.00	5,271.89	552.90	207.00	115.17	91.83	2.254	
15,415.81	10,212.00	15,540.19	10,419.00	54.14	54.42	180.00	5,287.70	552.90	207.00	114.95	92.05	2.249	

Company:	XTO Energy	**Local Co-ordinate Reference:**	Well CORRAL CANYON 3-34 FED 108H
Project:	Eddy County, NM (NAD27) NMEZ Grid	**TVD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Reference Site:	Corral Canyon 3-34 Fed	**MD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	CORRAL CANYON 3-34 FED 108H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	CORRAL CANYON 3-34 FED 108H	**Database:**	STRYKER_EDM
Reference Design:	Plan #3	**Offset TVD Reference:**	Reference Datum

Offset Design Corral Canyon 3-34 Fed - CORRAL CANYON 3-34 FED 907H - CORRAL CANYON 3-34 FED 907H - P — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+MS — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-90.29	-0.30	-60.10	60.10				
50.00	50.00	50.00	50.00	0.04	0.07	-90.29	-0.30	-60.10	60.10	59.99	0.11	563.557	
100.00	100.00	100.00	100.00	0.13	0.13	-90.29	-0.30	-60.10	60.10	59.84	0.26	229.669	
150.00	150.00	150.00	150.00	0.31	0.31	-90.29	-0.30	-60.10	60.10	59.48	0.62	96.912	
200.00	200.00	200.00	200.00	0.49	0.49	-90.29	-0.30	-60.10	60.10	59.12	0.98	61.413	
250.00	250.00	250.00	250.00	0.67	0.67	-90.29	-0.30	-60.10	60.10	58.76	1.34	44.949	
300.00	300.00	300.00	300.00	0.85	0.85	-90.29	-0.30	-60.10	60.10	58.41	1.70	35.446	
350.00	350.00	350.00	350.00	1.03	1.03	-90.29	-0.30	-60.10	60.10	58.05	2.05	29.260	
400.00	400.00	400.00	400.00	1.21	1.21	-90.29	-0.30	-60.10	60.10	57.69	2.41	24.912	
450.00	450.00	450.00	450.00	1.39	1.39	-90.29	-0.30	-60.10	60.10	57.33	2.77	21.689	
500.00	500.00	500.00	500.00	1.56	1.56	-90.29	-0.30	-60.10	60.10	56.97	3.13	19.205	
550.00	550.00	550.00	550.00	1.74	1.74	-90.29	-0.30	-60.10	60.10	56.61	3.49	17.231	
600.00	600.00	600.00	600.00	1.92	1.92	-90.29	-0.30	-60.10	60.10	56.25	3.85	15.625	
650.00	650.00	650.00	650.00	2.10	2.10	-90.29	-0.30	-60.10	60.10	55.90	4.20	14.293	
700.00	700.00	700.00	700.00	2.28	2.28	-90.29	-0.30	-60.10	60.10	55.54	4.56	13.170	
750.00	750.00	750.00	750.00	2.46	2.46	-90.29	-0.30	-60.10	60.10	55.18	4.92	12.211	
800.00	800.00	800.00	800.00	2.64	2.64	-90.29	-0.30	-60.10	60.10	54.82	5.28	11.382	
850.00	850.00	850.00	850.00	2.82	2.82	-90.29	-0.30	-60.10	60.10	54.46	5.64	10.659	
900.00	900.00	900.00	900.00	3.00	3.00	-90.29	-0.30	-60.10	60.10	54.10	6.00	10.021	
950.00	950.00	950.00	950.00	3.18	3.18	-90.29	-0.30	-60.10	60.10	53.75	6.36	9.456	
1,000.00	1,000.00	1,000.00	1,000.00	3.36	3.36	-90.29	-0.30	-60.10	60.10	53.39	6.71	8.951	
1,050.00	1,050.00	1,050.00	1,050.00	3.54	3.54	-90.29	-0.30	-60.10	60.10	53.03	7.07	8.498	
1,100.00	1,100.00	1,100.00	1,100.00	3.72	3.72	-90.29	-0.30	-60.10	60.10	52.67	7.43	8.088	
1,150.00	1,150.00	1,150.00	1,150.00	3.89	3.89	-90.29	-0.30	-60.10	60.10	52.31	7.79	7.716	
1,200.00	1,200.00	1,200.00	1,200.00	4.07	4.07	-90.29	-0.30	-60.10	60.10	51.95	8.15	7.376	
1,250.00	1,250.00	1,250.00	1,250.00	4.25	4.25	-90.29	-0.30	-60.10	60.10	51.59	8.51	7.065	
1,300.00	1,300.00	1,300.00	1,300.00	4.43	4.43	-90.29	-0.30	-60.10	60.10	51.24	8.87	6.780	
1,350.00	1,350.00	1,350.00	1,350.00	4.61	4.61	-90.29	-0.30	-60.10	60.10	50.88	9.22	6.516	
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	-90.29	-0.30	-60.10	60.10	50.52	9.58	6.272	
1,450.00	1,450.00	1,450.00	1,450.00	4.97	4.97	-90.29	-0.30	-60.10	60.10	50.16	9.94	6.046	
1,500.00	1,500.00	1,500.00	1,500.00	5.15	5.15	-90.29	-0.30	-60.10	60.10	49.80	10.30	5.836	
1,550.00	1,550.00	1,550.00	1,550.00	5.33	5.33	-90.29	-0.30	-60.10	60.10	49.44	10.66	5.639	
1,600.00	1,600.00	1,600.00	1,600.00	5.51	5.51	-90.29	-0.30	-60.10	60.10	49.08	11.02	5.456	
1,650.00	1,650.00	1,650.00	1,650.00	5.69	5.69	-90.29	-0.30	-60.10	60.10	48.73	11.37	5.284	
1,700.00	1,700.00	1,700.00	1,700.00	5.87	5.87	-90.29	-0.30	-60.10	60.10	48.37	11.73	5.122	
1,750.00	1,750.00	1,750.00	1,750.00	6.05	6.05	-90.29	-0.30	-60.10	60.10	48.01	12.09	4.971	
1,800.00	1,800.00	1,800.00	1,800.00	6.22	6.22	-90.29	-0.30	-60.10	60.10	47.65	12.45	4.827	
1,850.00	1,850.00	1,850.00	1,850.00	6.40	6.40	-90.29	-0.30	-60.10	60.10	47.29	12.81	4.692	
1,900.00	1,900.00	1,900.00	1,900.00	6.58	6.58	-90.29	-0.30	-60.10	60.10	46.93	13.17	4.565	
1,950.00	1,950.00	1,950.00	1,950.00	6.76	6.76	-90.29	-0.30	-60.10	60.10	46.58	13.53	4.444	
2,000.00	2,000.00	2,000.00	2,000.00	6.94	6.94	-90.29	-0.30	-60.10	60.10	46.22	13.88	4.329	
2,050.00	2,050.00	2,050.00	2,050.00	7.12	7.12	-90.29	-0.30	-60.10	60.10	45.86	14.24	4.220	
2,100.00	2,100.00	2,100.00	2,100.00	7.30	7.30	-90.29	-0.30	-60.10	60.10	45.50	14.60	4.116	
2,150.00	2,150.00	2,150.00	2,150.00	7.48	7.48	-90.29	-0.30	-60.10	60.10	45.14	14.96	4.018	
2,200.00	2,200.00	2,200.00	2,200.00	7.66	7.66	-90.29	-0.30	-60.10	60.10	44.78	15.32	3.924	
2,250.00	2,250.00	2,250.00	2,250.00	7.84	7.84	-90.29	-0.30	-60.10	60.10	44.42	15.68	3.834	
2,300.00	2,300.00	2,300.00	2,300.00	8.02	8.02	-90.29	-0.30	-60.10	60.10	44.07	16.03	3.748	
2,350.00	2,350.00	2,350.00	2,350.00	8.20	8.20	-90.29	-0.30	-60.10	60.10	43.71	16.39	3.666	
2,400.00	2,400.00	2,400.00	2,400.00	8.38	8.38	-90.29	-0.30	-60.10	60.10	43.35	16.75	3.586	
2,450.00	2,450.00	2,450.00	2,450.00	8.55	8.55	-90.29	-0.30	-60.10	60.10	42.99	17.11	3.513	
2,500.00	2,500.00	2,500.00	2,500.00	8.73	8.73	-90.29	-0.30	-60.10	60.10	42.63	17.47	3.441	
2,550.00	2,550.00	2,550.00	2,550.00	8.91	8.91	-90.29	-0.30	-60.10	60.10	42.27	17.83	3.371	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	XTO Energy	**Local Co-ordinate Reference:**	Well CORRAL CANYON 3-34 FED 108H
Project:	Eddy County, NM (NAD27) NMEZ Grid	**TVD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Reference Site:	Corral Canyon 3-34 Fed	**MD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	CORRAL CANYON 3-34 FED 108H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	CORRAL CANYON 3-34 FED 108H	**Database:**	STRYKER_EDM
Reference Design:	Plan #3	**Offset TVD Reference:**	Reference Datum

Offset Design Corral Canyon 3-34 Fed - CORRAL CANYON 3-34 FED 907H - CORRAL CANYON 3-34 FED 907H - P — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+MS — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,600.00	2,600.00	2,600.00	2,600.00	9.09	9.09	-90.29	-0.30	-60.10	60.10	41.92	18.19	3.305	
2,650.00	2,650.00	2,650.00	2,650.00	9.27	9.27	-90.29	-0.30	-60.10	60.10	41.56	18.54	3.241	
2,700.00	2,700.00	2,700.00	2,700.00	9.45	9.45	-90.29	-0.30	-60.10	60.10	41.20	18.90	3.180	
2,750.00	2,750.00	2,750.00	2,750.00	9.63	9.63	-90.29	-0.30	-60.10	60.10	40.84	19.26	3.120	
2,800.00	2,800.00	2,800.00	2,800.00	9.81	9.81	-90.29	-0.30	-60.10	60.10	40.48	19.62	3.063	
2,850.00	2,850.00	2,850.00	2,850.00	9.99	9.99	-90.29	-0.30	-60.10	60.10	40.12	19.98	3.008	
2,900.00	2,900.00	2,900.00	2,900.00	10.17	10.17	-90.29	-0.30	-60.10	60.10	39.76	20.34	2.955	
2,950.00	2,950.00	2,950.00	2,950.00	10.35	10.35	-90.29	-0.30	-60.10	60.10	39.41	20.69	2.904	
3,000.00	3,000.00	3,000.00	3,000.00	10.53	10.53	-90.29	-0.30	-60.10	60.10	39.05	21.05	2.855	
3,050.00	3,050.00	3,050.00	3,050.00	10.71	10.71	-90.29	-0.30	-60.10	60.10	38.69	21.41	2.807	
3,100.00	3,100.00	3,100.00	3,100.00	10.88	10.88	-90.29	-0.30	-60.10	60.10	38.33	21.77	2.761	
3,150.00	3,150.00	3,150.00	3,150.00	11.06	11.06	-90.29	-0.30	-60.10	60.10	37.97	22.13	2.716	
3,200.00	3,200.00	3,200.00	3,200.00	11.24	11.24	-90.29	-0.30	-60.10	60.10	37.61	22.49	2.673 CC	
3,250.00	3,250.00	3,250.00	3,250.00	11.41	11.42	109.91	-0.30	-60.10	60.17	37.34	22.84	2.635	
3,300.00	3,299.99	3,299.99	3,299.99	11.58	11.60	110.49	-0.30	-60.10	60.40	37.21	23.19	2.605 ES	
3,350.00	3,349.98	3,349.98	3,349.98	11.75	11.78	111.45	-0.30	-60.10	60.79	37.26	23.53	2.584	
3,400.00	3,399.96	3,399.96	3,399.96	11.91	11.96	112.77	-0.30	-60.10	61.37	37.50	23.87	2.571	
3,450.00	3,449.92	3,449.92	3,449.92	12.07	12.14	114.43	-0.30	-60.10	62.15	37.94	24.21	2.567 SF	
3,500.00	3,499.86	3,499.86	3,499.86	12.24	12.32	116.40	-0.30	-60.10	63.18	38.63	24.55	2.574	
3,550.00	3,549.79	3,549.79	3,549.79	12.40	12.50	118.49	-0.30	-60.10	64.39	39.50	24.89	2.587	
3,600.00	3,599.73	3,599.73	3,599.73	12.56	12.68	120.49	-0.30	-60.10	65.68	40.44	25.24	2.603	
3,650.00	3,649.66	3,649.66	3,649.66	12.73	12.86	122.42	-0.30	-60.10	67.05	41.47	25.58	2.621	
3,700.00	3,699.59	3,699.59	3,699.59	12.89	13.03	124.26	-0.30	-60.10	68.49	42.56	25.92	2.642	
3,750.00	3,749.52	3,749.52	3,749.52	13.06	13.21	126.03	-0.30	-60.10	70.00	43.73	26.27	2.665	
3,800.00	3,799.45	3,799.45	3,799.45	13.22	13.39	127.72	-0.30	-60.10	71.57	44.96	26.61	2.689	
3,850.00	3,849.38	3,849.38	3,849.38	13.39	13.57	147.89	-0.30	-60.10	73.52	46.56	26.96	2.727	
3,900.00	3,899.30	3,899.30	3,899.30	13.56	13.75	164.80	-0.30	-60.10	76.14	48.83	27.30	2.789	
3,950.00	3,949.19	3,949.19	3,949.19	13.73	13.93	177.23	-0.30	-60.10	79.40	51.74	27.65	2.871	
4,000.00	3,999.04	3,999.04	3,999.04	13.90	14.11	-174.16	-0.30	-60.10	83.28	55.28	28.00	2.974	
4,050.00	4,048.85	4,048.85	4,048.85	14.07	14.29	-173.55	-0.30	-60.10	87.56	59.21	28.35	3.088	
4,100.00	4,098.67	4,098.67	4,098.67	14.25	14.46	-173.85	-0.30	-60.10	91.85	63.14	28.70	3.200	
4,150.00	4,148.48	4,148.48	4,148.48	14.42	14.64	-174.12	-0.30	-60.10	96.13	67.08	29.05	3.309	
4,200.00	4,198.29	4,198.29	4,198.29	14.59	14.82	-174.38	-0.30	-60.10	100.42	71.02	29.40	3.415	
4,250.00	4,248.11	4,248.11	4,248.11	14.77	15.00	-174.61	-0.30	-60.10	104.71	74.96	29.75	3.519	
4,300.00	4,297.92	4,297.92	4,297.92	14.94	15.18	-174.82	-0.30	-60.10	109.01	78.90	30.11	3.621	
4,350.00	4,347.74	4,347.74	4,347.74	15.11	15.36	-175.02	-0.30	-60.10	113.30	82.84	30.46	3.720	
4,400.00	4,397.55	4,397.55	4,397.55	15.29	15.54	-175.20	-0.30	-60.10	117.59	86.79	30.81	3.817	
4,450.00	4,447.36	4,447.36	4,447.36	15.46	15.71	-175.37	-0.30	-60.10	121.89	90.73	31.16	3.912	
4,500.00	4,497.18	4,497.18	4,497.18	15.64	15.89	-175.53	-0.30	-60.10	126.19	94.68	31.51	4.004	
4,550.00	4,546.99	4,547.04	4,547.04	15.81	16.06	-175.80	-0.58	-60.18	130.48	98.62	31.86	4.096	
4,600.00	4,596.81	4,596.89	4,596.88	15.99	16.23	-176.34	-1.48	-60.44	134.75	102.55	32.20	4.185	
4,650.00	4,646.62	4,646.70	4,646.67	16.16	16.40	-177.11	-3.01	-60.87	139.03	106.50	32.53	4.274	
4,700.00	4,696.43	4,696.46	4,696.37	16.34	16.56	-178.09	-5.16	-61.48	143.34	110.47	32.87	4.361	
4,750.00	4,746.25	4,746.14	4,745.97	16.51	16.72	-179.27	-7.92	-62.27	147.70	114.50	33.20	4.449	
4,800.00	4,796.06	4,795.74	4,795.44	16.59	16.88	179.38	-11.30	-63.24	152.16	118.62	33.53	4.537	
4,850.00	4,845.87	4,845.27	4,844.80	16.86	17.04	177.89	-15.28	-64.37	156.74	122.87	33.87	4.628	
4,900.00	4,895.69	4,894.88	4,894.22	17.04	17.20	176.41	-19.44	-65.55	161.44	127.24	34.20	4.720	
4,950.00	4,945.50	4,944.48	4,943.64	17.21	17.36	175.01	-23.59	-66.74	166.25	131.71	34.54	4.814	
5,000.00	4,995.32	4,994.09	4,993.06	17.39	17.52	173.69	-27.75	-67.93	171.14	136.27	34.87	4.908	
5,050.00	5,045.13	5,043.70	5,042.48	17.57	17.69	172.45	-31.91	-69.11	176.13	140.92	35.21	5.003	
5,100.00	5,094.94	5,093.31	5,091.90	17.74	17.85	171.27	-36.07	-70.30	181.19	145.65	35.54	5.098	
5,150.00	5,144.76	5,142.92	5,141.32	17.92	18.01	170.16	-40.23	-71.48	186.32	150.44	35.88	5.193	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	XTO Energy	**Local Co-ordinate Reference:**	Well CORRAL CANYON 3-34 FED 108H
Project:	Eddy County, NM (NAD27) NMEZ Grid	**TVD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Reference Site:	Corral Canyon 3-34 Fed	**MD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	CORRAL CANYON 3-34 FED 108H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	CORRAL CANYON 3-34 FED 108H	**Database:**	STRYKER_EDM
Reference Design:	Plan #3	**Offset TVD Reference:**	Reference Datum

Offset Design Corral Canyon 3-34 Fed - CORRAL CANYON 3-34 FED 907H - CORRAL CANYON 3-34 FED 907H - P

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.00	5,194.57	5,192.53	5,190.74	18.09	18.17	169.11	-44.39	-72.67	191.52	155.31	36.21	5.288	
5,250.00	5,244.39	5,242.77	5,240.82	18.27	18.34	168.19	-48.28	-73.78	196.70	160.14	36.56	5.380	
5,300.00	5,294.20	5,293.12	5,291.05	18.45	18.51	167.50	-51.55	-74.71	201.76	164.85	36.90	5.467	
5,350.00	5,344.01	5,343.55	5,341.41	18.62	18.67	167.03	-54.18	-75.46	206.67	169.42	37.25	5.548	
5,400.00	5,393.83	5,394.05	5,391.87	18.80	18.84	166.75	-56.17	-76.03	211.41	173.82	37.59	5.623	
5,450.00	5,443.64	5,444.61	5,442.40	18.98	19.01	166.65	-57.53	-76.41	215.98	178.04	37.94	5.693	
5,500.00	5,493.45	5,495.19	5,492.98	19.15	19.18	166.73	-58.24	-76.62	220.37	182.08	38.29	5.756	
5,550.00	5,543.27	5,545.48	5,543.27	19.33	19.35	166.96	-58.36	-76.65	224.60	185.96	38.64	5.813	
5,600.00	5,593.08	5,595.30	5,593.08	19.51	19.53	167.20	-58.36	-76.65	228.81	189.81	38.99	5.868	
5,650.00	5,642.90	5,645.11	5,642.90	19.69	19.71	167.43	-58.36	-76.65	233.01	193.66	39.35	5.922	
5,700.00	5,692.71	5,694.92	5,692.71	19.86	19.89	167.66	-58.36	-76.65	237.22	197.52	39.70	5.975	
5,750.00	5,742.52	5,744.74	5,742.52	20.04	20.07	167.88	-58.36	-76.65	241.43	201.38	40.06	6.027	
5,800.00	5,792.34	5,794.55	5,792.34	20.22	20.24	168.09	-58.36	-76.65	245.65	205.24	40.41	6.079	
5,850.00	5,842.15	5,844.36	5,842.15	20.40	20.42	168.29	-58.36	-76.65	249.87	209.10	40.77	6.129	
5,900.00	5,891.97	5,894.18	5,891.97	20.57	20.60	168.49	-58.36	-76.65	254.09	212.97	41.12	6.179	
5,950.00	5,941.78	5,943.99	5,941.78	20.75	20.78	168.68	-58.36	-76.65	258.32	216.84	41.48	6.228	
6,000.00	5,991.59	5,993.81	5,991.59	20.93	20.96	168.87	-58.36	-76.65	262.55	220.72	41.83	6.276	
6,050.00	6,041.41	6,043.62	6,041.41	21.11	21.13	169.05	-58.36	-76.65	266.78	224.59	42.19	6.324	
6,100.00	6,091.22	6,093.43	6,091.22	21.28	21.31	169.22	-58.36	-76.65	271.01	228.47	42.54	6.371	
6,150.00	6,141.03	6,143.25	6,141.03	21.46	21.49	169.39	-58.36	-76.65	275.25	232.35	42.90	6.417	
6,200.00	6,190.85	6,193.06	6,190.85	21.64	21.67	169.55	-58.36	-76.65	279.49	236.24	43.25	6.462	
6,250.00	6,240.66	6,242.88	6,240.66	21.82	21.85	169.71	-58.36	-76.65	283.73	240.12	43.61	6.506	
6,300.00	6,290.48	6,292.69	6,290.48	22.00	22.02	169.86	-58.36	-76.65	287.97	244.01	43.96	6.550	
6,350.00	6,340.29	6,342.50	6,340.29	22.17	22.20	170.01	-58.36	-76.65	292.22	247.90	44.32	6.594	
6,400.00	6,390.10	6,392.32	6,390.10	22.35	22.38	170.15	-58.36	-76.65	296.46	251.79	44.67	6.636	
6,450.00	6,439.92	6,442.13	6,439.92	22.53	22.56	170.29	-58.36	-76.65	300.71	255.68	45.03	6.678	
6,500.00	6,489.73	6,491.94	6,489.73	22.71	22.74	170.43	-58.36	-76.65	304.96	259.58	45.39	6.719	
6,550.00	6,539.55	6,541.76	6,539.55	22.89	22.91	170.56	-58.36	-76.65	309.21	263.47	45.74	6.760	
6,600.00	6,589.36	6,591.57	6,589.36	23.07	23.09	170.69	-58.36	-76.65	313.47	267.37	46.10	6.800	
6,650.00	6,639.17	6,641.39	6,639.17	23.25	23.27	170.82	-58.36	-76.65	317.72	271.27	46.45	6.840	
6,700.00	6,688.99	6,691.20	6,688.99	23.42	23.45	170.94	-58.36	-76.65	321.98	275.17	46.81	6.879	
6,750.00	6,738.80	6,741.01	6,738.80	23.60	23.63	171.06	-58.36	-76.65	326.24	279.07	47.16	6.917	
6,800.00	6,788.61	6,790.83	6,788.61	23.78	23.81	171.18	-58.36	-76.65	330.50	282.97	47.52	6.955	
6,850.00	6,838.43	6,840.64	6,838.43	23.96	23.98	171.29	-58.36	-76.65	334.76	286.88	47.88	6.992	
6,900.00	6,888.24	6,890.46	6,888.24	24.14	24.16	171.40	-58.36	-76.65	339.02	290.78	48.23	7.029	
6,950.00	6,938.06	6,940.27	6,938.06	24.32	24.34	171.51	-58.36	-76.65	343.28	294.69	48.59	7.065	
7,000.00	6,987.87	6,990.08	6,987.87	24.50	24.52	171.61	-58.36	-76.65	347.55	298.60	48.95	7.101	
7,050.00	7,037.68	7,039.90	7,037.68	24.68	24.70	171.71	-58.36	-76.65	351.81	302.51	49.30	7.136	
7,100.00	7,087.50	7,089.71	7,087.50	24.85	24.87	171.81	-58.36	-76.65	356.08	306.42	49.66	7.170	
7,150.00	7,137.31	7,139.52	7,137.31	25.03	25.05	171.91	-58.36	-76.65	360.34	310.33	50.02	7.205	
7,200.00	7,187.13	7,189.34	7,187.13	25.21	25.23	172.01	-58.36	-76.65	364.61	314.24	50.37	7.238	
7,250.00	7,236.94	7,239.15	7,236.94	25.39	25.41	172.10	-58.36	-76.65	368.88	318.15	50.73	7.272	
7,300.00	7,286.75	7,288.97	7,286.75	25.57	25.59	172.19	-58.36	-76.65	373.15	322.07	51.09	7.305	
7,350.00	7,336.57	7,338.78	7,336.57	25.75	25.77	172.28	-58.36	-76.65	377.42	325.98	51.44	7.337	
7,400.00	7,386.38	7,388.59	7,386.38	25.93	25.94	172.37	-58.36	-76.65	381.70	329.90	51.80	7.369	
7,450.00	7,436.19	7,438.41	7,436.19	26.11	26.12	172.45	-58.36	-76.65	385.97	333.81	52.16	7.400	
7,500.00	7,486.01	7,488.22	7,486.01	26.29	26.30	172.53	-58.36	-76.65	390.24	337.73	52.51	7.431	
7,550.00	7,535.82	7,538.04	7,535.82	26.47	26.48	172.62	-58.36	-76.65	394.52	341.65	52.87	7.462	
7,600.00	7,585.64	7,587.85	7,585.64	26.65	26.66	172.70	-58.36	-76.65	398.79	345.57	53.23	7.492	
7,650.00	7,635.45	7,637.66	7,635.45	26.83	26.83	172.77	-58.36	-76.65	403.07	349.49	53.58	7.522	
7,700.00	7,685.26	7,687.48	7,685.26	27.01	27.01	172.85	-58.36	-76.65	407.35	353.41	53.94	7.552	
7,750.00	7,735.08	7,737.29	7,735.08	27.19	27.19	172.92	-58.36	-76.65	411.62	357.33	54.30	7.581	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	XTO Energy	**Local Co-ordinate Reference:**	Well CORRAL CANYON 3-34 FED 108H
Project:	Eddy County, NM (NAD27) NMEZ Grid	**TVD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Reference Site:	Corral Canyon 3-34 Fed	**MD Reference:**	3034+27 @ 3061.00usft (ScanProducer)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	CORRAL CANYON 3-34 FED 108H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	CORRAL CANYON 3-34 FED 108H	**Database:**	STRYKER_EDM
Reference Design:	Plan #3	**Offset TVD Reference:**	Reference Datum

Offset Design Corral Canyon 3-34 Fed - CORRAL CANYON 3-34 FED 907H - CORRAL CANYON 3-34 FED 907H - P — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+MS — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,800.00	7,784.89	7,787.10	7,784.89	27.35	27.37	173.00	-58.36	-76.65	415.90	361.25	54.65	7.610	
7,850.00	7,834.71	7,836.92	7,834.71	27.54	27.55	173.07	-58.36	-76.65	420.18	365.17	55.01	7.638	
7,900.00	7,884.52	7,886.73	7,884.52	27.72	27.73	173.14	-58.36	-76.65	424.46	369.09	55.37	7.666	
7,950.00	7,934.33	7,936.55	7,934.33	27.90	27.90	173.21	-58.36	-76.65	428.74	373.02	55.73	7.694	
8,000.00	7,984.15	7,986.36	7,984.15	28.08	28.08	173.28	-58.36	-76.65	433.02	376.94	56.08	7.721	
8,050.00	8,033.96	8,036.17	8,033.96	28.26	28.26	173.34	-58.36	-76.65	437.30	380.86	56.44	7.748	
8,100.00	8,083.77	8,085.99	8,083.77	28.44	28.44	173.41	-58.36	-76.65	441.59	384.79	56.80	7.775	
8,150.00	8,133.59	8,135.80	8,133.59	28.62	28.62	173.47	-58.36	-76.65	445.87	388.71	57.16	7.801	
8,200.00	8,183.40	8,185.62	8,183.40	28.80	28.80	173.53	-58.36	-76.65	450.15	392.64	57.51	7.827	
8,250.00	8,233.22	8,235.43	8,233.22	28.98	28.97	173.59	-58.36	-76.65	454.43	396.56	57.87	7.853	
8,300.00	8,283.03	8,285.24	8,283.03	29.15	29.15	173.65	-58.36	-76.65	458.72	400.49	58.23	7.878	
8,350.00	8,332.84	8,335.06	8,332.84	29.34	29.33	173.71	-58.36	-76.65	463.00	404.42	58.59	7.903	
8,400.00	8,382.66	8,384.87	8,382.66	29.52	29.51	173.77	-58.36	-76.65	467.29	408.35	58.94	7.928	
8,450.00	8,432.47	8,434.68	8,432.47	29.70	29.69	173.83	-58.36	-76.65	471.57	412.27	59.30	7.952	
8,500.00	8,482.29	8,484.50	8,482.29	29.88	29.87	173.88	-58.36	-76.65	475.86	416.20	59.66	7.976	
8,550.00	8,532.10	8,534.31	8,532.10	30.06	30.04	173.94	-58.36	-76.65	480.15	420.13	60.02	8.000	
8,600.00	8,581.91	8,584.13	8,581.91	30.24	30.22	173.99	-58.36	-76.65	484.43	424.06	60.37	8.024	
8,650.00	8,631.73	8,633.94	8,631.73	30.42	30.40	174.05	-58.36	-76.65	488.72	427.99	60.73	8.047	
8,700.00	8,681.54	8,683.75	8,681.54	30.60	30.58	174.10	-58.36	-76.65	493.01	431.92	61.09	8.070	
8,750.00	8,731.35	8,733.57	8,731.35	30.78	30.76	174.15	-58.36	-76.65	497.30	435.85	61.45	8.093	

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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: 12-12-18

☐ Original
☒ Amended - Reason for Amendment: Name Change

Operator & OGRID No.: XTO Energy, Inc [005380]

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 – Corral Canyon 10 East 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
Corral Canyon 3-34 Fed 108H	30-015-45433	A-10-25S-29E	185'FNL & 884'FEL	2500	Flared/Sold	CTB Connected to P/L

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 ENLINK and will be connected to ENLINK low/high pressure gathering system located in Lea County, New Mexico. It will require 0' of pipeline to connect the facility to low/high pressure gathering system. XTO ENERGY, INC provides (periodically) to ENLINK 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 ENLINK have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at ENLINK Processing Plant located in Block 27, Section 4, Loving County 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 ENLINK's 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

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**XTO ENERGY INC.**
LEASE NO.:	**NMNM136870**
WELL NAME & NO.:	**24H – CORRAL CANYON FEDERAL**
SURFACE HOLE FOOTAGE:	**185'/N & 885'/E**
BOTTOM HOLE FOOTAGE	**200'/N & 330'/E**
LOCATION:	**Section 10.,T25S., R.29E., NMP**
COUNTY:	**EDDY County, New Mexico**

Original COAs still stand with the following drilling modifications:

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

☒ **Eddy County**
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

1. **Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.**

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a "Major" violation.**

3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works is located, this does not include the dog house or stairway area.

4. **The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.**

B. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) for Water Basin:
After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.

Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Medium Cave/Karst
Possibility of water flows in the Salado and Castile.
Possibility of lost circulation in the Red Beds, Rustler, and Delaware.
Abnormal pressure may be encountered in the 3rd Bone Spring and all subsequent formations.

1. The **13-3/8** inch surface casing shall be set at approximately **647** feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. **If salt is encountered, set casing at least 25 feet above the salt.**

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

    b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.

    c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

    d. If cement falls back, remedial cementing will be done prior to drilling out that string.

Formation below the 13-3/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe and the mud weight for the bottom of the hole. Report results to BLM office.

Intermediate casing shall be kept fluid filled while running into hole to meet BLM minimum collapse requirements.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

Operator has proposed DV tool at depth of 697', but will adjust cement proportionately if moved. DV tool shall be set a minimum of 50' below previous shoe and a minimum of 200' above current shoe. Operator shall submit sundry if DV tool depth cannot be set in this range. If an ECP is used, it is to be set a minimum of 50' below the shoe to provide cement across the shoe. If it cannot be set below the shoe, a CBL shall be run to verify cement coverage.

a. First stage to DV tool:

☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.

b. Second stage above DV tool:

☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.**

If cement does not circulate to surface on the intermediate casing, the cement on the production casing must come to surface.

Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

Centralizers required on horizontal leg, must be type for horizontal service and a minimum of one every other joint.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

   ☒ Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.

4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API 53.

2. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. **Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.** If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).

3. **Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 5000 (5M) psi.**
    a. **Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.**
    b. **If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.**
    c. **Manufacturer representative shall install the test plug for the initial BOP test.**
    d. **Operator shall perform the intermediate casing integrity test to 70% of the casing burst. This will test the multi-bowl seals.**
    e. **If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.**

5M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

    b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.

    c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

    d. The results of the test shall be reported to the appropriate BLM office.

e. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**

f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

g. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the **Wolfcamp** formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

D. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented.

E. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

F. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

JAM 022119