Form 3160-5
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

5. Lease Serial No.
NMNM35607

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
Ross Draw 25 Fed WX #22H

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

8. Well Name and No. 323108
ROSS DRAW 25 36 FED COM 102H

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

9. API Well No.
30-015-45585-00-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
PURPLE SAGE-WOLFCAMP (GAS)

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 25 T26S R29E NENW 170FNL 2070FWL
32.019577 N Lat, 103.938972 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 name to Ross Draw 25-36 Fed Com 102H – 324930
2. Change formation to Purple Sage; Wolfcamp
2. Change BHL from 170'FSL & 2190'FWL to 200'FSL & 1594'FWL
5. Drilling Program/Directional Plan

Attachments:
1. C102 & Supplement

See 2nd page

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

Electronic Submission #451354 verified by the BLM Well Information System
For XTO ENERGY INCORPORATED, sent to the Carlsbad
Committed to AFMSS for processing by PRISCILLA PEREZ on 01/29/2019 (19PP0798SE)

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

Signature (Electronic Submission) — Date 01/22/2019

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By ZOTA STEVENS — Title PETROLEUM ENGINEER — Date 02/21/2019

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 Carlsbad

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 ****

RW 2-25-19

Additional data for EC transaction #451354 that would not fit on the form

32. Additional remarks, continued

2. Drilling Program
3. BOP/CM/FH
4. Directional Plan
5. GCP

*Sundry originally submitted on 1/9/19. BLM rejected on 1/22/19 due to system failure and unable to upload attachments. Requested sundry be re-submitted.

Revisions to Operator-Submitted EC Data for Sundry Notice #451354

	Operator Submitted	BLM Revised (AFMSS)
Sundry Type:	APDCH NOI	APDCH NOI
Lease:	NMNM35607	NMNM35607
Agreement:		
Operator:	XTO ENERGY INC. 6401 HOLIDAY HILL RD BLDG 5 MIDLAND, TX 79707 Ph: 432-620-4374	XTO ENERGY INCORPORATED 6401 HOLIDAY HILL ROAD BLDG 5 MIDLAND, TX 79707 Ph: 432.683 2277
Admin Contact:	KELLY KARDOS REGULATORY COORDINATOR E-Mail: kelly_kardos@xtoenergy.com Ph: 432-620-4374	KELLY KARDOS REGULATORY COORDINATOR E-Mail: kelly_kardos@xtoenergy.com Ph: 432-620-4374
Tech Contact:	KELLY KARDOS REGULATORY COORDINATOR E-Mail: kelly_kardos@xtoenergy.com Ph: 432-620-4374	KELLY KARDOS REGULATORY COORDINATOR E-Mail: kelly_kardos@xtoenergy.com Ph: 432-620-4374
Location: State: County:	 NM EDDY	 NM EDDY
Field/Pool:	BRUSHY DRAW; WOLFCAMP	PURPLE SAGE-WOLFCAMP (GAS)
Well/Facility:	ROSS DRAW 25 FED WX 22H Sec 25 T26S R29E Mer NMP NENW 170FNL 271FWL	ROSS DRAW 25 36 FED COM 102H Sec 25 T26S R29E NENW 170FNL 2070FWL 32.019577 N Lat, 103.938972 W Lon

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**XTO ENERGY, INC**
LEASE NO.:	**NMNM35607**
WELL NAME & NO.:	**ROSS DRAW 25-35 FED COM 102H**
SURFACE HOLE FOOTAGE:	**170' FNL & 2071' FWL**
BOTTOM HOLE FOOTAGE	**200' FNL & 1594' FWL**
LOCATION:	**Section25; T26S; R29E NMP**
COUNTY:	**EDDY, NEW MEXICO**

COA

All previous COAs still apply expect the following:

H2S	○ Yes	◉ No	
Potash	◉ None	○ Secretary	○ R-111-P
Cave/Karst Potential	○ Low	◉ Medium	○ High
Variance	○ None	◉ Flex Hose	○ Other
Wellhead	○ Conventional	◉ Multibowl	○ Both
Other	☐ 4 String Area	☐ Capitan Reef	☐ WIPP

A. Hydrogen Sulfide

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.

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **350** feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface.

    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 will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
    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.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing shall be set at approximately **3150 ft is**:
   - Cement to surface. If cement does not circulate see B.1.a, c-d above.

Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

- ❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings , the cement on the 3rd casing string must come to surface.

3. The minimum required fill of cement behind the **7** inch production casing is:
   - Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.

4. The minimum required fill of cement behind the **4-1/2** inch production liner is:
   - Cement should tie-back 100' into the previous casing. Operator shall provide method of verification.

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).

2. 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.

GENERAL 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)

☒ Chaves and Roosevelt Counties
Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201.
During office hours call (575) 627-0272.
After office hours call (575)

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

☒ Lea County
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612

1. 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.
   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
   b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
      - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.

2. 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 are located, this does not include the dog house or stairway area.

3. The record of the drilling rate along with the GR/N well log (one log per well pad is acceptable) 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.

A. CASING

1. 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.

2. Wait on cement (WOC) for Potash Areas: 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 for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. 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. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. 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.

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

6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

7. 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.

8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. 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 RP 53 Sec. 17.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. 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.

3. 5M or higher 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. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
    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. 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.
    e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

5. 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. In potash areas, 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. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).

c. The tests shall be done by an independent service company utilizing a test plug. The results of the test shall be reported to the appropriate BLM office.

d. 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.

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. 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.

C. 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.

D. 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.

Waste Minimization Plan (WMP)

In the interest of resource development, submission of additional well gas capture development plan information is deferred but may be required by the BLM Authorized Officer at a later date.

ZS 021919

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
FEB 25 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
30-015-45585	98220	PURPLE SAGE; WOLFCAMP

[4] Property Code	[5] Property Name	[6] Well Number
324930	ROSS DRAW 25-36 FED COM	102H

[7] OGRID No.	[8] Operator Name	[9] Elevation
005380	XTO ENERGY, INC.	2,959

[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
C	25	26 S	29 E		170	NORTH	2,071	WEST	EDDY

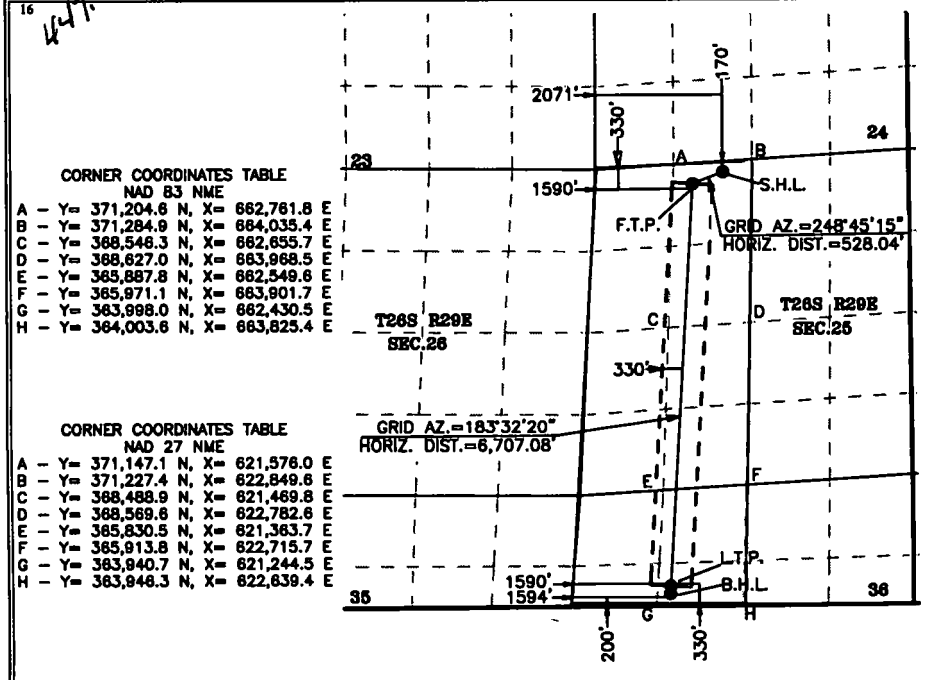
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
~~L~~ F	36	26 S	29 E	8	200	SOUTH	1,594	WEST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
~~847.9~~ 440.90			

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

[16]



CORNER COORDINATES TABLE
NAD 83 NME

A	Y= 371,204.6 N,	X= 662,781.8 E
B	Y= 371,284.9 N,	X= 664,035.4 E
C	Y= 368,548.3 N,	X= 662,655.7 E
D	Y= 368,627.0 N,	X= 663,968.5 E
E	Y= 365,887.8 N,	X= 662,549.6 E
F	Y= 365,971.1 N,	X= 663,901.7 E
G	Y= 363,998.0 N,	X= 662,430.5 E
H	Y= 364,003.6 N,	X= 663,825.4 E

CORNER COORDINATES TABLE
NAD 27 NME

A	Y= 371,147.1 N,	X= 621,576.0 E
B	Y= 371,227.4 N,	X= 622,849.6 E
C	Y= 368,488.9 N,	X= 621,469.8 E
D	Y= 368,569.6 N,	X= 622,782.6 E
E	Y= 365,830.5 N,	X= 621,363.7 E
F	Y= 365,913.8 N,	X= 622,715.7 E
G	Y= 363,940.7 N,	X= 621,244.5 E
H	Y= 363,946.3 N,	X= 622,839.4 E

GEODETIC COORDINATES NAD 83 NME SURFACE LOCATION	LAST TAKE POINT NAD 83 NME	GEODETIC COORDINATES NAD 27 NME SURFACE LOCATION	LAST TAKE POINT NAD 27 NME
Y= 371,084.5	Y= 364,328.9	Y= 371,027.1	Y= 364,271.6
X= 663,560.1	X= 662,862.0	X= 622,374.3	X= 621,476.0
LAT.= 32.019578°N	LAT.= 32.001017°N	LAT.= 32.019453°N	LAT.= 32.000891°N
LONG.= 103.938969°W	LONG.= 103.941946°W	LONG.= 103.938489°W	LONG.= 103.941466°W
FIRST TAKE POINT NAD 83 NME	**BOTTOM HOLE LOCATION NAD 83 NME**	**FIRST TAKE POINT NAD 27 NME**	**BOTTOM HOLE LOCATION NAD 27 NME**
Y= 370,893.2	Y= 364,198.9	Y= 370,835.8	Y= 364,141.6
X= 663,067.9	X= 662,653.9	X= 621,882.1	X= 621,467.9
LAT.= 32.019057°N	LAT.= 32.000659°N	LAT.= 32.018932°N	LAT.= 32.000534°N
LONG.= 103.940560°W	LONG.= 103.941974°W	LONG.= 103.940079°W	LONG.= 103.941494°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 01-09-19
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.

12-18-2018
Date of Survey

Signature and Seal of Professional Surveyor:

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

MARK DILLON HARP 23786
Certificate Number JC 2018112761

RWP 2-25-19

NM OIL CONSERVATION
ARTESIA DISTRICT

FEB 25 2019

RECEIVED

Intent [X] As Drilled [ ]

API #
30-015-45585

Operator Name:	Property Name:	Well Number
XTO Energy Inc.	Ross Draw 25-36 Fed Com	102H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
C	25	26S	29E		170	North	2071	West	Eddy

Latitude	Longitude	NAD
32.019578	-103.938969	NAD83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
C	25	26S	29E		330	North	1590	West	Eddy

Latitude	Longitude	NAD
32.019057	-103.940560	NAD83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
	36	26S	29E	2	330	South	1590	West	Eddy

Latitude	Longitude	NAD
32.001017	-103.941946	NAD83

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

Is this well an infill well? [N]

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

API #

Operator Name:	Property Name:	Well Number

KZ 06/29/2018

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

NM OIL CONSERVATION
ARTESIA DISTRICT
FEB 25 2019
RECEIVED

GAS CAPTURE PLAN

Date: 01/09/2019

☐ 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 – Ross Draw 25 Northeast

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

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
Ross Draw 25-36 Fed Com 102H	30-015-45585	C-25-26S-29E	170'FNL & 2071'FWEL	2500	Flared/Sold	CTB to be 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 ETC and will be connected to ETC 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 ETC a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, XTO ENERGY, INC. and ETC have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at ETC's Processing Plant located in Sec. 25 Twn. 26S, Rng. 29E, Eddy County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on ETC'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

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

XTO Energy Inc.
Ross Draw 25-36 FED 102H
Projected TD: 17011' MD / 10225' TVD
SHL: 170' FNL & 2071' FWL , Section 25, T26S, R29E
BHL: 200' FSL & 1594' FWL , Section 36, T26S, R29E
Eddy County, NM

1. Geologic Name of Surface Formation

A. Permian

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

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	507'	Water
Top of Salt	1350'	Water
Base of Salt	2981'	Water
Delaware	3156'	Water
Bone Spring	6907'	Water/Oil/Gas
1st Bone Spring Ss	7881'	Water/Oil/Gas
2nd Bone Spring Ss	8752'	Water/Oil/Gas
3rd Bone Spring Ss	9756'	Water/Oil/Gas
Wolfcamp Y	10210'	Water/Oil/Gas
Target/Land Curve	10225'	Water/Oil/Gas

*** Hydrocarbons @ Brushy Canyon
*** Groundwater depth 40' (per NM State Engineers Office).

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 @ 560' (-53' into the Rustler) and circulating cement back to surface. The salt will be isolated by setting 9-5/8 inch casing at 3040' and circulating cement to surface. An 8-3/4 inch vertical and curve hole will be drilled and 7 inch casing run and cemented 500' into the 9-5/8 inch casing. A 6-1/8 inch curve and lateral hole will be drilled to MD/TD and 4-1/2 inch liner will be set at TD and cemented back 250' into the 7 inch casing shoe.

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17-1/2"	0' – 560'	13-3/8"	48	STC	H-40	New	1.83	3.00	11.98
12-1/4"	0' – 3040'	9-5/8"	36	LTC	J-55	New	1.31	2.11	4.14
8-3/4"	0' – 10576'	7"	29	LTC	P-110	New	1.18	1.73	2.60
6-1/8"	9663' – 17011'	4-1/2"	13.5	BTC	P-110	New	1.31	2.56	2.44

- XTO requests to utilize centralizers only in the curve after the KOP and only a minimum of one every other joint.
- 9-5/8" & 4-1/2" Collapse analyzed using 50% evacuation based on regional experience.
- 4-1/2" tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35

WELLHEAD:

A. Starting Head (RSH System): 13-3/8" SOW bottom x 13-5/8" 5M top flange
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.
- Wellhead manufacturer representative will not be present for BOP test plug installation
- Operator will test the 9-5/8" casing to per Onshore Order 2 before drilling out.

4. Cement Program

Surface Casing: 13-3/8", 48 New H-40, STC casing to be set at +/- 560'

Lead: 190 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", 36 New J-55, LTC casing to be set at +/- 3040'

Lead: 840 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

2nd Intermediate Casing: 7", 29 New P-110, LTC casing to be set at +/- 10576'

Lead: 960 sxs Halcem-C + 2% CaCl (mixed at 12.9 ppg, 1.88 ft3/sx, 9.61 gal/sx water)

Tail: 60 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

Production Liner: 4-1/2", 13.5 New P-110, BTC casing to be set at +/- 17011'

Tail: 620 sxs VersaCem (mixed at 13.2 ppg, 1.33 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 4131 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 the 9-5/8" and 7" casing is set, the packoff seals 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 560'	17-1/2"	FW/Native	8.4-8.8	35-40	NC
560' to 3040'	12-1/4"	Brine/Gel Sweeps	9.8-10.2	30-32	NC
3040' to 10576'	8-3/4"	FW / Cut Brine	8.6-9.5	29-32	NC - 20
10576' to 17011'	6-1/8"	FW / Cut Brine / Polymer	11.7-12	32-50	20-Aug

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.

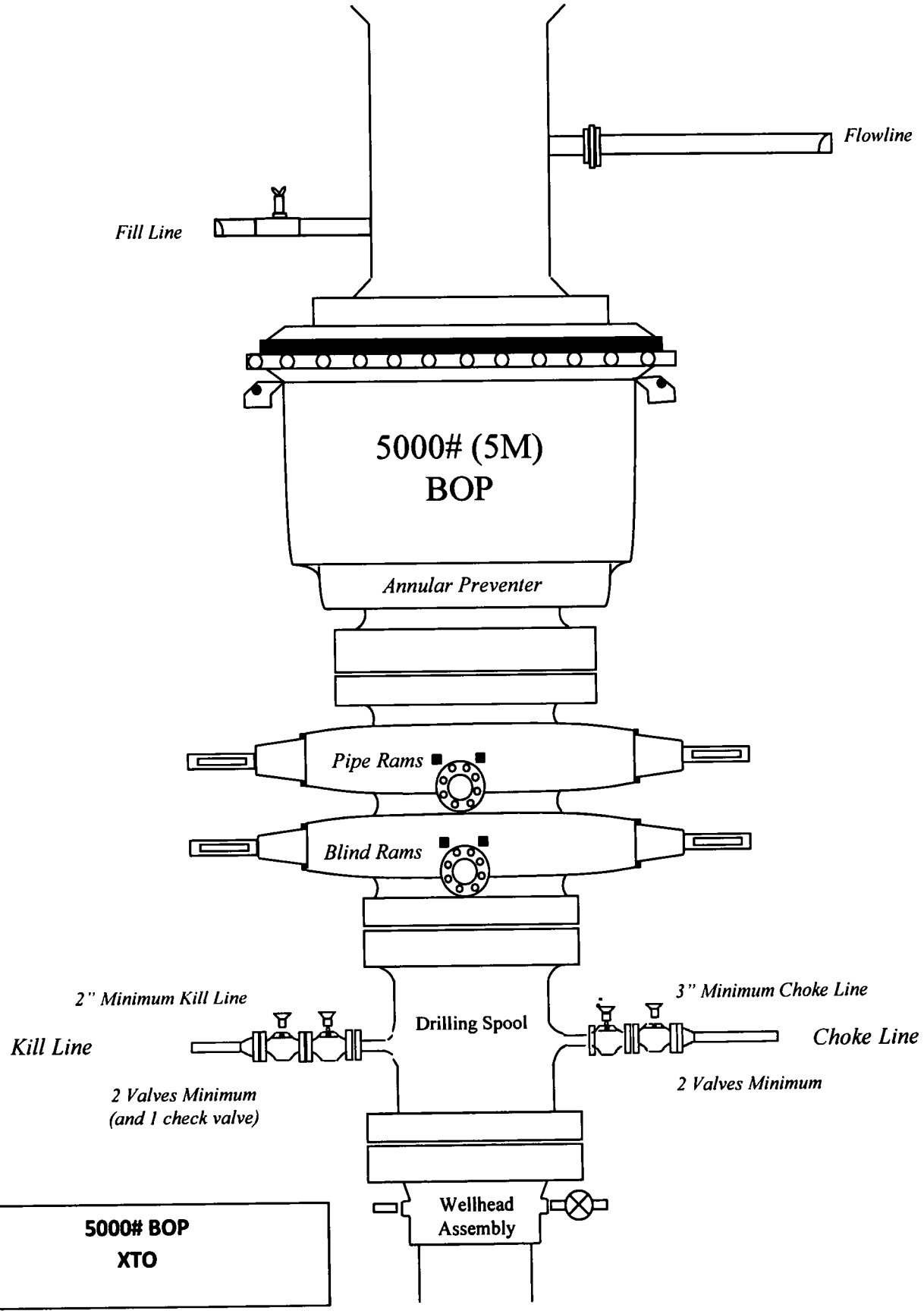
Open hole logging will include quad combo.

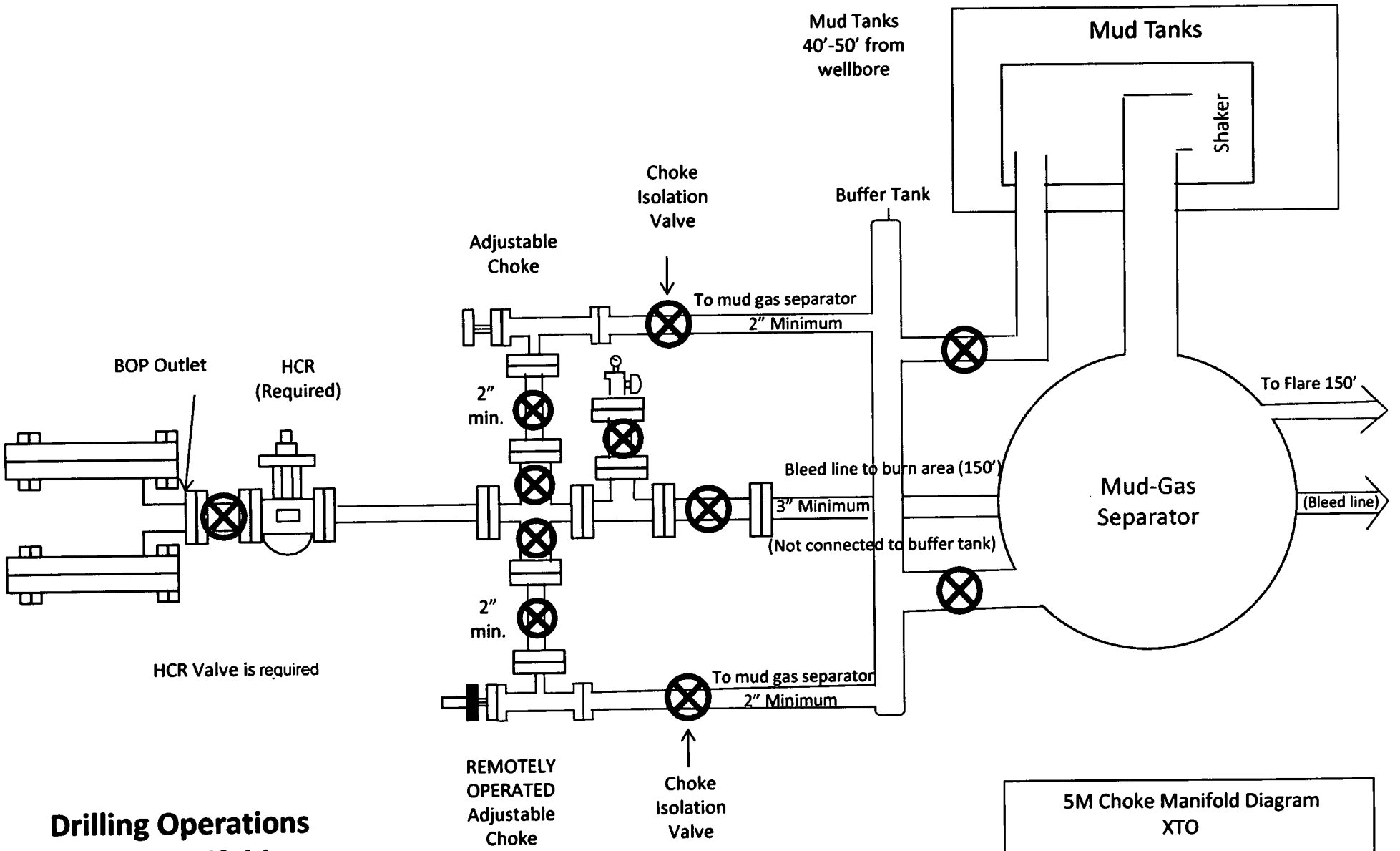
9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 145 to 165 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 6380 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

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

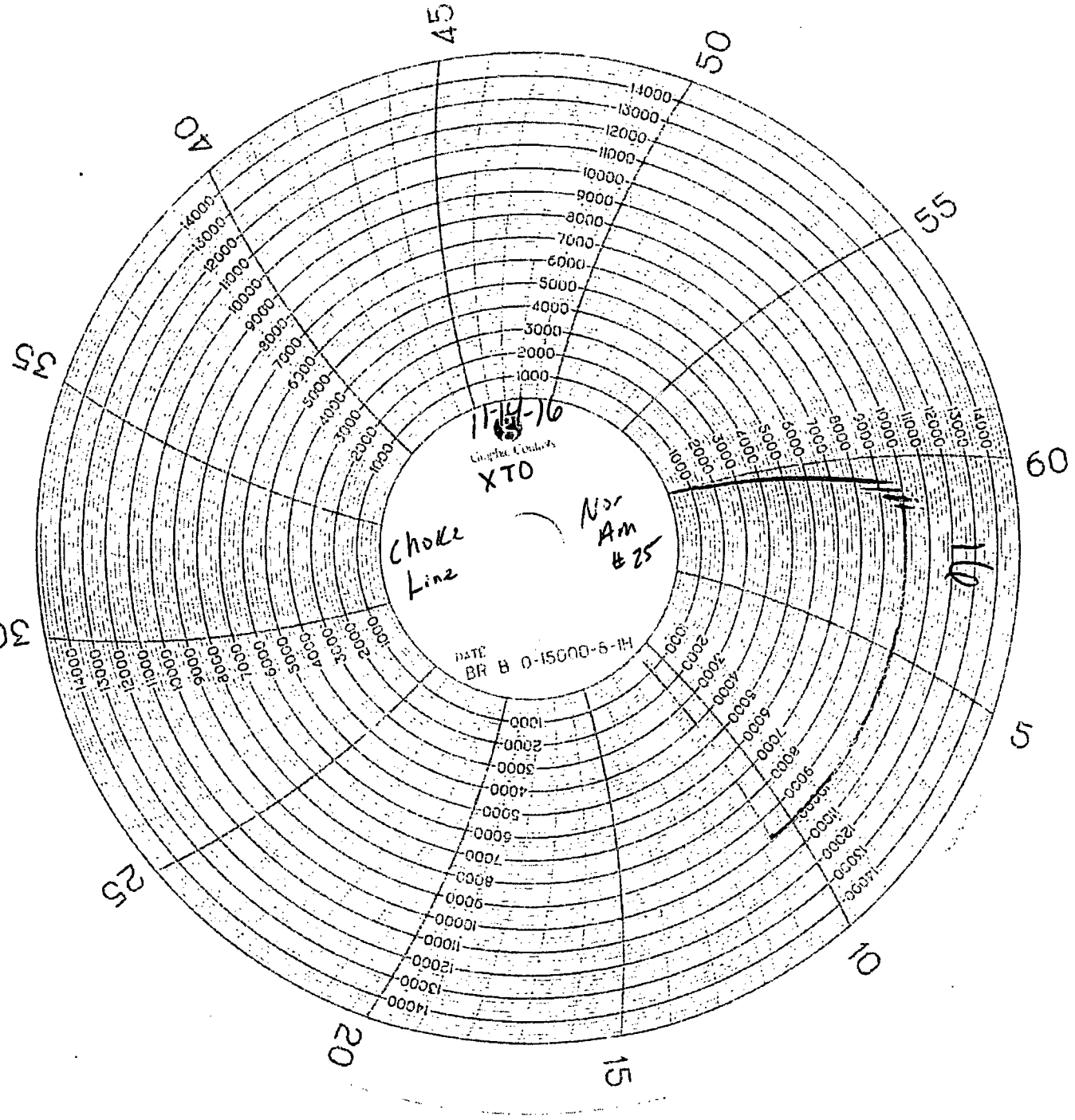
Customer :	AUSTIN DISTRIBUTING	Test Date:	6/8/2014
Customer Ref. :	PENDING	Hose Serial No.:	D-060814-1
Invoice No. :	201709	Created By:	NORMA

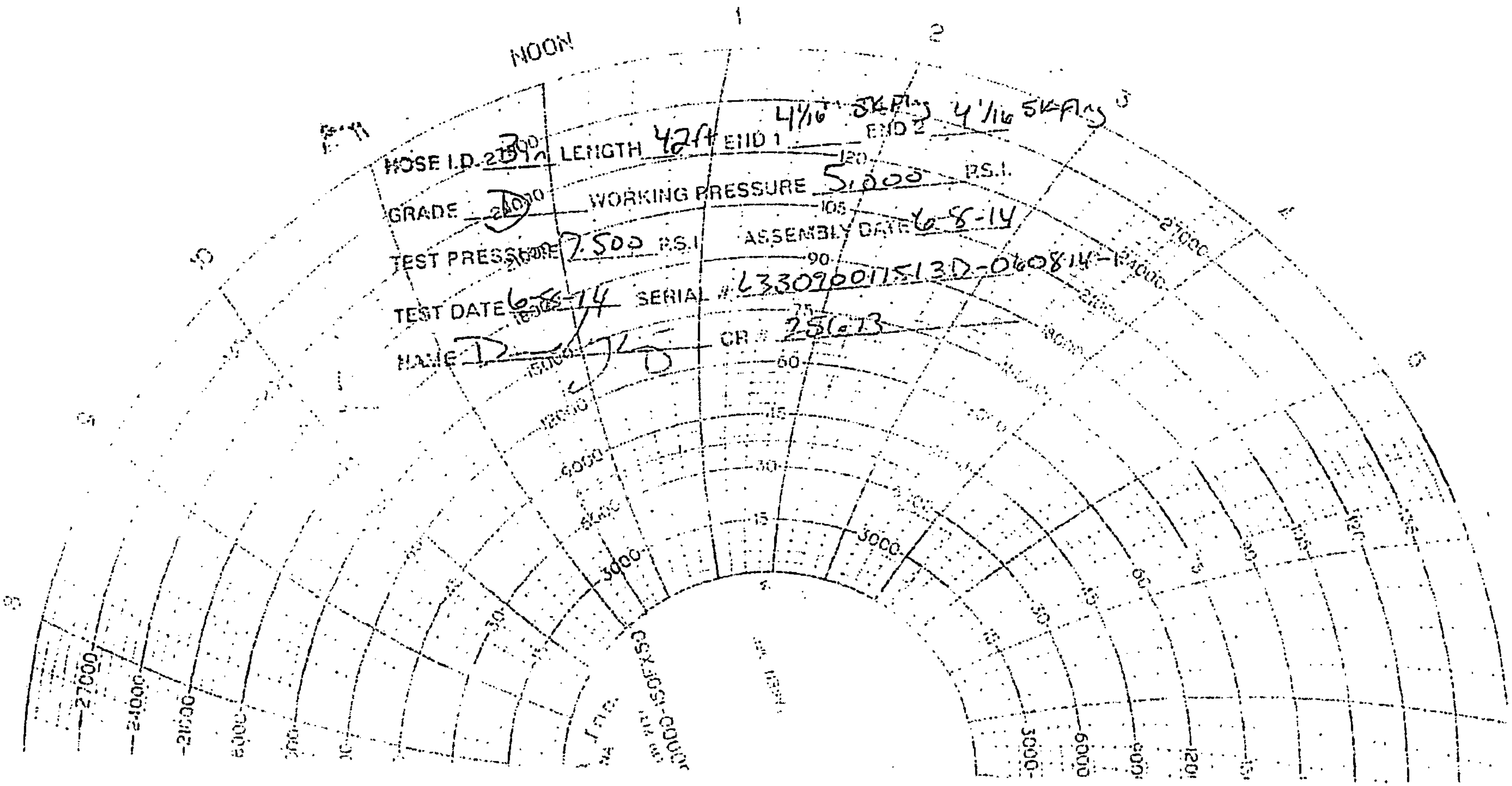
Product Description:	FD3.0-12.0R41/16.5KFLGE/E LE

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
DATE
BR B 0-15000-5-1H


NOON
HOSE I.D. 3 in LENGTH 42 ft END 1 4 1/16 5K Flg END 2 4 1/16 5K Flg
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 # 63309001151 3D-060814-1
NAME
CR # 25673

XTO Energy

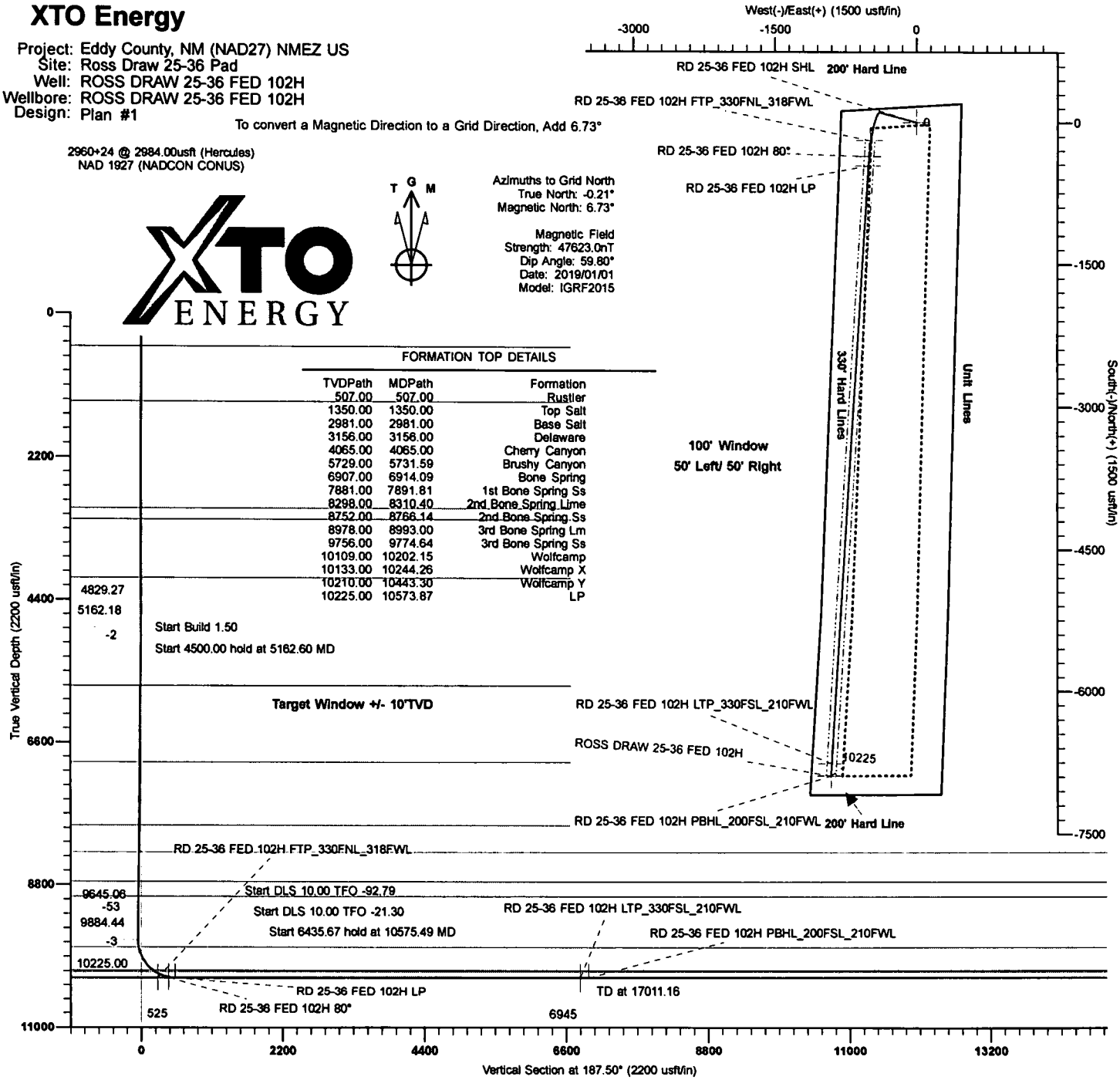
Project: Eddy County, NM (NAD27) NMEZ US
Site: Ross Draw 25-36 Pad
Well: ROSS DRAW 25-36 FED 102H
Wellbore: ROSS DRAW 25-36 FED 102H
Design: Plan #1

To convert a Magnetic Direction to a Grid Direction, Add 6.73°

2960+24 @ 2984.00usft (Hercules)
NAD 1927 (NADCON CONUS)

Azimuths to Grid North
True North: -0.21°
Magnetic North: 6.73°

Magnetic Field
Strength: 47623.0nT
Dip Angle: 59.80°
Date: 2019/01/01
Model: IGRF2015



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
507.00	507.00	Rustler
1350.00	1350.00	Top Salt
2981.00	2981.00	Base Salt
3156.00	3156.00	Delaware
4065.00	4065.00	Cherry Canyon
5729.00	5731.59	Brushy Canyon
6907.00	6914.09	Bone Spring
7881.00	7891.81	1st Bone Spring Ss
8298.00	8310.40	2nd Bone Spring Lime
8752.00	8766.14	2nd Bone Spring Ss
8978.00	8993.00	3rd Bone Spring Lm
9756.00	9774.64	3rd Bone Spring Ss
10109.00	10202.15	Wolfcamp
10133.00	10244.26	Wolfcamp X
10210.00	10443.30	Wolfcamp Y
10225.00	10573.87	LP

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting
RD 25-36 FED 102H SHL	0.00	0.00	0.00	371027.10	622374.30
RD 25-36 FED 102H 80°	10216.19	-361.67	-501.90	370665.43	621872.40
RD 25-36 FED 102H FTP_330FNL_318FWL	10225.00	-191.30	-492.20	370835.80	621882.10
RD 25-36 FED 102H LP	10225.00	-462.08	-509.47	370565.02	621864.83
RD 25-36 FED 102H LTP_330FSL_210FWL	10225.00	-6755.50	-898.30	364271.60	621476.00
RD 25-36 FED 102H PBHL_200FSL_210FWL	10225.00	-6885.50	-906.40	364141.60	621467.90

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4829.27	0.00	0.00	4829.27	0.00	0.00	0.00	0.00	0.00	
5162.60	5.00	285.00	5162.18	3.76	-14.04	1.50	285.00	-1.90	
9662.60	5.00	285.00	9645.06	105.27	-392.88	0.00	0.00	-53.10	
9910.32	25.00	203.00	9884.44	59.16	-424.25	10.00	-92.79	-3.29	
10575.49	90.00	183.54	10225.00	-462.08	-509.47	10.00	-21.30	524.62	
17011.16	90.00	183.54	10225.00	-6885.50	-906.40	0.00	0.00	6944.90	RD 25-36 FED 102H PBHL_200FSL_210FWL

Plan: Plan #1 (ROSS DRAW 25-36 FED 102H/ROSS DRAW 25-36 FED 102H)
Created By: Mekka Williams
eSomina Well Design
mekka@esominawelldesign.com
20:37, January 02 2019

TRUE PERFORMANCE DIRECTIONAL DRILLING
5075 E 52nd Street, Odessa, Texas 79762
281.222.8366

Database:	TP_EDM	**Local Co-ordinate Reference:**	Well ROSS DRAW 25-36 FED 102H - Slot RD 25-36 FED 102H SHL
Company:	XTO Energy	**TVD Reference:**	2960+24 @ 2984.00usft (Hercules)
Project:	Eddy County, NM (NAD27) NMEZ US	**MD Reference:**	2960+24 @ 2984.00usft (Hercules)
Site:	Ross Draw 25-36 Pad	**North Reference:**	Grid
Well:	ROSS DRAW 25-36 FED 102H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ROSS DRAW 25-36 FED 102H		
Design:	Plan #1		

Project	Eddy County, NM (NAD27) NMEZ US		
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	Ross Draw 25-36 Pad				
Site Position:		**Northing:**	371,027.10 usft	**Latitude:**	32.0194530
From:	Map	**Easting:**	622,374.30 usft	**Longitude:**	-103.9384887
Position Uncertainty:	0.00 usft	**Slot Radius:**	13.20 in	**Grid Convergence:**	0.21 °

Well	ROSS DRAW 25-36 FED 102H - Slot RD 25-36 FED 102H SHL					
Well Position	**+N/-S**	0.00 usft	**Northing:**	371,027.10 usft	**Latitude:**	32.0194530
	+E/-W	0.00 usft	**Easting:**	622,374.30 usft	**Longitude:**	-103.9384887
Position Uncertainty		0.00 usft	**Wellhead Elevation:**		**Ground Level:**	2,960.00 usft

Wellbore	ROSS DRAW 25-36 FED 102H				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2015	2019/01/01	6.94	59.80	47,623

Design	Plan #1				
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	187.50	

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	
4,829.27	0.00	0.00	4,829.27	0.00	0.00	0.00	0.00	0.00	0.00	
5,162.60	5.00	285.00	5,162.18	3.76	-14.04	1.50	1.50	0.00	285.00	
9,662.60	5.00	285.00	9,645.06	105.27	-392.88	0.00	0.00	0.00	0.00	
9,910.32	25.00	203.00	9,884.44	59.16	-424.25	10.00	8.07	-33.10	-92.79	
10,575.49	90.00	183.54	10,225.00	-462.08	-509.47	10.00	9.77	-2.93	-21.30	
17,011.17	90.00	183.54	10,225.00	-6,885.50	-906.40	0.00	0.00	0.00	0.00	RD 25-36 FED 102H

Database:	TP_EDM	**Local Co-ordinate Reference:**	Well ROSS DRAW 25-36 FED 102H - Slot RD 25-36 FED 102H SHL
Company:	XTO Energy	**TVD Reference:**	2960+24 @ 2984.00usft (Hercules)
Project:	Eddy County, NM (NAD27) NMEZ US	**MD Reference:**	2960+24 @ 2984.00usft (Hercules)
Site:	Ross Draw 25-36 Pad	**North Reference:**	Grid
Well:	ROSS DRAW 25-36 FED 102H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ROSS DRAW 25-36 FED 102H		
Design:	Plan #1		

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
507.00	0.00	0.00	507.00	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
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
1,350.00	0.00	0.00	1,350.00	0.00	0.00	0.00	0.00	0.00	0.00
Top Salt									
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
2,981.00	0.00	0.00	2,981.00	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
3,156.00	0.00	0.00	3,156.00	0.00	0.00	0.00	0.00	0.00	0.00
Delaware									
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,065.00	0.00	0.00	4,065.00	0.00	0.00	0.00	0.00	0.00	0.00
Cherry Canyon									
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00

Database:	TP_EDM	**Local Co-ordinate Reference:**	Well ROSS DRAW 25-36 FED 102H - Slot RD 25-36 FED 102H SHL
Company:	XTO Energy	**TVD Reference:**	2960+24 @ 2984.00usft (Hercules)
Project:	Eddy County, NM (NAD27) NMEZ US	**MD Reference:**	2960+24 @ 2984.00usft (Hercules)
Site:	Ross Draw 25-36 Pad	**North Reference:**	Grid
Well:	ROSS DRAW 25-36 FED 102H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ROSS DRAW 25-36 FED 102H		
Design:	Plan #1		

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)
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,829.27	0.00	0.00	4,829.27	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	1.06	285.00	4,900.00	0.17	-0.63	-0.09	1.50	1.50	0.00
5,000.00	2.56	285.00	4,999.94	0.99	-3.68	-0.50	1.50	1.50	0.00
5,100.00	4.06	285.00	5,099.77	2.48	-9.26	-1.25	1.50	1.50	0.00
5,162.60	5.00	285.00	5,162.18	3.76	-14.04	-1.90	1.50	1.50	0.00
5,200.00	5.00	285.00	5,199.43	4.61	-17.19	-2.32	0.00	0.00	0.00
5,300.00	5.00	285.00	5,299.05	6.86	-25.61	-3.46	0.00	0.00	0.00
5,400.00	5.00	285.00	5,398.67	9.12	-34.03	-4.60	0.00	0.00	0.00
5,500.00	5.00	285.00	5,498.29	11.37	-42.44	-5.74	0.00	0.00	0.00
5,600.00	5.00	285.00	5,597.91	13.63	-50.86	-6.87	0.00	0.00	0.00
5,700.00	5.00	285.00	5,697.53	15.88	-59.28	-8.01	0.00	0.00	0.00
5,731.59	5.00	285.00	5,729.00	16.60	-61.94	-8.37	0.00	0.00	0.00
Brushy Canyon									
5,800.00	5.00	285.00	5,797.15	18.14	-67.70	-9.15	0.00	0.00	0.00
5,900.00	5.00	285.00	5,896.77	20.40	-76.12	-10.29	0.00	0.00	0.00
6,000.00	5.00	285.00	5,996.39	22.65	-84.54	-11.42	0.00	0.00	0.00
6,100.00	5.00	285.00	6,096.01	24.91	-92.96	-12.56	0.00	0.00	0.00
6,200.00	5.00	285.00	6,195.63	27.16	-101.37	-13.70	0.00	0.00	0.00
6,300.00	5.00	285.00	6,295.25	29.42	-109.79	-14.84	0.00	0.00	0.00
6,400.00	5.00	285.00	6,394.87	31.67	-118.21	-15.98	0.00	0.00	0.00
6,500.00	5.00	285.00	6,494.49	33.93	-126.63	-17.11	0.00	0.00	0.00
6,600.00	5.00	285.00	6,594.11	36.19	-135.05	-18.25	0.00	0.00	0.00
6,700.00	5.00	285.00	6,693.73	38.44	-143.47	-19.39	0.00	0.00	0.00
6,800.00	5.00	285.00	6,793.35	40.70	-151.89	-20.53	0.00	0.00	0.00
6,900.00	5.00	285.00	6,892.97	42.95	-160.30	-21.66	0.00	0.00	0.00
6,914.09	5.00	285.00	6,907.00	43.27	-161.49	-21.82	0.00	0.00	0.00
Bone Spring									
7,000.00	5.00	285.00	6,992.59	45.21	-168.72	-22.80	0.00	0.00	0.00
7,100.00	5.00	285.00	7,092.20	47.46	-177.14	-23.94	0.00	0.00	0.00
7,200.00	5.00	285.00	7,191.82	49.72	-185.56	-25.08	0.00	0.00	0.00
7,300.00	5.00	285.00	7,291.44	51.98	-193.98	-26.22	0.00	0.00	0.00
7,400.00	5.00	285.00	7,391.06	54.23	-202.40	-27.35	0.00	0.00	0.00
7,500.00	5.00	285.00	7,490.68	56.49	-210.82	-28.49	0.00	0.00	0.00
7,600.00	5.00	285.00	7,590.30	58.74	-219.23	-29.63	0.00	0.00	0.00
7,700.00	5.00	285.00	7,689.92	61.00	-227.65	-30.77	0.00	0.00	0.00
7,800.00	5.00	285.00	7,789.54	63.26	-236.07	-31.90	0.00	0.00	0.00
7,891.81	5.00	285.00	7,881.00	65.33	-243.80	-32.95	0.00	0.00	0.00
1st Bone Spring Ss									
7,900.00	5.00	285.00	7,889.16	65.51	-244.49	-33.04	0.00	0.00	0.00
8,000.00	5.00	285.00	7,988.78	67.77	-252.91	-34.18	0.00	0.00	0.00
8,100.00	5.00	285.00	8,088.40	70.02	-261.33	-35.32	0.00	0.00	0.00
8,200.00	5.00	285.00	8,188.02	72.28	-269.75	-36.45	0.00	0.00	0.00
8,300.00	5.00	285.00	8,287.64	74.53	-278.16	-37.59	0.00	0.00	0.00
8,310.40	5.00	285.00	8,298.00	74.77	-279.04	-37.71	0.00	0.00	0.00
2nd Bone Spring Lime									

Database:	TP_EDM	**Local Co-ordinate Reference:**	Well ROSS DRAW 25-36 FED 102H - Slot RD 25-36 FED 102H SHL
Company:	XTO Energy	**TVD Reference:**	2960+24 @ 2984.00usft (Hercules)
Project:	Eddy County, NM (NAD27) NMEZ US	**MD Reference:**	2960+24 @ 2984.00usft (Hercules)
Site:	Ross Draw 25-36 Pad	**North Reference:**	Grid
Well:	ROSS DRAW 25-36 FED 102H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ROSS DRAW 25-36 FED 102H		
Design:	Plan #1		

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)
8,400.00	5.00	285.00	8,387.26	76.79	-286.58	-38.73	0.00	0.00	0.00
8,500.00	5.00	285.00	8,486.88	79.05	-295.00	-39.87	0.00	0.00	0.00
8,600.00	5.00	285.00	8,586.50	81.30	-303.42	-41.01	0.00	0.00	0.00
8,700.00	5.00	285.00	8,686.12	83.56	-311.84	-42.14	0.00	0.00	0.00
8,766.14	5.00	285.00	8,752.00	85.05	-317.41	-42.90	0.00	0.00	0.00
2nd Bone Spring Ss									
8,800.00	5.00	285.00	8,785.74	85.81	-320.26	-43.28	0.00	0.00	0.00
8,900.00	5.00	285.00	8,885.36	88.07	-328.68	-44.42	0.00	0.00	0.00
8,993.00	5.00	285.00	8,978.00	90.17	-336.51	-45.48	0.00	0.00	0.00
3rd Bone Spring Lm									
9,000.00	5.00	285.00	8,984.97	90.32	-337.09	-45.56	0.00	0.00	0.00
9,100.00	5.00	285.00	9,084.59	92.58	-345.51	-46.69	0.00	0.00	0.00
9,200.00	5.00	285.00	9,184.21	94.84	-353.93	-47.83	0.00	0.00	0.00
9,300.00	5.00	285.00	9,283.83	97.09	-362.35	-48.97	0.00	0.00	0.00
9,400.00	5.00	285.00	9,383.45	99.35	-370.77	-50.11	0.00	0.00	0.00
9,500.00	5.00	285.00	9,483.07	101.60	-379.19	-51.25	0.00	0.00	0.00
9,600.00	5.00	285.00	9,582.69	103.86	-387.61	-52.38	0.00	0.00	0.00
9,662.60	5.00	285.00	9,645.06	105.27	-392.88	-53.10	0.00	0.00	0.00
9,700.00	6.09	247.14	9,682.29	104.92	-396.28	-52.30	10.00	2.92	-101.24
9,750.00	9.85	222.43	9,731.81	100.73	-401.61	-47.46	10.00	7.50	-49.42
9,774.64	12.03	216.41	9,756.00	97.11	-404.56	-43.48	10.00	8.87	-24.46
3rd Bone Spring Ss									
9,800.00	14.37	212.14	9,780.69	92.32	-407.80	-38.30	10.00	9.24	-16.83
9,850.00	19.14	206.79	9,828.56	79.74	-414.80	-24.92	10.00	9.52	-10.70
9,900.00	23.99	203.52	9,875.05	63.09	-422.56	-7.40	10.00	9.71	-6.53
9,910.32	25.00	203.00	9,884.44	59.16	-424.25	-3.29	10.00	9.78	-5.07
9,950.00	28.73	200.00	9,919.83	42.47	-430.79	14.11	10.00	9.40	-7.56
10,000.00	33.50	197.11	9,962.63	17.98	-438.96	39.47	10.00	9.55	-5.78
10,050.00	38.33	194.87	10,003.11	-10.22	-447.01	68.47	10.00	9.65	-4.48
10,100.00	43.19	193.06	10,040.97	-41.89	-454.86	100.89	10.00	9.72	-3.61
10,150.00	48.07	191.56	10,075.93	-76.80	-462.46	136.50	10.00	9.77	-3.01
10,200.00	52.97	190.27	10,107.71	-114.68	-469.75	175.01	10.00	9.80	-2.58
10,202.15	53.18	190.22	10,109.00	-116.37	-470.05	176.73	10.00	9.81	-2.40
Wolfcamp									
10,244.26	57.32	189.26	10,133.00	-150.47	-475.90	211.30	10.00	9.82	-2.28
Wolfcamp X									
10,250.00	57.88	189.13	10,136.07	-155.25	-476.67	216.14	10.00	9.83	-2.15
10,300.00	62.80	188.12	10,160.81	-198.20	-483.17	259.57	10.00	9.84	-2.04
10,350.00	67.73	187.18	10,181.72	-243.20	-489.21	304.96	10.00	9.86	-1.86
10,400.00	72.67	186.32	10,198.65	-289.90	-494.73	351.99	10.00	9.87	-1.74
10,443.30	76.94	185.60	10,210.00	-331.45	-499.07	393.75	10.00	9.87	-1.65
Wolfcamp Y									
10,450.00	77.60	185.49	10,211.48	-337.95	-499.70	400.28	10.00	9.88	-1.61
10,500.00	82.54	184.70	10,220.10	-387.00	-504.07	449.47	10.00	9.88	-1.58
10,550.00	87.48	183.93	10,224.44	-436.65	-507.82	499.19	10.00	9.88	-1.55
10,573.87	89.84	183.56	10,225.00	-460.46	-509.37	523.00	10.00	9.88	-1.54
LP									
10,575.49	90.00	183.54	10,225.00	-462.08	-509.47	524.62	10.00	9.88	-1.54
10,600.00	90.00	183.54	10,225.00	-486.54	-510.99	549.07	0.00	0.00	0.00
10,700.00	90.00	183.54	10,225.00	-586.35	-517.15	648.83	0.00	0.00	0.00
10,800.00	90.00	183.54	10,225.00	-686.16	-523.32	748.59	0.00	0.00	0.00
10,900.00	90.00	183.54	10,225.00	-785.97	-529.49	848.35	0.00	0.00	0.00

Database:	TP_EDM	**Local Co-ordinate Reference:**	Well ROSS DRAW 25-36 FED 102H - Slot RD 25-36 FED 102H SHL
Company:	XTO Energy	**TVD Reference:**	2960+24 @ 2984.00usft (Hercules)
Project:	Eddy County, NM (NAD27) NMEZ US	**MD Reference:**	2960+24 @ 2984.00usft (Hercules)
Site:	Ross Draw 25-36 Pad	**North Reference:**	Grid
Well:	ROSS DRAW 25-36 FED 102H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ROSS DRAW 25-36 FED 102H		
Design:	Plan #1		

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)
11,000.00	90.00	183.54	10,225.00	-885.78	-535.66	948.11	0.00	0.00	0.00
11,100.00	90.00	183.54	10,225.00	-985.59	-541.82	1,047.87	0.00	0.00	0.00
11,200.00	90.00	183.54	10,225.00	-1,085.40	-547.99	1,147.63	0.00	0.00	0.00
11,300.00	90.00	183.54	10,225.00	-1,185.21	-554.16	1,247.40	0.00	0.00	0.00
11,400.00	90.00	183.54	10,225.00	-1,285.02	-560.33	1,347.16	0.00	0.00	0.00
11,500.00	90.00	183.54	10,225.00	-1,384.83	-566.49	1,446.92	0.00	0.00	0.00
11,600.00	90.00	183.54	10,225.00	-1,484.64	-572.66	1,546.68	0.00	0.00	0.00
11,700.00	90.00	183.54	10,225.00	-1,584.45	-578.83	1,646.44	0.00	0.00	0.00
11,800.00	90.00	183.54	10,225.00	-1,684.26	-585.00	1,746.20	0.00	0.00	0.00
11,900.00	90.00	183.54	10,225.00	-1,784.07	-591.16	1,845.96	0.00	0.00	0.00
12,000.00	90.00	183.54	10,225.00	-1,883.88	-597.33	1,945.72	0.00	0.00	0.00
12,100.00	90.00	183.54	10,225.00	-1,983.69	-603.50	2,045.48	0.00	0.00	0.00
12,200.00	90.00	183.54	10,225.00	-2,083.49	-609.67	2,145.24	0.00	0.00	0.00
12,300.00	90.00	183.54	10,225.00	-2,183.30	-615.83	2,245.00	0.00	0.00	0.00
12,400.00	90.00	183.54	10,225.00	-2,283.11	-622.00	2,344.76	0.00	0.00	0.00
12,500.00	90.00	183.54	10,225.00	-2,382.92	-628.17	2,444.53	0.00	0.00	0.00
12,600.00	90.00	183.54	10,225.00	-2,482.73	-634.34	2,544.29	0.00	0.00	0.00
12,700.00	90.00	183.54	10,225.00	-2,582.54	-640.51	2,644.05	0.00	0.00	0.00
12,800.00	90.00	183.54	10,225.00	-2,682.35	-646.67	2,743.81	0.00	0.00	0.00
12,900.00	90.00	183.54	10,225.00	-2,782.16	-652.84	2,843.57	0.00	0.00	0.00
13,000.00	90.00	183.54	10,225.00	-2,881.97	-659.01	2,943.33	0.00	0.00	0.00
13,100.00	90.00	183.54	10,225.00	-2,981.78	-665.18	3,043.09	0.00	0.00	0.00
13,200.00	90.00	183.54	10,225.00	-3,081.59	-671.34	3,142.85	0.00	0.00	0.00
13,300.00	90.00	183.54	10,225.00	-3,181.40	-677.51	3,242.61	0.00	0.00	0.00
13,400.00	90.00	183.54	10,225.00	-3,281.21	-683.68	3,342.37	0.00	0.00	0.00
13,500.00	90.00	183.54	10,225.00	-3,381.02	-689.85	3,442.13	0.00	0.00	0.00
13,600.00	90.00	183.54	10,225.00	-3,480.83	-696.01	3,541.90	0.00	0.00	0.00
13,700.00	90.00	183.54	10,225.00	-3,580.64	-702.18	3,641.66	0.00	0.00	0.00
13,800.00	90.00	183.54	10,225.00	-3,680.45	-708.35	3,741.42	0.00	0.00	0.00
13,900.00	90.00	183.54	10,225.00	-3,780.26	-714.52	3,841.18	0.00	0.00	0.00
14,000.00	90.00	183.54	10,225.00	-3,880.07	-720.68	3,940.94	0.00	0.00	0.00
14,100.00	90.00	183.54	10,225.00	-3,979.88	-726.85	4,040.70	0.00	0.00	0.00
14,200.00	90.00	183.54	10,225.00	-4,079.69	-733.02	4,140.46	0.00	0.00	0.00
14,300.00	90.00	183.54	10,225.00	-4,179.50	-739.19	4,240.22	0.00	0.00	0.00
14,400.00	90.00	183.54	10,225.00	-4,279.31	-745.35	4,339.98	0.00	0.00	0.00
14,500.00	90.00	183.54	10,225.00	-4,379.12	-751.52	4,439.74	0.00	0.00	0.00
14,600.00	90.00	183.54	10,225.00	-4,478.93	-757.69	4,539.50	0.00	0.00	0.00
14,700.00	90.00	183.54	10,225.00	-4,578.74	-763.86	4,639.26	0.00	0.00	0.00
14,800.00	90.00	183.54	10,225.00	-4,678.54	-770.02	4,739.03	0.00	0.00	0.00
14,900.00	90.00	183.54	10,225.00	-4,778.35	-776.19	4,838.79	0.00	0.00	0.00
15,000.00	90.00	183.54	10,225.00	-4,878.16	-782.36	4,938.55	0.00	0.00	0.00
15,100.00	90.00	183.54	10,225.00	-4,977.97	-788.53	5,038.31	0.00	0.00	0.00
15,200.00	90.00	183.54	10,225.00	-5,077.78	-794.69	5,138.07	0.00	0.00	0.00
15,300.00	90.00	183.54	10,225.00	-5,177.59	-800.86	5,237.83	0.00	0.00	0.00
15,400.00	90.00	183.54	10,225.00	-5,277.40	-807.03	5,337.59	0.00	0.00	0.00
15,500.00	90.00	183.54	10,225.00	-5,377.21	-813.20	5,437.35	0.00	0.00	0.00
15,600.00	90.00	183.54	10,225.00	-5,477.02	-819.37	5,537.11	0.00	0.00	0.00
15,700.00	90.00	183.54	10,225.00	-5,576.83	-825.53	5,636.87	0.00	0.00	0.00
15,800.00	90.00	183.54	10,225.00	-5,676.64	-831.70	5,736.63	0.00	0.00	0.00
15,900.00	90.00	183.54	10,225.00	-5,776.45	-837.87	5,836.40	0.00	0.00	0.00
16,000.00	90.00	183.54	10,225.00	-5,876.26	-844.04	5,936.16	0.00	0.00	0.00
16,100.00	90.00	183.54	10,225.00	-5,976.07	-850.20	6,035.92	0.00	0.00	0.00
16,200.00	90.00	183.54	10,225.00	-6,075.88	-856.37	6,135.68	0.00	0.00	0.00

Database:	TP_EDM	**Local Co-ordinate Reference:**	Well ROSS DRAW 25-36 FED 102H - Slot RD 25-36 FED 102H SHL
Company:	XTO Energy	**TVD Reference:**	2960+24 @ 2984.00usft (Hercules)
Project:	Eddy County, NM (NAD27) NMEZ US	**MD Reference:**	2960+24 @ 2984.00usft (Hercules)
Site:	Ross Draw 25-36 Pad	**North Reference:**	Grid
Well:	ROSS DRAW 25-36 FED 102H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ROSS DRAW 25-36 FED 102H		
Design:	Plan #1		

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)
16,300.00	90.00	183.54	10,225.00	-6,175.69	-862.54	6,235.44	0.00	0.00	0.00
16,400.00	90.00	183.54	10,225.00	-6,275.50	-868.71	6,335.20	0.00	0.00	0.00
16,500.00	90.00	183.54	10,225.00	-6,375.31	-874.87	6,434.96	0.00	0.00	0.00
16,600.00	90.00	183.54	10,225.00	-6,475.12	-881.04	6,534.72	0.00	0.00	0.00
16,700.00	90.00	183.54	10,225.00	-6,574.93	-887.21	6,634.48	0.00	0.00	0.00
16,800.00	90.00	183.54	10,225.00	-6,674.74	-893.38	6,734.24	0.00	0.00	0.00
16,900.00	90.00	183.54	10,225.00	-6,774.55	-899.54	6,834.00	0.00	0.00	0.00
17,000.00	90.00	183.54	10,225.00	-6,874.36	-905.71	6,933.76	0.00	0.00	0.00
17,011.17	90.00	183.54	10,225.00	-6,885.50	-906.40	6,944.90	0.00	0.00	0.00

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
RD 25-36 FED 102H SH - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	371,027.10	622,374.30	32.0194530	-103.9384887
RD 25-36 FED 102H 80' - plan hits target center - Point	0.00	0.01	10,216.19	-361.67	-501.90	370,665.43	621,872.40	32.0184638	-103.9401123
RD 25-36 FED 102H FT - plan misses target center by 60.93usft at 10321.74usft MD (10170.38 TVD, -217.53 N, -485.86 E) - Point	0.00	0.00	10,225.00	-191.30	-492.20	370,835.80	621,882.10	32.0189321	-103.9400790
RD 25-36 FED 102H PB - plan hits target center - Rectangle (sides W100.00 H6,707.00 D0.00)	0.00	0.00	10,225.00	-6,885.50	-906.40	364,141.60	621,467.90	32.0005337	-103.9414937
RD 25-36 FED 102H LP - plan hits target center - Point	0.00	0.00	10,225.00	-462.08	-509.47	370,565.02	621,864.83	32.0181879	-103.9401379
RD 25-36 FED 102H LTI - plan misses target center by 0.07usft at 16880.91usft MD (10225.00 TVD, -6755.50 N, -898.37 E) - Point	0.00	0.00	10,225.00	-6,755.50	-898.30	364,271.60	621,476.00	32.0008910	-103.9414661

Database:	TP_EDM	**Local Co-ordinate Reference:**	Well ROSS DRAW 25-36 FED 102H - Slot RD 25-36 FED 102H SHL
Company:	XTO Energy	**TVD Reference:**	2960+24 @ 2984.00usft (Hercules)
Project:	Eddy County, NM (NAD27) NMEZ US	**MD Reference:**	2960+24 @ 2984.00usft (Hercules)
Site:	Ross Draw 25-36 Pad	**North Reference:**	Grid
Well:	ROSS DRAW 25-36 FED 102H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ROSS DRAW 25-36 FED 102H		
Design:	Plan #1		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
507.00	507.00	Rustler			
1,350.00	1,350.00	Top Salt			
2,981.00	2,981.00	Base Salt			
3,156.00	3,156.00	Delaware			
4,065.00	4,065.00	Cherry Canyon			
5,731.59	5,729.00	Brushy Canyon			
6,914.09	6,907.00	Bone Spring			
7,891.81	7,881.00	1st Bone Spring Ss			
8,310.40	8,298.00	2nd Bone Spring Lime			
8,766.14	8,752.00	2nd Bone Spring Ss			
8,993.00	8,978.00	3rd Bone Spring Lm			
9,774.64	9,756.00	3rd Bone Spring Ss			
10,202.15	10,109.00	Wolfcamp			
10,244.26	10,133.00	Wolfcamp X			
10,443.30	10,210.00	Wolfcamp Y			
10,573.87	10,225.00	LP			