

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 Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

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

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

Form C-101

August 1, 2011

Permit 293933

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

1. Operator Name and Address XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707		2. OGRID Number 5380
		3. API Number 30-015-48104
4. Property Code 330295	5. Property Name GAME ROOSTER 6 31 STATE COM	6. Well No. 807H

7. Surface Location

UL - Lot P	Section 6	Township 25S	Range 29E	Lot Idn P	Feet From 205	N/S Line S	Feet From 1091	E/W Line E	County Eddy
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8. Proposed Bottom Hole Location

UL - Lot I	Section 31	Township 24S	Range 29E	Lot Idn I	Feet From 2590	N/S Line S	Feet From 990	E/W Line E	County Eddy
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9. Pool Information

WILLOW LAKE;BONE SPRING, SOUTHEAST	96217
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 2911
16. Multiple N	17. Proposed Depth 17016	18. Formation 3rd Bone Spring Sand	19. Contractor	20. Spud Date 4/15/2021
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

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

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	12.25	9.625	40	547	210	0
Int1	8.75	7.625	29.7	8141	2490	0
Prod	6.75	5	18	17016	790	7841

Casing/Cement Program: Additional Comments

Well Includes a Tapered String. See attached drilling program for additional casing/cement information associated with the well.
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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	3500	Cameron

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒ if applicable.	OIL CONSERVATION DIVISION	
Signature:		
Printed Name: Electronically filed by Tiffany Yancey	Approved By: Kurt Simmons	
Title: Production Analyst	Title: Petroleum Specialist - A	
Email Address: tiffany.yancey@exxonmobil.com	Approved Date: 3/23/2021	Expiration Date: 3/23/2023
Date: 3/23/2021	Phone: 432-215-8939	Conditions of Approval Attached

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-	² Pool Code 96217	³ Pool Name WILLOW LAKE; BONE SPRING, SOUTHEAST
⁴ Property Code	⁵ Property Name GAME ROOSTER 6-31 STATE COM	⁶ Well Number 807H
⁷ OGRID No. 005380	⁸ Operator Name XTO ENERGY, INC.	⁹ Elevation 2,911'

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
P	6	25 S	29 E		205	SOUTH	1,091	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	31	24 S	29 E		2,590	SOUTH	990	EAST	EDDY

¹² Dedicated Acres 239.47	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. R-14078
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

¹⁶ LOT ACREAGE TABLE SECTION 6, T25S, R29E LOT 1 -- 39.47 ACRES LOT 2 -- 39.62 ACRES	SHL (NAD83 NME) Y = 419,381.8 X = 638,699.3 LAT. = 32.152568 °N LONG. = 104.018730 °W LTP (NAD83 NME) Y = 426,989.1 X = 638,805.9 LAT. = 32.173479 °N LONG. = 104.018313 °W FTP (NAD83 NME) Y = 419,279.0 X = 638,799.8 LAT. = 32.152285 °N LONG. = 104.018406 °W BHL (NAD83 NME) Y = 427,039.1 X = 638,805.4 LAT. = 32.173616 °N LONG. = 104.018314 °W CORNER COORDINATES (NAD83 NME) A - Y = 427,115.9 N , X = 638,469.5 E B - Y = 424,446.9 N , X = 638,492.1 E C - Y = 421,819.4 N , X = 638,476.9 E D - Y = 419,172.9 N , X = 638,461.7 E E - Y = 427,122.0 N , X = 639,794.6 E F - Y = 424,456.0 N , X = 639,821.1 E G - Y = 421,836.3 N , X = 639,805.3 E H - Y = 419,196.8 N , X = 639,789.3 E SHL (NAD27 NME) Y = 419,323.1 X = 597,515.5 LAT. = 32.152444 °N LONG. = 104.018240 °W LTP (NAD27 NME) Y = 426,930.3 X = 597,622.3 LAT. = 32.173355 °N LONG. = 104.017823 °W FTP (NAD27 NME) Y = 419,220.3 X = 597,616.0 LAT. = 32.152160 °N LONG. = 104.017916 °W BHL (NAD27 NME) Y = 426,980.3 X = 597,621.8 LAT. = 32.173492 °N LONG. = 104.017824 °W CORNER COORDINATES (NAD27 NME) A - Y = 427,057.0 N , X = 597,285.9 E B - Y = 424,388.1 N , X = 597,308.4 E C - Y = 421,760.7 N , X = 597,293.2 E D - Y = 419,114.3 N , X = 597,277.9 E E - Y = 427,063.2 N , X = 598,611.0 E F - Y = 424,397.2 N , X = 598,637.4 E G - Y = 421,777.6 N , X = 598,621.5 E H - Y = 419,138.1 N , X = 598,605.5 E	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. <i>Stephanie Rabadue</i> 02/25/2021 Signature Date Stephanie Rabadue Printed Name stephanie.rabadue@exxonmobil.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. 2-5-2021 Date of Survey Signature and Seal of Professional Surveyor: MARK DILLON HARP 23786 Certificate Number AW/JC 2020121633
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Oil Conservation Division
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Santa Fe, NM 87505

GAS CAPTURE PLAN

Date: 3/23/2021

☒ Original

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

☐ Amended - Reason for
Amendment: _____

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

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

Well(s)/Production Facility – Name of facility

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

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
GAME ROOSTER 6 31 STATE COM #807H	30-015-48104	P-6-25S-29E	0205S 1091E	2500	Flared	Pipeline Connected to CTB, Volumes will be Flared or Sold.

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to LUCID ENERGY DELAWARE, LLC and will be connected to LUCID ENERGY DELAWARE, LLC High/Low Pressure gathering system located in Eddy County, New Mexico. It will require 0' of pipeline to connect the facility to High/Low Pressure gathering system. XTO ENERGY, INC provides (periodically) to LUCID ENERGY DELAWARE, LLC 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 LUCID ENERGY DELAWARE, LLC have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at LUCID ENERGY DELAWARE, LLC Processing Plant located in Sec. 13, Twn. 24S, Rng. 33E, 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 LUCID ENERGY DELAWARE, LLC system at that time. Based on current information, it is XTO ENERGY, INC's belief the system can take this gas upon completion of the well(s).

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

Alternatives to Reduce Flaring

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

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

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Form APD Comments

Permit 293933

PERMIT COMMENTS

Operator Name and Address: XTO ENERGY, INC [5380] 6401 Holiday Hill Road Midland, TX 79707		API Number: 30-015-48104
		Well: GAME ROOSTER 6 31 STATE COM #807H

Created By	Comment	Comment Date
srabadue	2nd application submission. Multiple documents attached for well APD program.	3/23/2021

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Form APD Conditions

Permit 293933

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: XTO ENERGY, INC [5380] 6401 Holiday Hill Road Midland, TX 79707	API Number: 30-015-48104
	Well: GAME ROOSTER 6 31 STATE COM #807H

OCD Reviewer	Condition
ksimmons	Notify OCD 24 hours prior to casing & cement
ksimmons	Will require a File As Drilled C-102 and a Directional Survey with the C-104
ksimmons	Cement is required to circulate on both surface and intermediate1 strings of casing
kpickford	he Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud
kpickford	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud 2)- Drilling Sundries Form C-103 (Casing and Cement test are to be submitted within 10 days 3)- Completion Reports & Logs are to be submitted within 45 days 4)- Deviation / Directional Drill Survey are to be filed with or prior to C-104
kpickford	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
kpickford	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system

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

XTO Energy Inc.
Game Rooster 6-31 State Com 807H
Projected TD: 17016' MD / 8891' TVD
SHL: 205' FSL & 1091' FEL , Section 6, T25S, R29E
BHL: 2590' FSL & 990' FEL , Section 31, T25S, 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	236'	Water
Salado	597'	Water
Delaware	2726'	Water
Brushy Canyon	5190'	Water/Oil/Gas
Bone Spring	6467'	Water
1st Bone Spring Ss	7399'	Water/Oil/Gas
2nd Bone Spring Ss	8226'	Water/Oil/Gas
3rd Bone Spring Shale	8878'	Water/Oil/Gas
Target/Land Curve	8891'	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 9-5/8" casing @ 547' (50' above the salt) and circulating cement back to surface. The 7-5/8" intermediate casing will be set at 8141' and bring TOC back to surface. A 6-3/4 inch curve and lateral hole will be drilled to MD/TD and 5-1/2" x 5" casing will be set at TD and cemented back 300' into the 7-5/8" casing shoe.

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
12-1/4"	0' – 547'	9-5/8"	40	BTC	J-55	New	1.88	10.39	28.79
8-3/4"	0' – 4000'	7-5/8"	29.7	Liberty FJ	CYP-110	New	2.89	2.80	2.31
8-3/4"	4000' – 8141'	7-5/8"	29.7	Liberty FJ	HCL-80	New	2.11	2.70	3.30
6-3/4"	0' – 8041'	5-1/2"	20	Semi-Premium	P-110	New	1.05	2.35	2.71
6-3/4"	8041' – 11000'	5-1/2"	20	Semi-Flush	P-110	New	1.05	1.72	7.96
6-3/4"	11000' - 17016'	5"	18	Semi-Premium	P-110	New	1.16	2.58	34.30

· XTO requests to not utilize centralizers in the curve and lateral

· 7-5/8" 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

· Test on Casing will be limited to 70% burst of the casing or 1500 psi, whichever is less

· Request to use 5" BTC Float equipment for the the production casing

Wellhead:

Permanent Wellhead – Multibowl System

A. Starting Head: 13-5/8" 10M top flange x 11-3/4" SOW bottom

- B. Tubing Head: 13-5/8" 10M bottom flange x 7-1/16" 15M top flange
- Wellhead will be installed by manufacturer's representatives.
 - Manufacturer will monitor welding process to ensure appropriate temperature of seal.
 - Operator will test the 7-5/8" casing per BLM Onshore Order 2
 - Wellhead Manufacturer representative will not be present for BOP test plug installation

4. Cement Program

Surface Casing: 9-5/8", 40 New J-55, BTC casing to be set at +/- 547'

Lead: 80 sxs Halcem-C + 2% CaCl (mixed at 12.8 ppg, 1.87 ft3/sx, 10.13 gal/sx water)

Tail: 130 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

TOC: Surface

Intermediate Casing: 7-5/8", 29.7 New casing to be set at +/- 8141

1st Stage

Optional Lead: 240 sxs NeoCem (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water)

TOC: Surface

Tail: 260 sxs Halcem - Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)

Compressives: 12-hr = 900 psi 24 hr = 1150psi

TOC: Brushy Canyon (5190')

2nd Stage

Tail: 490 sxs Halcem-Class C (mixed at 14.8 ppg, 1.33 ft3/sx, 5.29 gal/sx water)

Compressives: 12-hr = 900 psi 24 hr = 1150 psi

TOC: Surface

XTO requests to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brush Canyon (5190') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. If cement is not visually confirmed to circulate to surface, the final cement top after the second stage job will be verified by Echo-meter. If necessary, a top out consisting of 1,500 sack of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. If cement is still unable to circulate to surface, another Echo-meter run will be performed for cement top verification.

XTO will include the Echo-meter verified fluid top and the volume of displacement fluid above the cement slurry in the annulus in all post-drill sundries on wells utilizing this cement program.

XTO will report to the BLM the volume of fluid (limited to 5 bbls) used to flush intermediate casing valves following backside cementing procedures.

XTO requests to pump an Optional Lead if well conditions dictate in an attempt to bring cement to surface on the first stage. If cement is brought to surface, the BLM will be notified and the second stage bradenhead squeeze and subsequent TOC verification will be negated.

In the event cement is not circulated to surface on the first stage, whether intentionally or unintentionally, XTO requests the option to conduct the bradenhead squeeze and TOC verification offline as per standard approval from BLM when unplanned remediation is needed and batch drilling is approved. In the event the bradenhead is conducted, we will ensure first stage cement job is cemented properly and the well is static with floats holding and no pressure on the csg annulus as with all other casing strings where batch drilling operations occur before moving off the rig. The TA cap will also be installed per GE

Production Casing: 5-1/2", 20 x 5", 18 New casing to be set at +/- 17016'

Lead: 20 sxs VersaCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water)

Tail: 770 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 7.20 gal/sx water)

Compressives 12-hr = 800 psi 24 hr = 1500 psi

TOC: 300' inside previous shoe

5. Pressure Control Equipment

Once the permanent WH is installed on the 9-5/8" casing, the blow out preventer equipment (BOP) will consist of a 13-5/8" minimum 5M Hydril and a 13-5/8" minimum 5M 3-Ram BOP. MASP should not exceed 3268 psi. In any instance where 10M BOP is required by BLM, XTO requests a variance to utilize 5M annular with 10M ram preventers (a common BOP

All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 70% of the working pressure. When nipping up on the 9-5/8", 5M bradenhead and flange, the BOP test will be limited to 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.

XTO requests a variance to be able to batch drill this well if necessary. In doing so, XTO will set each casing string and ensure that the well is cemented properly and the well is static. With floats holding, no pressure on the csg annulus, and the installation of a 10K TA cap as per GE recommendations, XTO will contact the BLM on each rig skid on the pad. Once surface and intermediate strings are all completed, XTO will begin drilling the production hole on each of the wells.

A variance is requested to **ONLY** test broken pressure seals on the BOP equipment when moving from wellhead to wellhead which is in compliance with API Standard 53. API standard 53 states, that for pad drilling operation, moving from one wellhead to another within 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken. Based on discussions with the BLM on February 27th 2020, we will request permission to **ONLY** retest broken pressure seals if the following conditions are met: 1. After a full BOP test is conducted on the first well on the pad (First well will be the deepest Intermediate) 2. When skidding to drill an intermediate section does not penetrate into the Wolfcamp 3. Full BOP test will be required prior to drilling the production hole

A variance is requested to cement offline for the surface and intermediate casing strings according to attached offline cementing supporting documentation.

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' - 547'	14-3/4"	FW / Native	8.4-8.8	35-40	NC
547' - 8141'	8-3/4"	Brine / Cut Brine / Direct Emulsion	8.5-9.7	30-32	NC
8141' to 17016'	6-3/4"	Cut Brine / WBM / OBM	10.8-11.8	32-36	NC

The necessary mud products for weight addition and fluid loss control will be on location at all times.

Spud with fresh water/native mud and set 11-3/4" surface casing, isolating the fresh water aquifer. Drill out from under 11-3/4" surface casing with a brine/oil direct emulsion mud system. 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 9-5/8" casing.



XTO Energy

**Eddy County, NM (NAD-27)
Game Rooster 6-31 State Com
#807H**

Wellbore #1

Plan: PERMIT

Standard Planning Report

20 February, 2021



Project: Eddy County, NM (NAD-27)
 Site: Game Rooster 6-31 State Com
 Well: #807H
 Wellbore: Wellbore #1
 Design: PERMIT

PROJECT DETAILS: Eddy County, NM (NAD-27)
 Geodetic System: US State Plane 1927 (Exact solution)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone: New Mexico East 3001
 System Datum: Mean Sea Level

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Game Rooster 807H: SHL (205' FSL & 1091' FEL)	0.00	0.00	0.00	419323.10	597615.50	32.1524437	-104.0182401	Point
Game Rooster 807H: FTP/ LP	8891.00	-102.80	100.50	419220.30	597616.00	32.1521603	-104.0179163	Point
Game Rooster 807H: LTP	8891.00	7607.20	106.80	426930.30	597622.30	32.1733549	-104.0178229	Point
Game Rooster 807H: PBHL (2590' FSL & 990' FEL)	8891.00	7657.20	106.30	426980.30	597621.80	32.1734924	-104.0178241	Point

WELL DETAILS: #807H

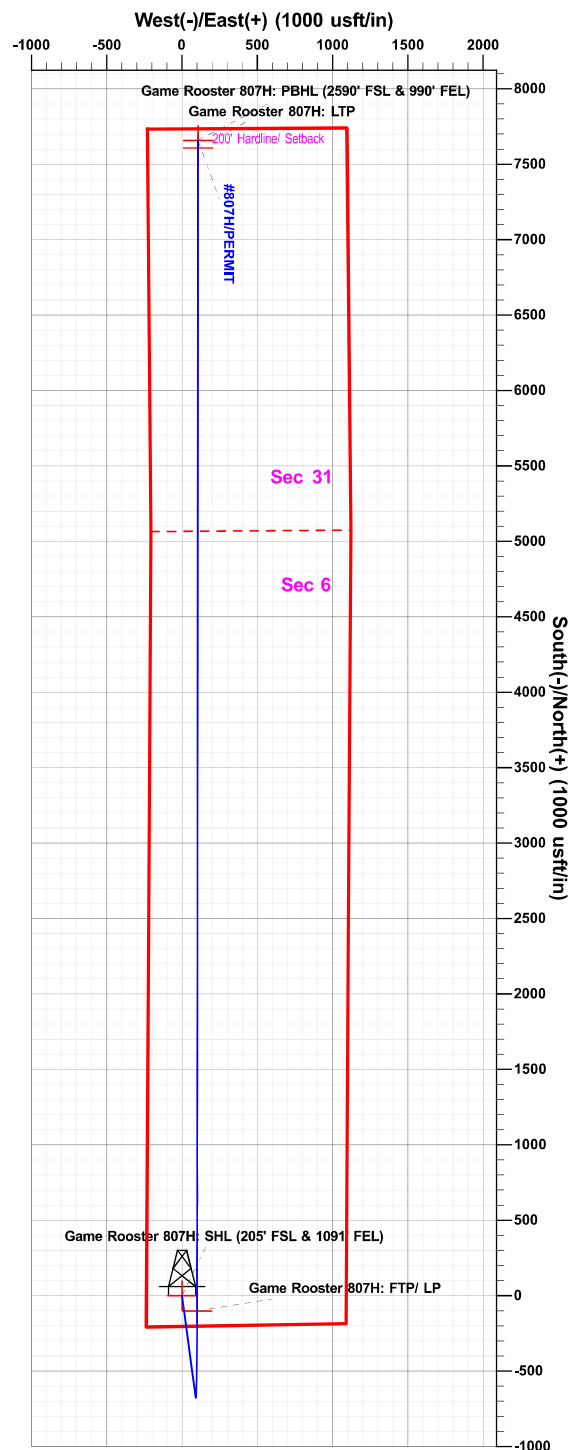
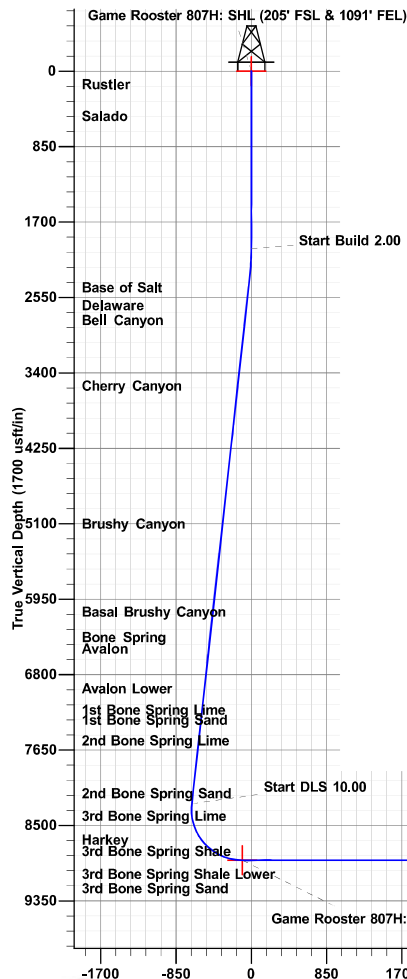
Rig Name:	Ref GL @ 2911.00usft
+N/-S	+E/-W
0.00	0.00
419323.10	597615.50
2911.00	32.1524437
	-104.0182401

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00
3	2317.47	6.35	172.33	2316.82	-17.42	2.35	2.00	172.33	-17.41
4	8292.62	6.35	172.33	8285.32	-872.30	90.58	0.00	0.00	-872.24
5	9255.54	90.00	0.04	8891.00	-102.80	100.50	10.00	-172.24	-102.73
6	16965.54	90.00	0.04	8891.00	7607.20	106.26	0.00	0.00	7607.27
7	17015.54	90.00	0.04	8891.00	7657.20	106.30	0.00	0.00	7657.27

FORMATION TOP DETAILS

TVDPth	Formation
236.00	Rustler
597.00	Salado
2526.00	Base of Salt
2726.00	Delaware
2753.00	Bell Canyon
3634.00	Cherry Canyon
6181.00	Brushy Canyon
6487.00	Basal Brushy Canyon
6596.00	Bone Spring
7044.00	Avalon
7337.00	Avalon Lower
7399.00	1st Bone Spring Lime
7630.00	1st Bone Spring Sand
8226.00	2nd Bone Spring Lime
8483.00	2nd Bone Spring Sand
8834.00	3rd Bone Spring Lime
8878.00	Harkey
8891.00	3rd Bone Spring Shale
	LP



Vertical Section at 0.04° (1700 usft/in)

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Plan: PERMIT (#807H/Wellbore #1)

Created By: Matthew May Date: 9:18, February 20 2021



Planning Report

Database:	EDM 5000.1.13 Single User Db	Local Co-ordinate Reference:	Well #807H
Company:	XTO Energy	TVD Reference:	Ref GL @ 2911.00usft
Project:	Eddy County, NM (NAD-27)	MD Reference:	Ref GL @ 2911.00usft
Site:	Game Rooster 6-31 State Com	North Reference:	Grid
Well:	#807H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

Project	Eddy County, NM (NAD-27)		
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		Game Rooster 6-31 State Com			
Site Position:		Northing:	419,323.10 usft	Latitude:	32.1524437
From:	Map	Easting:	597,515.50 usft	Longitude:	-104.0182401
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.17 °

Well	#807H					
Well Position	+N/-S	0.00 usft	Northing:	419,323.10 usft	Latitude:	32.1524437
	+E/-W	0.00 usft	Easting:	597,515.50 usft	Longitude:	-104.0182401
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	2,911.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	02/20/21	6.78	59.78	47,442

Design	PERMIT				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	0.04	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	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	
2,317.47	6.35	172.33	2,316.82	-17.42	2.35	2.00	2.00	0.00	172.33	
8,292.62	6.35	172.33	8,255.32	-672.30	90.58	0.00	0.00	0.00	0.00	
9,255.54	90.00	0.04	8,891.00	-102.80	100.50	10.00	8.69	-17.89	-172.24	Game Rooster 807I
16,965.54	90.00	0.04	8,891.00	7,607.20	106.26	0.00	0.00	0.00	0.00	Game Rooster 807I
17,015.54	90.00	0.04	8,891.00	7,657.20	106.30	0.00	0.00	0.00	0.00	Game Rooster 807I



Planning Report

Database:	EDM 5000.1.13 Single User Db	Local Co-ordinate Reference:	Well #807H
Company:	XTO Energy	TVD Reference:	Ref GL @ 2911.00usft
Project:	Eddy County, NM (NAD-27)	MD Reference:	Ref GL @ 2911.00usft
Site:	Game Rooster 6-31 State Com	North Reference:	Grid
Well:	#807H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	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
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	2.00	172.33	2,099.98	-1.73	0.23	-1.73	2.00	2.00	0.00
2,200.00	4.00	172.33	2,199.84	-6.92	0.93	-6.92	2.00	2.00	0.00
2,300.00	6.00	172.33	2,299.45	-15.55	2.10	-15.55	2.00	2.00	0.00
2,317.47	6.35	172.33	2,316.82	-17.42	2.35	-17.41	2.00	2.00	0.00
2,400.00	6.35	172.33	2,398.84	-26.46	3.56	-26.46	0.00	0.00	0.00
2,500.00	6.35	172.33	2,498.23	-37.42	5.04	-37.42	0.00	0.00	0.00
2,600.00	6.35	172.33	2,597.62	-48.38	6.52	-48.38	0.00	0.00	0.00
2,700.00	6.35	172.33	2,697.00	-59.34	7.99	-59.34	0.00	0.00	0.00
2,800.00	6.35	172.33	2,796.39	-70.30	9.47	-70.29	0.00	0.00	0.00
2,900.00	6.35	172.33	2,895.78	-81.26	10.95	-81.25	0.00	0.00	0.00
3,000.00	6.35	172.33	2,995.16	-92.22	12.42	-92.21	0.00	0.00	0.00
3,100.00	6.35	172.33	3,094.55	-103.18	13.90	-103.17	0.00	0.00	0.00
3,200.00	6.35	172.33	3,193.94	-114.14	15.38	-114.13	0.00	0.00	0.00
3,300.00	6.35	172.33	3,293.32	-125.10	16.85	-125.09	0.00	0.00	0.00
3,400.00	6.35	172.33	3,392.71	-136.06	18.33	-136.05	0.00	0.00	0.00
3,500.00	6.35	172.33	3,492.10	-147.02	19.81	-147.01	0.00	0.00	0.00
3,600.00	6.35	172.33	3,591.48	-157.98	21.28	-157.97	0.00	0.00	0.00
3,700.00	6.35	172.33	3,690.87	-168.94	22.76	-168.93	0.00	0.00	0.00
3,800.00	6.35	172.33	3,790.26	-179.90	24.24	-179.89	0.00	0.00	0.00
3,900.00	6.35	172.33	3,889.64	-190.86	25.71	-190.84	0.00	0.00	0.00
4,000.00	6.35	172.33	3,989.03	-201.82	27.19	-201.80	0.00	0.00	0.00
4,100.00	6.35	172.33	4,088.42	-212.78	28.67	-212.76	0.00	0.00	0.00
4,200.00	6.35	172.33	4,187.80	-223.74	30.14	-223.72	0.00	0.00	0.00
4,300.00	6.35	172.33	4,287.19	-234.70	31.62	-234.68	0.00	0.00	0.00
4,400.00	6.35	172.33	4,386.58	-245.66	33.10	-245.64	0.00	0.00	0.00
4,500.00	6.35	172.33	4,485.96	-256.62	34.57	-256.60	0.00	0.00	0.00
4,600.00	6.35	172.33	4,585.35	-267.58	36.05	-267.56	0.00	0.00	0.00
4,700.00	6.35	172.33	4,684.74	-278.54	37.53	-278.52	0.00	0.00	0.00
4,800.00	6.35	172.33	4,784.12	-289.50	39.00	-289.48	0.00	0.00	0.00
4,900.00	6.35	172.33	4,883.51	-300.46	40.48	-300.44	0.00	0.00	0.00
5,000.00	6.35	172.33	4,982.90	-311.42	41.96	-311.39	0.00	0.00	0.00
5,100.00	6.35	172.33	5,082.28	-322.38	43.43	-322.35	0.00	0.00	0.00
5,200.00	6.35	172.33	5,181.67	-333.34	44.91	-333.31	0.00	0.00	0.00



Planning Report

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Company:	XTO Energy	TVD Reference:	Ref GL @ 2911.00usft
Project:	Eddy County, NM (NAD-27)	MD Reference:	Ref GL @ 2911.00usft
Site:	Game Rooster 6-31 State Com	North Reference:	Grid
Well:	#807H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,300.00	6.35	172.33	5,281.06	-344.30	46.39	-344.27	0.00	0.00	0.00
5,400.00	6.35	172.33	5,380.44	-355.26	47.86	-355.23	0.00	0.00	0.00
5,500.00	6.35	172.33	5,479.83	-366.22	49.34	-366.19	0.00	0.00	0.00
5,600.00	6.35	172.33	5,579.22	-377.18	50.82	-377.15	0.00	0.00	0.00
5,700.00	6.35	172.33	5,678.60	-388.14	52.29	-388.11	0.00	0.00	0.00
5,800.00	6.35	172.33	5,777.99	-399.10	53.77	-399.07	0.00	0.00	0.00
5,900.00	6.35	172.33	5,877.38	-410.07	55.25	-410.03	0.00	0.00	0.00
6,000.00	6.35	172.33	5,976.76	-421.03	56.72	-420.99	0.00	0.00	0.00
6,100.00	6.35	172.33	6,076.15	-431.99	58.20	-431.94	0.00	0.00	0.00
6,200.00	6.35	172.33	6,175.54	-442.95	59.68	-442.90	0.00	0.00	0.00
6,300.00	6.35	172.33	6,274.92	-453.91	61.15	-453.86	0.00	0.00	0.00
6,400.00	6.35	172.33	6,374.31	-464.87	62.63	-464.82	0.00	0.00	0.00
6,500.00	6.35	172.33	6,473.69	-475.83	64.11	-475.78	0.00	0.00	0.00
6,600.00	6.35	172.33	6,573.08	-486.79	65.58	-486.74	0.00	0.00	0.00
6,700.00	6.35	172.33	6,672.47	-497.75	67.06	-497.70	0.00	0.00	0.00
6,800.00	6.35	172.33	6,771.85	-508.71	68.54	-508.66	0.00	0.00	0.00
6,900.00	6.35	172.33	6,871.24	-519.67	70.01	-519.62	0.00	0.00	0.00
7,000.00	6.35	172.33	6,970.63	-530.63	71.49	-530.58	0.00	0.00	0.00
7,100.00	6.35	172.33	7,070.01	-541.59	72.97	-541.54	0.00	0.00	0.00
7,200.00	6.35	172.33	7,169.40	-552.55	74.44	-552.49	0.00	0.00	0.00
7,300.00	6.35	172.33	7,268.79	-563.51	75.92	-563.45	0.00	0.00	0.00
7,400.00	6.35	172.33	7,368.17	-574.47	77.40	-574.41	0.00	0.00	0.00
7,500.00	6.35	172.33	7,467.56	-585.43	78.87	-585.37	0.00	0.00	0.00
7,600.00	6.35	172.33	7,566.95	-596.39	80.35	-596.33	0.00	0.00	0.00
7,700.00	6.35	172.33	7,666.33	-607.35	81.83	-607.29	0.00	0.00	0.00
7,800.00	6.35	172.33	7,765.72	-618.31	83.30	-618.25	0.00	0.00	0.00
7,900.00	6.35	172.33	7,865.11	-629.27	84.78	-629.21	0.00	0.00	0.00
8,000.00	6.35	172.33	7,964.49	-640.23	86.26	-640.17	0.00	0.00	0.00
8,100.00	6.35	172.33	8,063.88	-651.19	87.73	-651.13	0.00	0.00	0.00
8,200.00	6.35	172.33	8,163.27	-662.15	89.21	-662.09	0.00	0.00	0.00
8,292.62	6.35	172.33	8,255.32	-672.30	90.58	-672.24	0.00	0.00	0.00
8,300.00	5.62	171.31	8,262.66	-673.06	90.69	-673.00	10.00	-9.90	-13.79
8,350.00	1.02	122.96	8,312.57	-675.72	91.43	-675.66	10.00	-9.20	-96.70
8,400.00	4.53	10.92	8,362.52	-674.03	92.18	-673.96	10.00	7.02	-224.09
8,450.00	9.48	5.17	8,412.13	-667.98	92.92	-667.92	10.00	9.91	-11.49
8,500.00	14.47	3.36	8,461.02	-657.64	93.66	-657.57	10.00	9.97	-3.62
8,550.00	19.46	2.47	8,508.83	-643.07	94.39	-643.00	10.00	9.99	-1.79
8,600.00	24.46	1.92	8,555.19	-624.39	95.09	-624.32	10.00	9.99	-1.08
8,650.00	29.46	1.56	8,599.74	-601.74	95.78	-601.67	10.00	9.99	-0.73
8,700.00	34.46	1.29	8,642.15	-575.29	96.43	-575.23	10.00	10.00	-0.54
8,750.00	39.45	1.08	8,682.09	-545.25	97.05	-545.18	10.00	10.00	-0.41
8,800.00	44.45	0.92	8,719.27	-511.84	97.63	-511.77	10.00	10.00	-0.34
8,850.00	49.45	0.78	8,753.39	-475.32	98.17	-475.25	10.00	10.00	-0.28
8,900.00	54.45	0.65	8,784.19	-435.96	98.66	-435.89	10.00	10.00	-0.24
8,950.00	59.45	0.55	8,811.45	-394.06	99.09	-393.99	10.00	10.00	-0.21
9,000.00	64.45	0.45	8,834.96	-349.95	99.48	-349.88	10.00	10.00	-0.19
9,050.00	69.45	0.36	8,854.53	-303.96	99.80	-303.89	10.00	10.00	-0.18
9,100.00	74.45	0.28	8,870.02	-256.44	100.07	-256.37	10.00	10.00	-0.17
9,150.00	79.45	0.20	8,881.31	-207.74	100.28	-207.67	10.00	10.00	-0.16
9,200.00	84.45	0.13	8,888.31	-158.25	100.42	-158.18	10.00	10.00	-0.15
9,250.00	89.45	0.05	8,890.97	-108.34	100.50	-108.27	10.00	10.00	-0.15
9,255.54	90.00	0.04	8,891.00	-102.80	100.50	-102.73	10.00	10.00	-0.15
9,300.00	90.00	0.04	8,891.00	-58.34	100.53	-58.27	0.00	0.00	0.00
9,400.00	90.00	0.04	8,891.00	41.66	100.61	41.73	0.00	0.00	0.00



Planning Report

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Company:	XTO Energy	TVD Reference:	Ref GL @ 2911.00usft
Project:	Eddy County, NM (NAD-27)	MD Reference:	Ref GL @ 2911.00usft
Site:	Game Rooster 6-31 State Com	North Reference:	Grid
Well:	#807H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
9,500.00	90.00	0.04	8,891.00	141.66	100.68	141.73	0.00	0.00	0.00	
9,600.00	90.00	0.04	8,891.00	241.66	100.76	241.73	0.00	0.00	0.00	
9,700.00	90.00	0.04	8,891.00	341.66	100.83	341.73	0.00	0.00	0.00	
9,800.00	90.00	0.04	8,891.00	441.66	100.91	441.73	0.00	0.00	0.00	
9,900.00	90.00	0.04	8,891.00	541.66	100.98	541.73	0.00	0.00	0.00	
10,000.00	90.00	0.04	8,891.00	641.66	101.06	641.73	0.00	0.00	0.00	
10,100.00	90.00	0.04	8,891.00	741.66	101.13	741.73	0.00	0.00	0.00	
10,200.00	90.00	0.04	8,891.00	841.66	101.21	841.73	0.00	0.00	0.00	
10,300.00	90.00	0.04	8,891.00	941.66	101.28	941.73	0.00	0.00	0.00	
10,400.00	90.00	0.04	8,891.00	1,041.66	101.36	1,041.73	0.00	0.00	0.00	
10,500.00	90.00	0.04	8,891.00	1,141.66	101.43	1,141.73	0.00	0.00	0.00	
10,600.00	90.00	0.04	8,891.00	1,241.66	101.50	1,241.73	0.00	0.00	0.00	
10,700.00	90.00	0.04	8,891.00	1,341.66	101.58	1,341.73	0.00	0.00	0.00	
10,800.00	90.00	0.04	8,891.00	1,441.66	101.65	1,441.73	0.00	0.00	0.00	
10,900.00	90.00	0.04	8,891.00	1,541.66	101.73	1,541.73	0.00	0.00	0.00	
11,000.00	90.00	0.04	8,891.00	1,641.66	101.80	1,641.73	0.00	0.00	0.00	
11,100.00	90.00	0.04	8,891.00	1,741.66	101.88	1,741.73	0.00	0.00	0.00	
11,200.00	90.00	0.04	8,891.00	1,841.66	101.95	1,841.73	0.00	0.00	0.00	
11,300.00	90.00	0.04	8,891.00	1,941.66	102.03	1,941.73	0.00	0.00	0.00	
11,400.00	90.00	0.04	8,891.00	2,041.66	102.10	2,041.73	0.00	0.00	0.00	
11,500.00	90.00	0.04	8,891.00	2,141.66	102.18	2,141.73	0.00	0.00	0.00	
11,600.00	90.00	0.04	8,891.00	2,241.66	102.25	2,241.73	0.00	0.00	0.00	
11,700.00	90.00	0.04	8,891.00	2,341.66	102.33	2,341.73	0.00	0.00	0.00	
11,800.00	90.00	0.04	8,891.00	2,441.66	102.40	2,441.73	0.00	0.00	0.00	
11,900.00	90.00	0.04	8,891.00	2,541.66	102.48	2,541.73	0.00	0.00	0.00	
12,000.00	90.00	0.04	8,891.00	2,641.66	102.55	2,641.73	0.00	0.00	0.00	
12,100.00	90.00	0.04	8,891.00	2,741.66	102.63	2,741.73	0.00	0.00	0.00	
12,200.00	90.00	0.04	8,891.00	2,841.66	102.70	2,841.73	0.00	0.00	0.00	
12,300.00	90.00	0.04	8,891.00	2,941.66	102.78	2,941.73	0.00	0.00	0.00	
12,400.00	90.00	0.04	8,891.00	3,041.66	102.85	3,041.73	0.00	0.00	0.00	
12,500.00	90.00	0.04	8,891.00	3,141.66	102.92	3,141.73	0.00	0.00	0.00	
12,600.00	90.00	0.04	8,891.00	3,241.66	103.00	3,241.73	0.00	0.00	0.00	
12,700.00	90.00	0.04	8,891.00	3,341.66	103.07	3,341.73	0.00	0.00	0.00	
12,800.00	90.00	0.04	8,891.00	3,441.66	103.15	3,441.73	0.00	0.00	0.00	
12,900.00	90.00	0.04	8,891.00	3,541.66	103.22	3,541.73	0.00	0.00	0.00	
13,000.00	90.00	0.04	8,891.00	3,641.66	103.30	3,641.73	0.00	0.00	0.00	
13,100.00	90.00	0.04	8,891.00	3,741.66	103.37	3,741.73	0.00	0.00	0.00	
13,200.00	90.00	0.04	8,891.00	3,841.66	103.45	3,841.73	0.00	0.00	0.00	
13,300.00	90.00	0.04	8,891.00	3,941.66	103.52	3,941.73	0.00	0.00	0.00	
13,400.00	90.00	0.04	8,891.00	4,041.66	103.60	4,041.73	0.00	0.00	0.00	
13,500.00	90.00	0.04	8,891.00	4,141.66	103.67	4,141.73	0.00	0.00	0.00	
13,600.00	90.00	0.04	8,891.00	4,241.66	103.75	4,241.73	0.00	0.00	0.00	
13,700.00	90.00	0.04	8,891.00	4,341.66	103.82	4,341.73	0.00	0.00	0.00	
13,800.00	90.00	0.04	8,891.00	4,441.66	103.90	4,441.73	0.00	0.00	0.00	
13,900.00	90.00	0.04	8,891.00	4,541.66	103.97	4,541.73	0.00	0.00	0.00	
14,000.00	90.00	0.04	8,891.00	4,641.66	104.05	4,641.73	0.00	0.00	0.00	
14,100.00	90.00	0.04	8,891.00	4,741.66	104.12	4,741.73	0.00	0.00	0.00	
14,200.00	90.00	0.04	8,891.00	4,841.66	104.20	4,841.73	0.00	0.00	0.00	
14,300.00	90.00	0.04	8,891.00	4,941.66	104.27	4,941.73	0.00	0.00	0.00	
14,400.00	90.00	0.04	8,891.00	5,041.66	104.35	5,041.73	0.00	0.00	0.00	
14,500.00	90.00	0.04	8,891.00	5,141.66	104.42	5,141.73	0.00	0.00	0.00	
14,600.00	90.00	0.04	8,891.00	5,241.66	104.49	5,241.73	0.00	0.00	0.00	
14,700.00	90.00	0.04	8,891.00	5,341.66	104.57	5,341.73	0.00	0.00	0.00	
14,800.00	90.00	0.04	8,891.00	5,441.66	104.64	5,441.73	0.00	0.00	0.00	



Planning Report

Database:	EDM 5000.1.13 Single User Db	Local Co-ordinate Reference:	Well #807H
Company:	XTO Energy	TVD Reference:	Ref GL @ 2911.00usft
Project:	Eddy County, NM (NAD-27)	MD Reference:	Ref GL @ 2911.00usft
Site:	Game Rooster 6-31 State Com	North Reference:	Grid
Well:	#807H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
14,900.00	90.00	0.04	8,891.00	5,541.66	104.72	5,541.73	0.00	0.00	0.00	
15,000.00	90.00	0.04	8,891.00	5,641.66	104.79	5,641.73	0.00	0.00	0.00	
15,100.00	90.00	0.04	8,891.00	5,741.66	104.87	5,741.73	0.00	0.00	0.00	
15,200.00	90.00	0.04	8,891.00	5,841.66	104.94	5,841.73	0.00	0.00	0.00	
15,300.00	90.00	0.04	8,891.00	5,941.66	105.02	5,941.73	0.00	0.00	0.00	
15,400.00	90.00	0.04	8,891.00	6,041.66	105.09	6,041.73	0.00	0.00	0.00	
15,500.00	90.00	0.04	8,891.00	6,141.66	105.17	6,141.73	0.00	0.00	0.00	
15,600.00	90.00	0.04	8,891.00	6,241.66	105.24	6,241.73	0.00	0.00	0.00	
15,700.00	90.00	0.04	8,891.00	6,341.66	105.32	6,341.73	0.00	0.00	0.00	
15,800.00	90.00	0.04	8,891.00	6,441.66	105.39	6,441.73	0.00	0.00	0.00	
15,900.00	90.00	0.04	8,891.00	6,541.66	105.47	6,541.73	0.00	0.00	0.00	
16,000.00	90.00	0.04	8,891.00	6,641.66	105.54	6,641.73	0.00	0.00	0.00	
16,100.00	90.00	0.04	8,891.00	6,741.66	105.62	6,741.73	0.00	0.00	0.00	
16,200.00	90.00	0.04	8,891.00	6,841.66	105.69	6,841.73	0.00	0.00	0.00	
16,300.00	90.00	0.04	8,891.00	6,941.66	105.77	6,941.73	0.00	0.00	0.00	
16,400.00	90.00	0.04	8,891.00	7,041.66	105.84	7,041.73	0.00	0.00	0.00	
16,500.00	90.00	0.04	8,891.00	7,141.66	105.91	7,141.73	0.00	0.00	0.00	
16,600.00	90.00	0.04	8,891.00	7,241.66	105.99	7,241.73	0.00	0.00	0.00	
16,700.00	90.00	0.04	8,891.00	7,341.66	106.06	7,341.73	0.00	0.00	0.00	
16,800.00	90.00	0.04	8,891.00	7,441.66	106.14	7,441.73	0.00	0.00	0.00	
16,900.00	90.00	0.04	8,891.00	7,541.66	106.21	7,541.73	0.00	0.00	0.00	
16,965.54	90.00	0.04	8,891.00	7,607.20	106.26	7,607.27	0.00	0.00	0.00	
17,000.00	90.00	0.04	8,891.00	7,641.66	106.29	7,641.73	0.00	0.00	0.00	
17,015.54	90.00	0.04	8,891.00	7,657.20	106.30	7,657.27	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
Game Rooster 807H: - hit/miss target - Shape - Point	0.00	0.00	0.00	0.00	0.00	419,323.10	597,515.50	32.1524437	-104.0182401	
Game Rooster 807H: - plan hits target center - Point	0.00	0.00	8,891.00	7,607.20	106.80	426,930.30	597,622.30	32.1733549	-104.0178229	
Game Rooster 807H: - plan misses target center by 0.54usft at 16965.54usft MD (8891.00 TVD, 7607.20 N, 106.26 E) - Point	0.00	0.00	8,891.00	-102.80	100.50	419,220.30	597,616.00	32.1521603	-104.0179163	
Game Rooster 807H: - plan hits target center - Point	0.00	0.00	8,891.00	7,657.20	106.30	426,980.30	597,621.80	32.1734924	-104.0178241	



Planning Report

Database:	EDM 5000.1.13 Single User Db	Local Co-ordinate Reference:	Well #807H
Company:	XTO Energy	TVD Reference:	Ref GL @ 2911.00usft
Project:	Eddy County, NM (NAD-27)	MD Reference:	Ref GL @ 2911.00usft
Site:	Game Rooster 6-31 State Com	North Reference:	Grid
Well:	#807H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
236.00	236.00	Rustler			
597.00	597.00	Salado			
2,527.94	2,526.00	Base of Salt			
2,729.17	2,726.00	Delaware			
2,756.34	2,753.00	Bell Canyon			
3,642.78	3,634.00	Cherry Canyon			
5,208.38	5,190.00	Brushy Canyon			
6,205.50	6,181.00	Basal Brushy Canyon			
6,493.26	6,467.00	Bone Spring			
6,623.06	6,596.00	Avalon			
7,073.83	7,044.00	Avalon Lower			
7,368.63	7,337.00	1st Bone Spring Lime			
7,431.02	7,399.00	1st Bone Spring Sand			
7,663.44	7,630.00	2nd Bone Spring Lime			
8,263.12	8,226.00	2nd Bone Spring Sand			
8,522.82	8,483.00	3rd Bone Spring Lime			
8,997.79	8,834.00	Harkey			
9,133.25	8,878.00	3rd Bone Spring Shale			
9,255.54	8,891.00	LP			



HYDROGEN SULFIDE (H₂S) CONTINGENCY PLAN

Assumed 100 ppm ROE = 3000'

100 ppm H₂S concentration shall trigger activation of this plan.

Emergency Procedures

In the event of a release of gas containing H₂S, the first responder(s) must

- Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- Evacuate any public places encompassed by the 100 ppm ROE.
- Be equipped with H₂S monitors and air packs in order to control the release.
- Use the "buddy system" to ensure no injuries occur during the response
- Take precautions to avoid personal injury during this operation.
- Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- Have received training in the
 - o Detection of H₂S, and
 - o Measures for protection against the gas,
 - o Equipment used for protection and emergency response.

Ignition of Gas source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO₂). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally, the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever this is an ignition of the gas.

Characteristics of H₂S and SO₂

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H ₂ S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO ₂	2.21 Air = 1	2 ppm	N/A	1000 ppm

Contacting Authorities

All XTO location personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available including directions to site. The following call list of essential and potential responders has been prepared for use during a release. (Operator Name)'s response must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMER).

CARLSBAD OFFICE – EDDY & LEA COUNTIES

3104 E. Greene St., Carlsbad, NM 88220
Carlsbad, NM

575-887-7329

XTO PERSONNEL:

Kendall Decker, Drilling Manager	903-521-6477
Milton Turman, Drilling Superintendent	817-524-5107
Jeff Raines, Construction Foreman	432-557-3159
Toady Sanders, EH & S Manager	903-520-1601
Wes McSpadden, Production Foreman	575-441-1147

SHERIFF DEPARTMENTS:

Eddy County	575-887-7551
Lea County	575-396-3611

NEW MEXICO STATE POLICE:

575-392-5588

FIRE DEPARTMENTS:

	911
Carlsbad	575-885-2111
Eunice	575-394-2111
Hobbs	575-397-9308
Jal	575-395-2221
Lovington	575-396-2359

HOSPITALS:

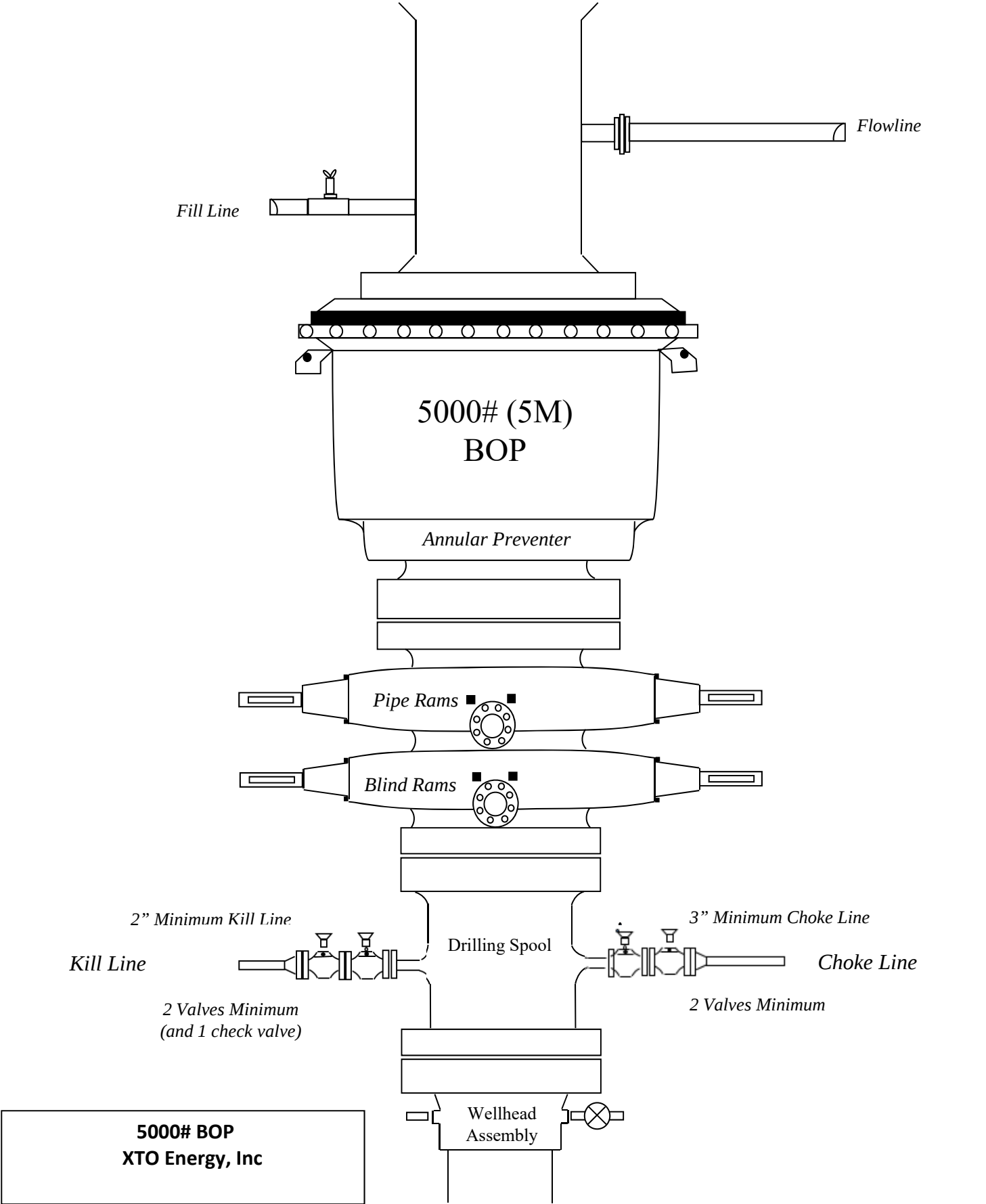
	911
Carlsbad Medical Emergency	575-885-2111
Eunice Medical Emergency	575-394-2112
Hobbs Medical Emergency	575-397-9308
Jal Medical Emergency	575-395-2221
Lovington Medical Emergency	575-396-2359

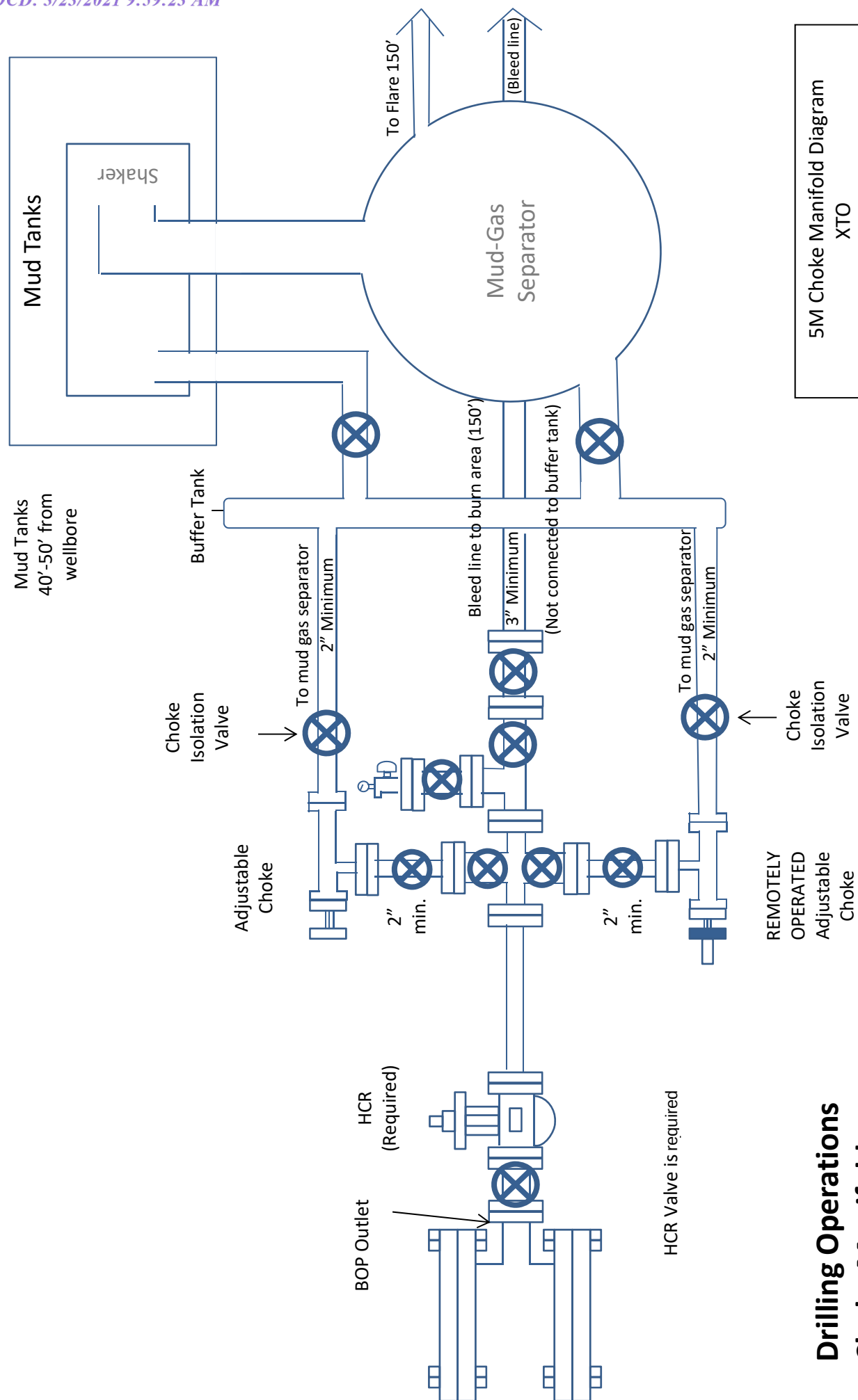
AGENT NOTIFICATIONS:**For Lea County:**

Bureau of Land Management – Hobbs	575-393-3612
New Mexico Oil Conservation Division – Hobbs	575-393-6161

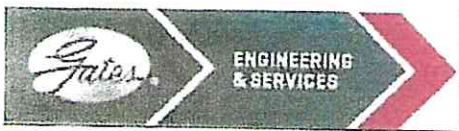
For Eddy County:

Bureau of Land Management - Carlsbad	575-234-5972
New Mexico Oil Conservation Division - Artesia	575-748-1283





Drilling Operations Choke Manifold 5M Service



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

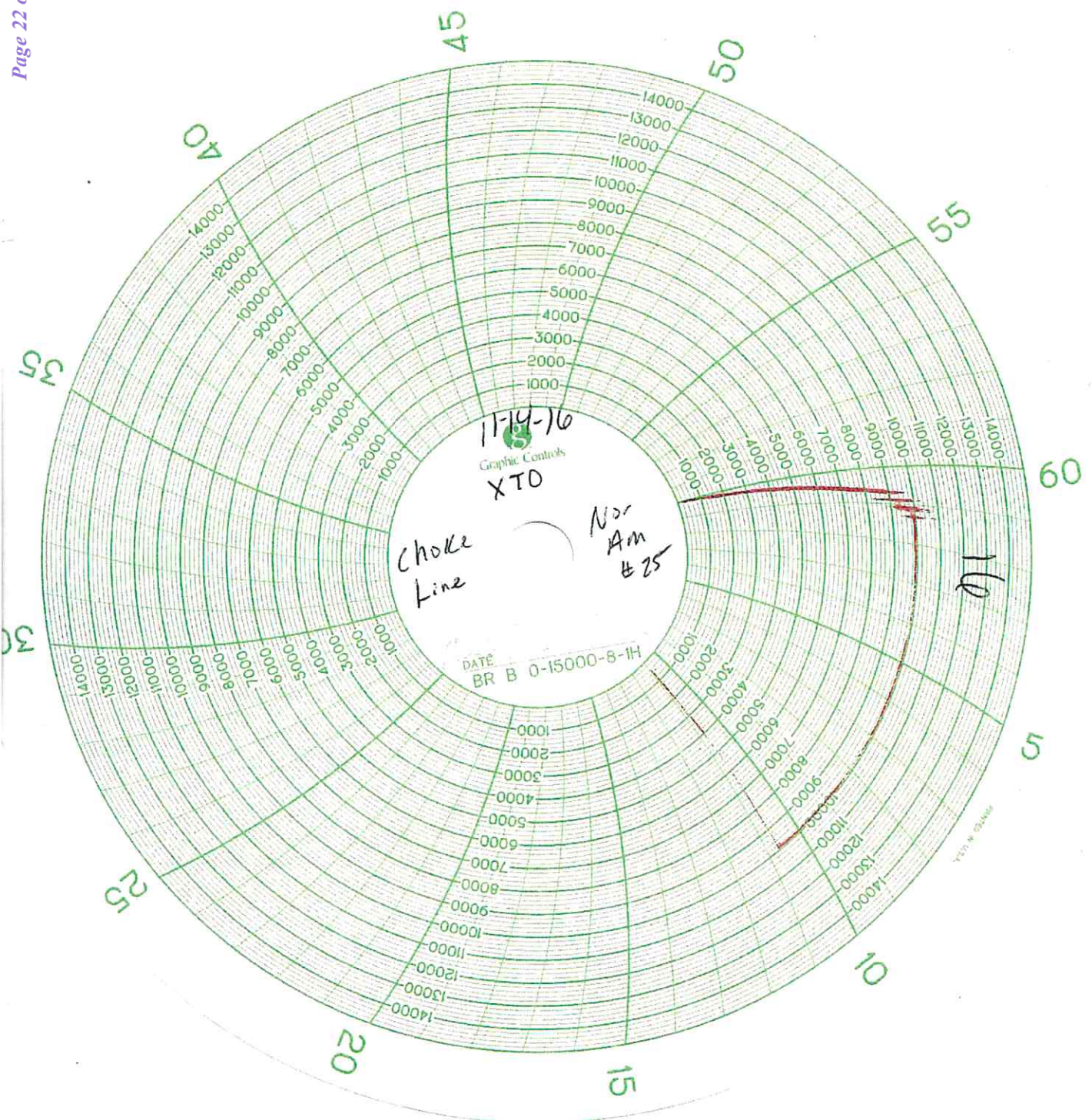
GRADE D PRESSURE TEST CERTIFICATE

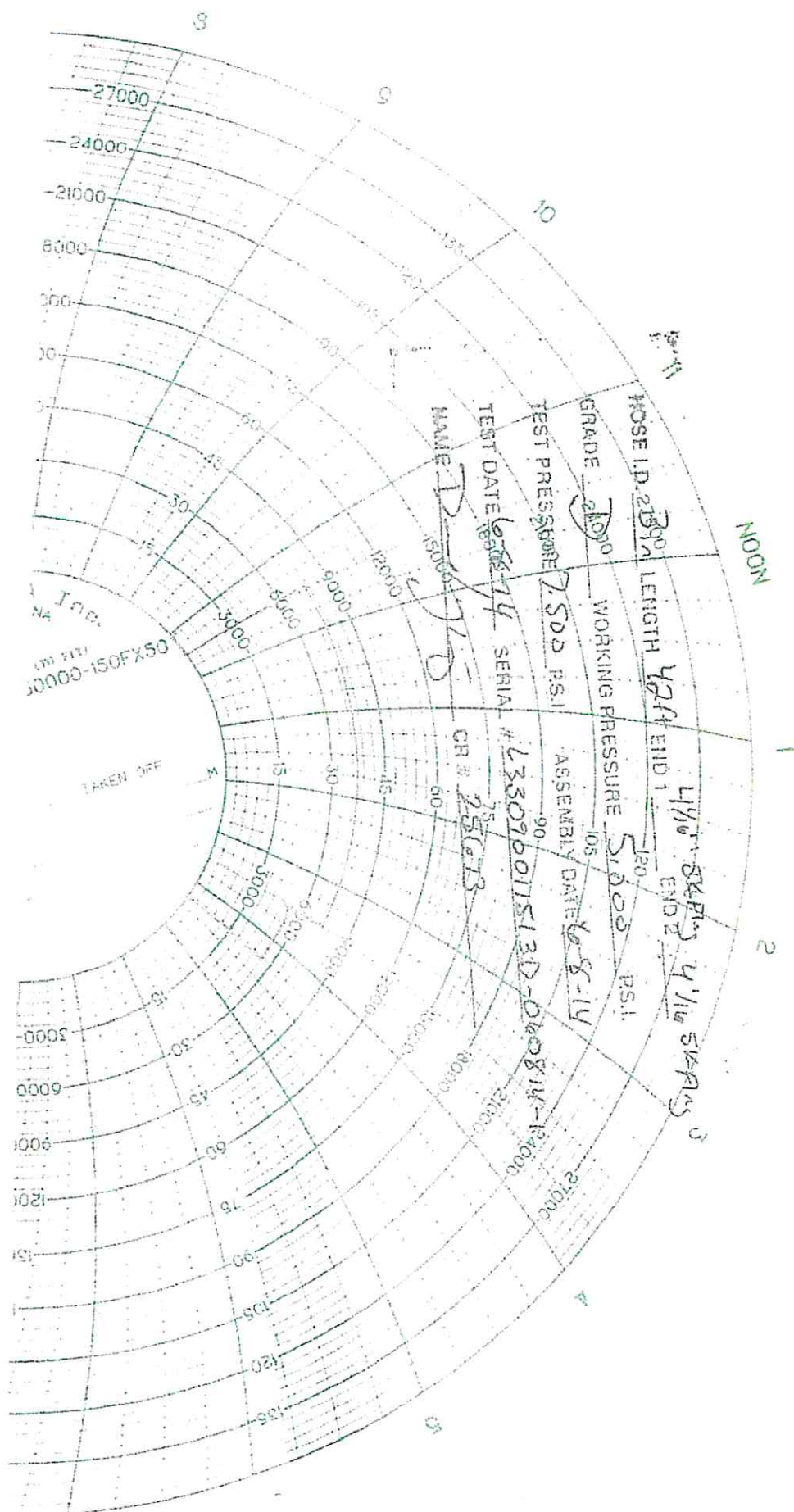
Customer :	AUSTIN DISTRIBUTING	Test Date:	6/8/2014
Customer Ref. :	PENDING	Hose Serial No.:	D-060814-1
Invoice No. :	201709	Created By:	NORMA
Product Description:	FD3.042.0R41/16.5KFLGE/E LE		
End Fitting 1 :	4 1/16 in.5K FLG	End Fitting 2 :	4 1/16 in.5K FLG
Gates Part No. :	4774-6001	Assembly Code :	L33090011513D-060814-1
Working Pressure :	5,000 PSI	Test Pressure :	7,500 PSI

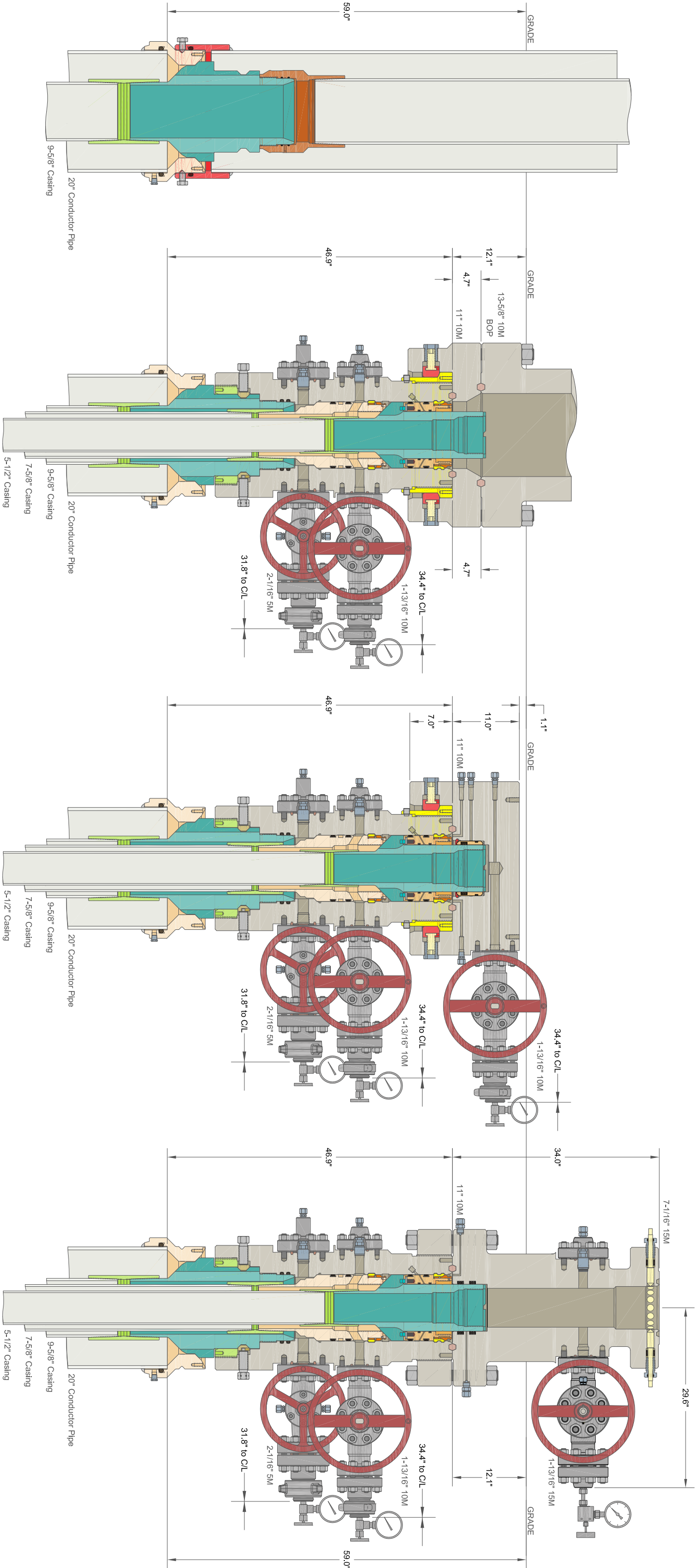
Gates E & S North America, Inc. certifies that the following hose assembly has been tested to the Gates Oilfield Roughneck Agreement/Specification requirements and passed the 15 minute hydrostatic test per API Spec 7K/Q1, Fifth Edition, June 2010, Test pressure 9.6.7 and per Table 9 to 7,500 psi in accordance 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 :	

Form PTC - 01 Rev.0 2







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CACTUS WELLHEAD LLC			ALL DIMENSIONS APPROXIMATE		
20" x 9-5/8" x 7-5/8" x 5-1/2" MBU-T-CFL-R-DBLO Wellhead With 1 1" 10M x 7-1/16" 15M CTH-DBLHPS Tubing Head And 9-5/8", 7-5/8" & 5-1/2" Pin Bottom Mandrel Casing Hangers			XTO ENERGY INC		
			ICARUS PAD		
			DRAWN	DLE	18JAN21
			APPRV		
			DRAWING NO.	HBE0000479	