U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Sundry Print Report

05/26/2023

Well Name: POKER LAKE UNIT 16 TWR

Well Location: T24S / R31E / SEC 21 / NWNE / 32.208662 / -103.780537

County or Parish/State: EDDY / NM

Well Number: 127H

Type of Well: CONVENTIONAL GAS WELL

Allottee or Tribe Name:

Lease Number: NMNM0506A

Unit or CA Name: POKER LAKE

Unit or CA Number: NMNM071016Z, NMNM71016X

US Well Number: 3001547413

Well Status: Producing Gas Well

Operator: XTO PERMIAN OPERATING LLC

Subsequent Report

Sundry ID: 2726484

Type of Submission: Subsequent Report

Type of Action: Other

Date Sundry Submitted: 04/19/2023

Time Sundry Submitted: 07:11

Date Operation Actually Began: 04/25/2022

Actual Procedure: XTO Energy (XTO) received verbal approval of Sundry ID 2668432, submitted on 4/25/2022. Due to AFMSS issues Sundry ID 2668432 was returned on 3/5/2023 and the sundry was not completed. Per BLM request XTO is submitting this sundry to update the well record. **Pool Change, Spacing, Casing/Cement, Drilling Variance Changes XTO Permian Operating, LLC requests permission to make the following changes to the original APD: No Additional Surface Disturbance Change formation from Wolfcamp to Bone Spring. Change pool from Purple Sage; Wolfcamp (98220) to Cotton Draw; Bone Spring, South (96546). Change BHL fr/200'FSL & 1254'FEL to 50'FSL & 880'FEL, Section 28-T24S-R31E Casing/Cement design per the attached drilling program. Attachments: C102 Drilling Program Directional Plan Multibowl Diagram

SR Attachments

Actual Procedure

PLU_16_TWR_127H_Verbal_Approval_w.Attachments_20230419071012.pdf

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Operator: XTO PERMIAN OPERATING LLC

Operator

I certify that the foregoing is true and correct. 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. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: JESSICA DOOLING

Signed on: APR 19, 2023 07:10 AM

Name: XTO PERMIAN OPERATING LLC

Title: Lead Regulatory Coordinator

Street Address: 6401 HOLIDAY HILL ROAD BLDG 5

City: MIDLAND **State:** TX

Phone: (970) 769-6048

Email address: JESSICA.DOOLING@EXXONMOBIL.COM

Field

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234

BLM POC Email Address: cwalls@blm.gov

Disposition: Approved

Disposition Date: 05/26/2023

Signature: Chris Walls

Rabadue, Stephanie

To: Morency, Allison E; Walls, Christopher; Ajibola E-I-T, Olabode T; Kirsch, Zane C
Subject: RE: [EXTERNAL] FW: Request: Sundry Approvals (XTO Energy)

From: Morency, Allison E [mailto:amorency@blm.gov]
Sent: Tuesday, June 7, 2022 4:25 PM
To: Rabadue, Stephanie <stephanie.rabadue@exxonmobil.com>; Walls, Christopher <cwalls@blm.gov>; Ajibola E-I-T, Olabode T <oajibolaeit@blm.gov>; Kirsch, Zane C <zkirsch@blm.gov>
Subject: RE: [EXTERNAL] FW: Request: Sundry Approvals (XTO Energy)

Verbal approval granted.

Chris is out today, but should approve them when they're back and send back the outrider and the PLU.

Sincerely,
Allison Morency
Petroleum Engineer
Carlsbad Field Office
Bureau of Land Management
575-234-5709

From: Rabadue, Stephanie <stephanie.rabadue@exxonmobil.com>
Sent: Tuesday, June 7, 2022 8:16 AM
To: Morency, Allison E <amorency@blm.gov>; Walls, Christopher <cwalls@blm.gov>; Ajibola E-I-T, Olabode T <oajibolaeit@blm.gov>; Kirsch, Zane C <zkirsch@blm.gov>
Subject: [EXTERNAL] FW: Request: Sundry Approvals (XTO Energy)

Good morning, BLM Team,

Our PLU 16 TWR wells are imminent. We have 3 rigs headed that direction beginning tomorrow, beginning with the: 167H, 127H, 107H, 106H, 126H, 156H, 154H, 124H, 104H.

Any help you can provide in getting these approvals would be greatly appreciated.

Thank you for everything!

Take care and happy Tuesday!

Stephanie Rabadue
ExxonMobil UOG Unconventional
Permian Business Unit, Regulatory Manager
Phone: 432-620-6714
stephanie.rabadue@exxonmobil.com

*** Please Note My New Email Address: stephanie.rabadue@exxonmobil.com

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From: Rabadue, Stephanie
Sent: Tuesday, May 31, 2022 6:32 AM
To: 'Morency, Allison E' <amorency@blm.gov>; 'cwalls@blm.gov' <cwalls@blm.gov>; 'Ajibola E-I-T, Olabode T' <oajibolaeit@blm.gov>; 'zkirsch@blm.gov' <zkirsch@blm.gov>
Cc: Evans, Cassie L <cassie.evans@exxonmobil.com>; Dooling, Jessica <jessica.dooling@exxonmobil.com>
Subject: FW: Request: Sundry Approvals (XTO Energy)

Good morning, BLM Team,

SOS. We're in dire need of the Outrider sundry approvals immediately followed by the Poker Lake Unit 16 TWR sundry approvals for rig spuds anticipated this week and next week.

If there is anything I can do to help, please don't hesitate to let me know!

Thank you, take care, and happy day after a holiday!

Outrider 28 Federal: June 3 Spud Date (No Additional Surface Disturbance, No Well Location Change)

Sundry ID	BLM Office	Operator	Well Name	Well Number
			Outrider	
2672444	Carlsbad	XTO ENERGY INCORP...	OUTRIDER 28 FED	123H
2672445	Carlsbad	XTO ENERGY INCORP...	OUTRIDER 28 FED	121H
2672447	Carlsbad	XTO ENERGY INCORP...	OUTRIDER 28 FED	101H
2672446	Carlsbad	XTO ENERGY INCORP...	OUTRIDER 28 FED	112H

Poker Lake Unit 16 TWR: June 8 Spud Date (No Additional Surface Disturbance, A Few On Pad Surface Hole Location Changes)

Sundry ID	BLM Office	Operator	Well Name	Well Number
			poker Lake Unit 16	
2668424	Carlsbad	XTO PERMIAN OPERAT...	POKER LAKE UNIT 16 TWR	104H
2668425	Carlsbad	XTO PERMIAN OPERAT...	POKER LAKE UNIT 16 TWR	106H
2668427	Carlsbad	XTO PERMIAN OPERAT...	POKER LAKE UNIT 16 TWR	107H
2668431	Carlsbad	XTO PERMIAN OPERAT...	POKER LAKE UNIT 16 TWR	126H
2668432	Carlsbad	XTO PERMIAN OPERAT...	POKER LAKE UNIT 16 TWR	127H
2668433	Carlsbad	XTO PERMIAN OPERAT...	POKER LAKE UNIT 16 TWR	154H
2668436	Carlsbad	XTO PERMIAN OPERAT...	POKER LAKE UNIT 16 TWR	156H
2668437	Carlsbad	XTO PERMIAN OPERAT...	POKER LAKE UNIT 16 TWR	167H
2668429	Carlsbad	XTO PERMIAN OPERAT...	POKER LAKE UNIT 16 TWR	124H
2668441	Carlsbad	XTO PERMIAN OPERAT...	POKER LAKE UNIT 16 TWR	167H
2672045	Carlsbad	XTO PERMIAN OPERAT...	POKER LAKE UNIT 16 TWR	152H
2672046	Carlsbad	XTO PERMIAN OPERAT...	POKER LAKE UNIT 16 TWR	161H

Stephanie Rabadue
ExxonMobil UOG Unconventional
Permian Business Unit, Regulatory Manager
Phone: 432-620-6714
stephanie.rabadue@exxonmobil.com

*** Please Note My New Email Address: stephanie.rabadue@exxonmobil.com

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

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
30-015-47413	96546	Cotton Draw; Bone Spring, South

[4] Property Code	[5] Property Name	[6] Well Number
	POKER LAKE UNIT 16 TWR	127H

[7] OGRID No.	[8] Operator Name	[9] Elevation
373075	XTO PERMIAN OPERATING, LLC.	3,513'

[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
B	21	24 S	31 E		520	NORTH	1,950	EAST	EDDY

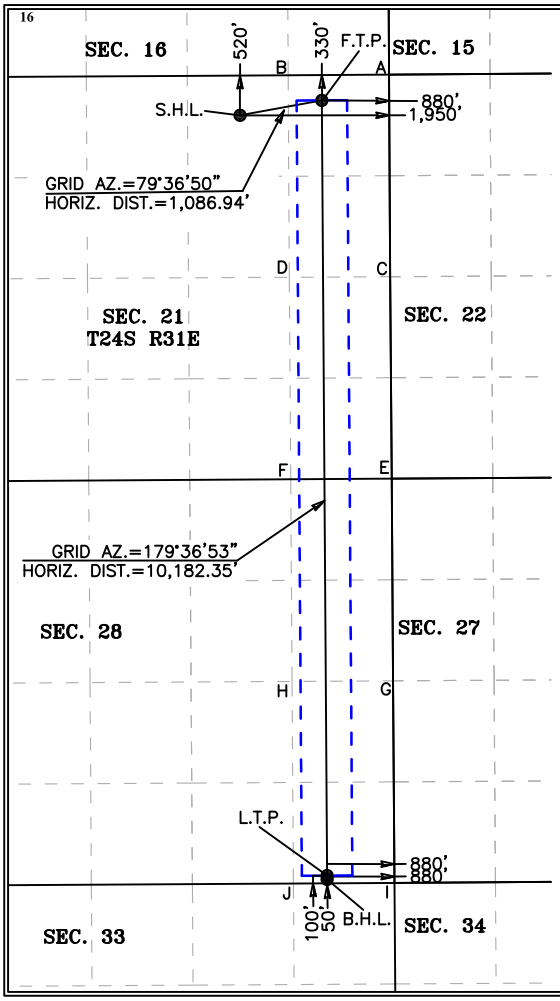
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	28	24 S	31 E		50	SOUTH	880	EAST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
320			

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



SHL (NAD83 NME)		LTP (NAD83 NME)	
Y =	440,084.8	Y =	430,148.7
X =	712,309.6	X =	713,446.9
LAT. =	32.208662 °N	LAT. =	32.181333 °N
LONG. =	103.780537 °W	LONG. =	103.777026 °W
FTP (NAD83 NME)		**BHL (NAD83 NME)**	
Y =	440,280.8	Y =	430,098.7
X =	713,378.8	X =	713,447.3
LAT. =	32.209185 °N	LAT. =	32.181196 °N
LONG. =	103.777077 °W	LONG. =	103.777026 °W

CORNER COORDINATES (NAD83 NME)

A - Y =	440,615.7 N ,	X =	714,257.0 E
B - Y =	440,608.3 N ,	X =	712,938.3 E
C - Y =	437,975.6 N ,	X =	714,270.8 E
D - Y =	437,968.6 N ,	X =	712,953.3 E
E - Y =	435,336.0 N ,	X =	714,291.7 E
F - Y =	435,328.1 N ,	X =	712,971.9 E
G - Y =	432,694.6 N ,	X =	714,308.9 E
H - Y =	432,686.9 N ,	X =	712,989.1 E
I - Y =	430,053.9 N ,	X =	714,327.6 E
J - Y =	430,046.0 N ,	X =	713,007.1 E

SHL (NAD27 NME)		LTP (NAD27 NME)	
Y =	440,026.0	Y =	430,090.1
X =	671,125.6	X =	672,262.5
LAT. =	32.208538 °N	LAT. =	32.181209 °N
LONG. =	103.780054 °W	LONG. =	103.776544 °W
FTP (NAD27 NME)		**BHL (NAD27 NME)**	
Y =	440,221.9	Y =	430,040.1
X =	672,194.8	X =	672,262.9
LAT. =	32.209061 °N	LAT. =	32.181072 °N
LONG. =	103.776594 °W	LONG. =	103.776544 °W

CORNER COORDINATES (NAD27 NME)

A - Y =	440,556.9 N ,	X =	673,073.0 E
B - Y =	440,549.4 N ,	X =	671,754.3 E
C - Y =	437,916.8 N ,	X =	673,086.7 E
D - Y =	437,909.8 N ,	X =	671,769.2 E
E - Y =	435,277.3 N ,	X =	673,107.5 E
F - Y =	435,269.4 N ,	X =	671,787.7 E
G - Y =	432,636.0 N ,	X =	673,124.6 E
H - Y =	432,628.2 N ,	X =	671,804.8 E
I - Y =	429,995.3 N ,	X =	673,143.2 E
J - Y =	429,987.4 N ,	X =	671,822.7 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.

Stephanie Rabadue 01/22/2022
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.

01-20-2022
Date of Survey

Signatue and Seal of Professional Surveyor:

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

MARK DILLON HARP 23786
Certificate Number AW 2018010238

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

XTO Energy Inc.
PLU 16 Twin Wells Ranch 127H
Projected TD: 21089' MD / 10893' TVD
SHL: 520' FNL & 1950' FEL , Section 21, T24S, R31E
BHL: 50' FSL & 880' FEL , Section 28, T24S, R31E
Eddy County, NM

1. Geologic Name of Surface Formation

A. Quaternary

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

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	670'	Water
Top of Salt	960'	Water
Base of Salt	4176'	Water
Delaware	4412'	Water
Brushy Canyon	6525'	Water/Oil/Gas
Bone Spring	8245'	Water
1st Bone Spring Ss	9274'	Water/Oil/Gas
2nd Bone Spring Ss	10012'	Water/Oil/Gas
3rd Bone Spring Sh	10716'	Water/Oil/Gas
Target/Land Curve	10893'	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 9.625 inch casing @ 770' (190' above the salt) and circulating cement back to surface. The intermediate will isolate from the top of salt down to the next casing seat by setting 7.625 inch casing at 9890' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 21089 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 9590 feet).

3. Casing Design

Hole Size	MD	TVD	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 770'	770'	9.625	40	J-55	BTC	New	1.40	7.38	20.45
8.75	0' – 4000'	3956'	7.625	29.7	RY P-110	Flush Joint	New	2.80	2.65	1.90
8.75	4000' – 9890'	9786'	7.625	29.7	HC L-80	Flush Joint	New	2.03	2.03	2.32
6.75	0' – 9790'	9668'	5.5	20	RY P-110	Semi-Premium	New	1.05	2.14	2.17
6.75	9790' - 21089'	10893'	5.5	20	RY P-110	Semi-Flush	New	1.05	1.92	2.17

· Production casing meets the clearance requiremenets as tapered string crosses over before encountering the intermediate shoe, per Onshore Order 2.3.B.1
· XTO requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface casing per this Sundry
· XTO requests to not utilize centralizers in the curve and lateral
· 7.625 Collapse analyzed using 50% evacuation based on regional experience.
· 5.5 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
· XTO requests the option to use 5" BTC Float equipment for the the production casing

Wellhead:

Permanent Wellhead – Multibowl System
A. Starting Head: 11" 10M top flange x 9-5/8" bottom
B. Tubing Head: 11" 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: 9.625, 40 New BTC, J-55 casing to be set at +/- 770

Lead: 150 sxs EconoCem-HLTRRC (mixed at 12.9 ppg, 1.87 ft3/sx, 10.13 gal/sx water
Tail: 130 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
Top of Cement: Surface
Compressives: 12-hr = 900 psi 24 hr = 1500 psi

2nd Intermediate Casing: 7.625, 29.7 New casing to be set at +/- 9890
1st Stage
Optional Lead: 350 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water
TOC: Surface
Tail: 310 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
TOC: Brushy Canyon @ 6525
Compressives: 12-hr = 900 psi 24 hr = 1150 psi

2nd Stage
Lead: 0 sxs Class C (mixed at 12.9 ppg, 2.16 ft3/sx, 9.61 gal/sx water)
Tail: 730 sxs Class C (mixed at 14.8 ppg, 1.33 ft3/sx, 6.39 gal/sx water)
Top of Cement: 0
Compressives: 12-hr = 900 psi 24 hr = 1150 psi

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 (6525') 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 inside the first intermediate casing. If cement reaches the desired height, the BLM will be notified and the second stage bradenhead squeeze and subsequent TOC verification will be negated.

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 the 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 Cactus procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.

Production Casing: 5.5, 20 New Semi-Flush, RY P-110 casing to be set at +/- 21089

Lead: 30 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 9590 feet
Tail: 760 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 10451 feet
Compressives: 12-hr = 800 psi 24 hr = 1500 psi

XTO requests the option to offline cement and remediate (if needed) surface and intermediate casing strings where batch drilling is approved and if unplanned remediation is needed. XTO will ensure well is static with 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 when applicable per Cactus procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops. Offline cement operations will then be conducted after the rig is moved off the current well to the next well in the batch sequence.

5. Pressure Control Equipment

Once the permanent WH is installed on the 9.625 casing, the blow out preventer equipment (BOP) will consist of a 13-5/8" minimum 5M Hydril and a 13-5/8" minimum 5M Double Ram BOP. MASP should not exceed 3381 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 configuration, which allows use of 10M rams in unlikely event that pressures exceed 5M).

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 9.625, 5M bradenhead and flange, the BOP test will be limited to 5000 psi. When nippling up on the 7.625, the BOP will be tested to a minimum of 5000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 5M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each day.

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

XTO requests a variance to be able to batch drill this well if necessary. In doing so, XTO will set casing and ensure that the well is cemented properly (unless approval is given for offline cementing) and the well is static. With floats holding, no pressure on the csg annulus, and the installation of a 10K TA cap as per Cactus recommendations, XTO will contact the BLM to skid the rig to drill the remaining wells on the pad. Once surface and both 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 2. When skidding to drill an intermediate section that does not penetrate into the Wolfcamp.

6. Proposed Mud Circulation System

INTERVAL	Hole Size		Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' - 770'	12.25		FW/Native	8.7-9.2	35-40	NC
770' - 9890'	8.75		FW / Cut Brine / Direct Emulsion	9.7-10.2	30-32	NC
9890' - 21089'	6.75		OBM	10.2-10.7	50-60	NC - 20

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

Spud with fresh water/native mud. Drill out from under 9-5/8" surface casing with brine solution. A 9.7 ppg - 10.2 ppg cut 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 9.625 casing.

8. Logging, Coring and Testing Program

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

Open hole logging will include None

9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 175 to 195 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 5778 psi.

10. Anticipated Starting Date and Duration of Operations

Anticipated spud date will be after BLM approval. Move in operations and drilling is expected to take 40 days.

Well Plan Report - PLU 16 TWR 127H

Measured Depth:	21089.08 ft	**Site:**	PLU 16 TWR D
TVD RKB:	10893.00 ft	**Slot:**	2
Location			
Cartographic Reference System:	New Mexico East - NAD 27		
Northing:	440020.42 ft		
Easting:	671333.99 ft		
RKB:	3543.00 ft		
Ground Level:	3513.00 ft		
North Reference:	Grid		
Convergence Angle:	0.30 Deg		

Plan Sections PLU 16 TWR 127H

Measured Depth (ft)	Inclination (Deg)	Azimuth (Deg)	TVD RKB (ft)	Y Offset (ft)	X Offset (ft)	Build Rate (Deg/100ft)	Turn Rate (Deg/100ft)	Dogleg Rate (Deg/100ft)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	
2685.17	13.70	65.89	2678.66	33.32	74.43	2.00	0.00	2.00	
6846.30	13.70	65.89	6721.34	436.03	974.18	0.00	0.00	0.00	
7531.48	0.00	0.00	7400.00	469.34	1048.61	-2.00	0.00	2.00	
10451.48	0.00	0.00	10320.00	469.34	1048.61	0.00	0.00	0.00	
11351.48	90.00	180.00	10892.96	-103.62	1048.61	10.00	0.00	10.00	
21089.08	90.00	179.33	10893.00	-9841.00	1105.37	-0.00	-0.01	0.01	PLU 16 TWR BHL 9

Position Uncertainty PLU 16 TWR 127H

Measured Depth (ft)	Inclination (°)	Azimuth (°)	TVD RKB (ft)	Highside Error (ft)	Lateral Bias (ft)	Lateral Error (ft)	Lateral Bias (ft)	Vertical Error (ft)	Vertical Bias (ft)	Magnitude of Bias (ft)	Semi-major Error (ft)	Semi-minor Error (ft)	Semi-minor Azimuth (°)	Tool Used
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.297	0.000	0.000	0.000	0.000	0.000	OWSG MWD+IFR1+MS
100.000	0.000	0.000	100.000	0.358	0.000	0.358	0.000	2.299	0.000	0.000	0.358	0.358	0.000	OWSG MWD+IFR1+MS
200.000	0.000	0.000	200.000	0.717	0.000	0.717	0.000	2.307	0.000	0.000	0.717	0.717	0.000	OWSG MWD+IFR1+MS
300.000	0.000	0.000	300.000	1.075	0.000	1.075	0.000	2.321	0.000	0.000	1.075	1.075	0.000	OWSG MWD+IFR1+MS
400.000	0.000	0.000	400.000	1.434	0.000	1.434	0.000	2.340	0.000	0.000	1.434	1.434	0.000	OWSG MWD+IFR1+MS
500.000	0.000	0.000	500.000	1.792	0.000	1.792	0.000	2.364	0.000	0.000	1.792	1.792	0.000	OWSG MWD+IFR1+MS
600.000	0.000	0.000	600.000	2.151	0.000	2.151	0.000	2.394	0.000	0.000	2.151	2.151	0.000	OWSG MWD+IFR1+MS
700.000	0.000	0.000	700.000	2.509	0.000	2.509	0.000	2.428	0.000	0.000	2.509	2.509	0.000	OWSG MWD+IFR1+MS
800.000	0.000	0.000	800.000	2.868	0.000	2.868	0.000	2.467	0.000	0.000	2.868	2.868	0.000	OWSG MWD+IFR1+MS
900.000	0.000	0.000	900.000	3.226	0.000	3.226	0.000	2.511	0.000	0.000	3.226	3.226	0.000	OWSG MWD+IFR1+MS
1000.000	0.000	0.000	1000.000	3.585	0.000	3.585	0.000	2.560	0.000	0.000	3.585	3.585	0.000	

														OWSG MWD+IFR1+MS
1100.000	0.000	0.000	1100.000	3.943	0.000	3.943	0.000	2.613	0.000	0.000	3.943	3.943	0.000	OWSG MWD+IFR1+MS
1200.000	0.000	0.000	1200.000	4.302	0.000	4.302	0.000	2.670	0.000	0.000	4.302	4.302	0.000	OWSG MWD+IFR1+MS
1300.000	0.000	0.000	1300.000	4.660	0.000	4.660	0.000	2.731	0.000	0.000	4.660	4.660	0.000	OWSG MWD+IFR1+MS
1400.000	0.000	0.000	1400.000	5.019	0.000	5.019	0.000	2.797	0.000	0.000	5.019	5.019	0.000	OWSG MWD+IFR1+MS
1500.000	0.000	0.000	1500.000	5.377	0.000	5.377	0.000	2.866	0.000	0.000	5.377	5.377	0.000	OWSG MWD+IFR1+MS
1600.000	0.000	0.000	1600.000	5.736	0.000	5.736	0.000	2.939	0.000	0.000	5.736	5.736	0.000	OWSG MWD+IFR1+MS
1700.000	0.000	0.000	1700.000	6.094	0.000	6.094	0.000	3.016	0.000	0.000	6.094	6.094	0.000	OWSG MWD+IFR1+MS
1800.000	0.000	0.000	1800.000	6.452	0.000	6.452	0.000	3.096	0.000	0.000	6.452	6.452	0.000	OWSG MWD+IFR1+MS
1900.000	0.000	0.000	1900.000	6.811	0.000	6.811	0.000	3.179	0.000	0.000	6.811	6.811	0.000	OWSG MWD+IFR1+MS
2000.000	0.000	0.000	2000.000	7.169	0.000	7.169	0.000	3.266	0.000	0.000	7.169	7.169	0.000	OWSG MWD+IFR1+MS
2100.000	2.000	65.888	2099.980	7.519	0.000	7.522	0.000	3.355	0.000	0.000	7.523	7.522	-7.347	OWSG MWD+IFR1+MS
2200.000	4.000	65.888	2199.838	7.855	0.000	7.870	0.000	3.446	0.000	0.000	7.871	7.870	-10.872	OWSG MWD+IFR1+MS
2300.000	6.000	65.888	2299.452	8.183	0.000	8.218	0.000	3.538	0.000	0.000	8.221	8.218	-8.581	OWSG MWD+IFR1+MS
2400.000	8.000	65.888	2398.702	8.503	0.000	8.566	0.000	3.632	0.000	0.000	8.570	8.566	-4.702	OWSG MWD+IFR1+MS
2500.000	10.000	65.888	2497.465	8.814	0.000	8.915	0.000	3.728	0.000	0.000	8.920	8.914	0.857	OWSG MWD+IFR1+MS
2600.000	12.000	65.888	2595.623	9.118	0.000	9.264	0.000	3.826	0.000	0.000	9.269	9.262	8.361	OWSG MWD+IFR1+MS
2685.174	13.703	65.888	2678.661	9.369	0.000	9.562	0.000	3.911	0.000	0.000	9.567	9.559	14.808	OWSG MWD+IFR1+MS
2700.000	13.703	65.888	2693.065	9.422	0.000	9.614	0.000	3.924	0.000	0.000	9.620	9.611	12.189	OWSG MWD+IFR1+MS
2800.000	13.703	65.888	2790.218	9.777	0.000	9.966	0.000	4.039	0.000	0.000	9.970	9.958	30.010	OWSG MWD+IFR1+MS
2900.000	13.703	65.888	2887.372	10.136	0.000	10.320	0.000	4.159	0.000	0.000	10.324	10.307	38.248	OWSG MWD+IFR1+MS
3000.000	13.703	65.888	2984.525	10.497	0.000	10.677	0.000	4.282	0.000	0.000	10.681	10.658	42.051	OWSG MWD+IFR1+MS
3100.000	13.703	65.888	3081.679	10.860	0.000	11.035	0.000	4.410	0.000	0.000	11.039	11.011	44.012	OWSG MWD+IFR1+MS
3200.000	13.703	65.888	3178.833	11.226	0.000	11.395	0.000	4.541	0.000	0.000	11.399	11.366	45.087	OWSG MWD+IFR1+MS
3300.000	13.703	65.888	3275.986	11.594	0.000	11.757	0.000	4.676	0.000	0.000	11.761	11.723	45.678	OWSG MWD+IFR1+MS
3400.000	13.703	65.888	3373.140	11.963	0.000	12.120	0.000	4.814	0.000	0.000	12.125	12.082	45.975	OWSG MWD+IFR1+MS
3500.000	13.703	65.888	3470.293	12.335	0.000	12.484	0.000	4.955	0.000	0.000	12.490	12.443	46.082	OWSG MWD+IFR1+MS
3600.000	13.703	65.888	3567.447	12.707	0.000	12.850	0.000	5.100	0.000	0.000	12.856	12.805	46.059	OWSG MWD+IFR1+MS
3700.000	13.703	65.888	3664.600	13.081	0.000	13.216	0.000	5.248	0.000	0.000	13.223	13.168	45.941	OWSG MWD+IFR1+MS
3800.000	13.703	65.888	3761.754	13.457	0.000	13.584	0.000	5.398	0.000	0.000	13.591	13.532	45.752	OWSG MWD+IFR1+MS
3900.000	13.703	65.888	3858.907	13.833	0.000	13.953	0.000	5.552	0.000	0.000	13.960	13.898	45.509	OWSG MWD+IFR1+MS
4000.000	13.703	65.888	3956.061	14.210	0.000	14.322	0.000	5.708	0.000	0.000	14.330	14.265	45.223	OWSG MWD+IFR1+MS
4100.000	13.703	65.888	4053.214	14.589	0.000	14.692	0.000	5.868	0.000	0.000	14.701	14.632	44.901	

														OWSG MWD+IFR1+MS
4200.000	13.703	65.888	4150.368	14.968	0.000	15.063	0.000	6.030	0.000	0.000	15.073	15.001	44.551	OWSG MWD+IFR1+MS
4300.000	13.703	65.888	4247.521	15.349	0.000	15.435	0.000	6.194	0.000	0.000	15.445	15.370	44.175	OWSG MWD+IFR1+MS
4400.000	13.703	65.888	4344.675	15.730	0.000	15.807	0.000	6.362	0.000	0.000	15.818	15.740	43.778	OWSG MWD+IFR1+MS
4500.000	13.703	65.888	4441.828	16.111	0.000	16.180	0.000	6.532	0.000	0.000	16.191	16.111	43.362	OWSG MWD+IFR1+MS
4600.000	13.703	65.888	4538.982	16.494	0.000	16.553	0.000	6.704	0.000	0.000	16.566	16.483	42.930	OWSG MWD+IFR1+MS
4700.000	13.703	65.888	4636.135	16.877	0.000	16.927	0.000	6.880	0.000	0.000	16.940	16.855	42.483	OWSG MWD+IFR1+MS
4800.000	13.703	65.888	4733.289	17.260	0.000	17.301	0.000	7.057	0.000	0.000	17.316	17.228	42.022	OWSG MWD+IFR1+MS
4900.000	13.703	65.888	4830.442	17.644	0.000	17.676	0.000	7.237	0.000	0.000	17.691	17.602	41.549	OWSG MWD+IFR1+MS
5000.000	13.703	65.888	4927.596	18.029	0.000	18.051	0.000	7.420	0.000	0.000	18.067	17.976	41.064	OWSG MWD+IFR1+MS
5100.000	13.703	65.888	5024.749	18.414	0.000	18.427	0.000	7.605	0.000	0.000	18.444	18.350	40.569	OWSG MWD+IFR1+MS
5200.000	13.703	65.888	5121.903	18.800	0.000	18.803	0.000	7.793	0.000	0.000	18.821	18.725	40.063	OWSG MWD+IFR1+MS
5300.000	13.703	65.888	5219.056	19.186	0.000	19.179	0.000	7.983	0.000	0.000	19.198	19.100	39.548	OWSG MWD+IFR1+MS
5400.000	13.703	65.888	5316.210	19.572	0.000	19.556	0.000	8.176	0.000	0.000	19.576	19.476	39.024	OWSG MWD+IFR1+MS
5500.000	13.703	65.888	5413.363	19.959	0.000	19.933	0.000	8.371	0.000	0.000	19.954	19.852	38.491	OWSG MWD+IFR1+MS
5600.000	13.703	65.888	5510.517	20.346	0.000	20.310	0.000	8.568	0.000	0.000	20.333	20.229	37.950	OWSG MWD+IFR1+MS
5700.000	13.703	65.888	5607.670	20.734	0.000	20.687	0.000	8.768	0.000	0.000	20.711	20.606	37.401	OWSG MWD+IFR1+MS
5800.000	13.703	65.888	5704.824	21.121	0.000	21.065	0.000	8.970	0.000	0.000	21.090	20.983	36.845	OWSG MWD+IFR1+MS
5900.000	13.703	65.888	5801.977	21.509	0.000	21.443	0.000	9.175	0.000	0.000	21.470	21.361	36.282	OWSG MWD+IFR1+MS
6000.000	13.703	65.888	5899.131	21.898	0.000	21.821	0.000	9.382	0.000	0.000	21.849	21.738	35.711	OWSG MWD+IFR1+MS
6100.000	13.703	65.888	5996.284	22.286	0.000	22.200	0.000	9.591	0.000	0.000	22.229	22.117	35.135	OWSG MWD+IFR1+MS
6200.000	13.703	65.888	6093.438	22.675	0.000	22.579	0.000	9.803	0.000	0.000	22.610	22.495	34.552	OWSG MWD+IFR1+MS
6300.000	13.703	65.888	6190.591	23.064	0.000	22.958	0.000	10.017	0.000	0.000	22.990	22.874	33.963	OWSG MWD+IFR1+MS
6400.000	13.703	65.888	6287.745	23.454	0.000	23.337	0.000	10.234	0.000	0.000	23.371	23.253	33.368	OWSG MWD+IFR1+MS
6500.000	13.703	65.888	6384.898	23.843	0.000	23.716	0.000	10.453	0.000	0.000	23.752	23.632	32.768	OWSG MWD+IFR1+MS
6600.000	13.703	65.888	6482.052	24.233	0.000	24.095	0.000	10.674	0.000	0.000	24.133	24.011	32.163	OWSG MWD+IFR1+MS
6700.000	13.703	65.888	6579.205	24.623	0.000	24.475	0.000	10.898	0.000	0.000	24.514	24.391	31.554	OWSG MWD+IFR1+MS
6800.000	13.703	65.888	6676.359	25.013	0.000	24.855	0.000	11.125	0.000	0.000	24.896	24.770	30.940	OWSG MWD+IFR1+MS
6846.300	13.703	65.888	6721.339	25.194	0.000	25.030	0.000	11.230	0.000	0.000	25.072	24.946	30.644	OWSG MWD+IFR1+MS
6900.000	12.629	65.888	6773.627	25.429	0.000	25.234	0.000	11.354	0.000	0.000	25.277	25.149	30.380	OWSG MWD+IFR1+MS
7000.000	10.629	65.888	6871.569	25.843	0.000	25.609	0.000	11.583	0.000	0.000	25.654	25.525	29.935	OWSG MWD+IFR1+MS
7100.000	8.629	65.888	6970.155	26.224	0.000	25.980	0.000	11.812	0.000	0.000	26.026	25.895	29.567	OWSG MWD+IFR1+MS
7200.000	6.629	65.888	7069.265	26.570	0.000	26.346	0.000	12.039	0.000	0.000	26.392	26.261	29.336	

														OWSG MWD+IFR1+MS
7300.000	4.629	65.888	7168.777	26.882	0.000	26.706	0.000	12.264	0.000	0.000	26.753	26.620	29.357	OWSG MWD+IFR1+MS
7400.000	2.629	65.888	7268.572	27.159	0.000	27.060	0.000	12.487	0.000	0.000	27.107	26.973	29.734	OWSG MWD+IFR1+MS
7500.000	0.629	65.888	7368.526	27.401	0.000	27.408	0.000	12.709	0.000	0.000	27.454	27.318	30.552	OWSG MWD+IFR1+MS
7531.475	0.000	0.000	7400.000	27.460	0.000	27.525	0.000	12.779	0.000	0.000	27.560	27.425	30.848	OWSG MWD+IFR1+MS
7600.000	0.000	0.000	7468.525	27.691	0.000	27.753	0.000	12.931	0.000	0.000	27.790	27.654	31.397	OWSG MWD+IFR1+MS
7700.000	0.000	0.000	7568.525	28.028	0.000	28.088	0.000	13.155	0.000	0.000	28.127	27.988	32.169	OWSG MWD+IFR1+MS
7800.000	0.000	0.000	7668.525	28.365	0.000	28.422	0.000	13.383	0.000	0.000	28.463	28.324	32.905	OWSG MWD+IFR1+MS
7900.000	0.000	0.000	7768.525	28.703	0.000	28.758	0.000	13.613	0.000	0.000	28.801	28.659	33.608	OWSG MWD+IFR1+MS
8000.000	0.000	0.000	7868.525	29.041	0.000	29.093	0.000	13.847	0.000	0.000	29.139	28.996	34.280	OWSG MWD+IFR1+MS
8100.000	0.000	0.000	7968.525	29.380	0.000	29.430	0.000	14.084	0.000	0.000	29.477	29.332	34.921	OWSG MWD+IFR1+MS
8200.000	0.000	0.000	8068.525	29.719	0.000	29.767	0.000	14.325	0.000	0.000	29.816	29.670	35.532	OWSG MWD+IFR1+MS
8300.000	0.000	0.000	8168.525	30.059	0.000	30.104	0.000	14.568	0.000	0.000	30.156	30.007	36.117	OWSG MWD+IFR1+MS
8400.000	0.000	0.000	8268.525	30.399	0.000	30.442	0.000	14.815	0.000	0.000	30.495	30.346	36.675	OWSG MWD+IFR1+MS
8500.000	0.000	0.000	8368.525	30.740	0.000	30.780	0.000	15.065	0.000	0.000	30.836	30.684	37.208	OWSG MWD+IFR1+MS
8600.000	0.000	0.000	8468.525	31.081	0.000	31.119	0.000	15.318	0.000	0.000	31.177	31.023	37.717	OWSG MWD+IFR1+MS
8700.000	0.000	0.000	8568.525	31.422	0.000	31.458	0.000	15.574	0.000	0.000	31.518	31.363	38.205	OWSG MWD+IFR1+MS
8800.000	0.000	0.000	8668.525	31.764	0.000	31.798	0.000	15.834	0.000	0.000	31.859	31.702	38.670	OWSG MWD+IFR1+MS
8900.000	0.000	0.000	8768.525	32.106	0.000	32.138	0.000	16.096	0.000	0.000	32.201	32.043	39.116	OWSG MWD+IFR1+MS
9000.000	0.000	0.000	8868.525	32.448	0.000	32.479	0.000	16.362	0.000	0.000	32.544	32.383	39.543	OWSG MWD+IFR1+MS
9100.000	0.000	0.000	8968.525	32.791	0.000	32.819	0.000	16.631	0.000	0.000	32.886	32.724	39.952	OWSG MWD+IFR1+MS
9200.000	0.000	0.000	9068.525	33.134	0.000	33.161	0.000	16.903	0.000	0.000	33.229	33.065	40.344	OWSG MWD+IFR1+MS
9300.000	0.000	0.000	9168.525	33.478	0.000	33.502	0.000	17.178	0.000	0.000	33.573	33.407	40.719	OWSG MWD+IFR1+MS
9400.000	0.000	0.000	9268.525	33.821	0.000	33.844	0.000	17.456	0.000	0.000	33.916	33.749	41.080	OWSG MWD+IFR1+MS
9500.000	0.000	0.000	9368.525	34.165	0.000	34.187	0.000	17.738	0.000	0.000	34.260	34.091	41.426	OWSG MWD+IFR1+MS
9600.000	0.000	0.000	9468.525	34.510	0.000	34.529	0.000	18.023	0.000	0.000	34.605	34.434	41.758	OWSG MWD+IFR1+MS
9700.000	0.000	0.000	9568.525	34.854	0.000	34.872	0.000	18.311	0.000	0.000	34.949	34.777	42.077	OWSG MWD+IFR1+MS
9800.000	0.000	0.000	9668.525	35.199	0.000	35.215	0.000	18.601	0.000	0.000	35.294	35.120	42.384	OWSG MWD+IFR1+MS
9900.000	0.000	0.000	9768.525	35.545	0.000	35.559	0.000	18.896	0.000	0.000	35.640	35.464	42.679	OWSG MWD+IFR1+MS
10000.000	0.000	0.000	9868.525	35.890	0.000	35.903	0.000	19.193	0.000	0.000	35.985	35.807	42.963	OWSG MWD+IFR1+MS
10100.000	0.000	0.000	9968.525	36.236	0.000	36.247	0.000	19.493	0.000	0.000	36.331	36.151	43.237	OWSG MWD+IFR1+MS
10200.000	0.000	0.000	10068.525	36.582	0.000	36.591	0.000	19.797	0.000	0.000	36.677	36.496	43.500	OWSG MWD+IFR1+MS
10300.000	0.000	0.000	10168.525	36.928	0.000	36.936	0.000	20.103	0.000	0.000	37.023	36.840	43.754	

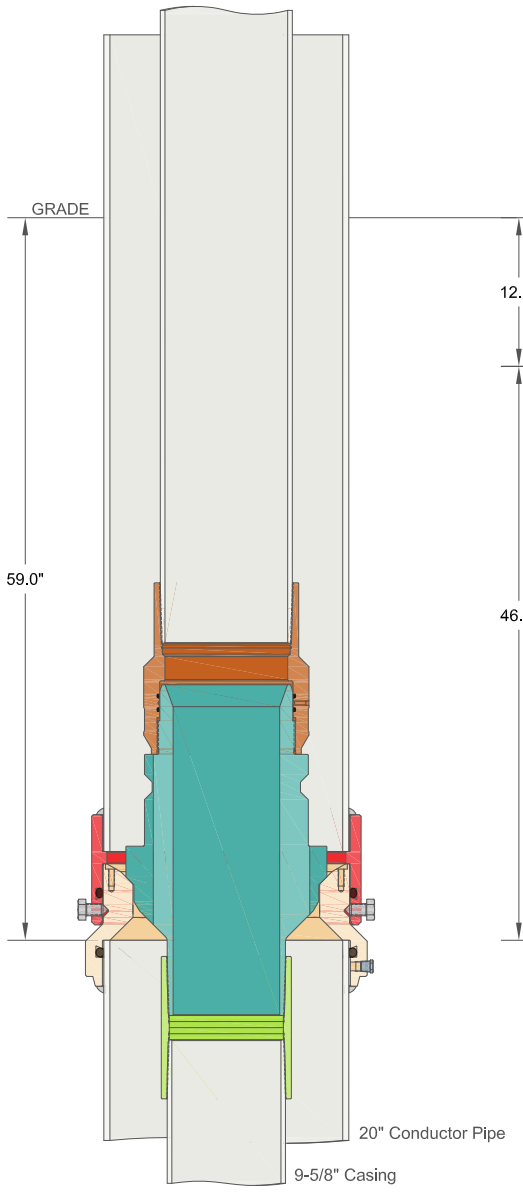
														OWSG MWD+IFR1+MS
10400.000	0.000	0.000	10268.525	37.274	0.000	37.281	0.000	20.413	0.000	0.000	37.369	37.185	43.999	OWSG MWD+IFR1+MS
10451.475	0.000	0.000	10320.000	37.453	0.000	37.458	0.000	20.574	0.000	0.000	37.548	37.363	44.122	OWSG MWD+IFR1+MS
10500.000	4.852	180.000	10368.467	37.402	-0.000	37.618	0.000	20.725	0.000	0.000	37.709	37.522	44.207	OWSG MWD+IFR1+MS
10600.000	14.852	180.000	10466.867	36.693	-0.000	37.926	0.000	21.028	0.000	0.000	38.021	37.819	43.505	OWSG MWD+IFR1+MS
10700.000	24.852	180.000	10560.805	35.238	-0.000	38.214	0.000	21.313	0.000	0.000	38.312	38.085	41.305	OWSG MWD+IFR1+MS
10800.000	34.852	180.000	10647.426	33.152	-0.000	38.476	0.000	21.574	0.000	0.000	38.573	38.312	37.666	OWSG MWD+IFR1+MS
10900.000	44.852	180.000	10724.098	30.612	-0.000	38.707	0.000	21.811	0.000	0.000	38.796	38.495	33.134	OWSG MWD+IFR1+MS
11000.000	54.852	180.000	10788.492	27.883	-0.000	38.901	0.000	22.027	0.000	0.000	38.978	38.633	28.170	OWSG MWD+IFR1+MS
11100.000	64.852	180.000	10838.651	25.330	-0.000	39.057	0.000	22.229	0.000	0.000	39.116	38.730	23.035	OWSG MWD+IFR1+MS
11200.000	74.852	180.000	10873.051	23.414	-0.000	39.172	0.000	22.422	0.000	0.000	39.211	38.791	17.789	OWSG MWD+IFR1+MS
11300.000	84.852	180.000	10890.647	22.600	-0.000	39.243	0.000	22.613	0.000	0.000	39.262	38.827	12.298	OWSG MWD+IFR1+MS
11351.475	90.000	180.000	10892.958	22.712	0.000	39.261	0.000	22.712	0.000	0.000	39.272	38.839	9.257	OWSG MWD+IFR1+MS
11400.000	90.000	180.000	10892.958	22.808	0.000	39.275	0.000	22.808	0.000	0.000	39.280	38.848	6.193	OWSG MWD+IFR1+MS
11500.000	90.000	179.990	10892.958	23.025	0.000	39.312	-0.000	23.025	0.000	0.000	39.312	38.857	0.015	OWSG MWD+IFR1+MS
11600.000	90.000	179.983	10892.958	23.267	0.000	39.360	-0.000	23.267	0.000	0.000	39.364	38.859	-5.247	OWSG MWD+IFR1+MS
11700.000	90.000	179.976	10892.958	23.532	0.000	39.419	-0.000	23.532	0.000	0.000	39.434	38.854	-9.260	OWSG MWD+IFR1+MS
11800.000	90.000	179.969	10892.958	23.820	0.000	39.490	-0.000	23.820	0.000	0.000	39.519	38.847	-12.128	OWSG MWD+IFR1+MS
11900.000	90.000	179.962	10892.958	24.131	0.000	39.572	-0.000	24.131	0.000	0.000	39.618	38.839	-14.102	OWSG MWD+IFR1+MS
12000.000	90.000	179.956	10892.958	24.462	0.000	39.665	-0.000	24.462	0.000	0.000	39.727	38.832	-15.425	OWSG MWD+IFR1+MS
12100.000	90.000	179.949	10892.958	24.814	0.000	39.769	-0.000	24.814	0.000	0.000	39.848	38.825	-16.281	OWSG MWD+IFR1+MS
12200.000	90.000	179.942	10892.958	25.186	0.000	39.884	-0.000	25.186	0.000	0.000	39.979	38.820	-16.806	OWSG MWD+IFR1+MS
12300.000	90.000	179.935	10892.958	25.576	0.000	40.010	-0.000	25.576	0.000	0.000	40.120	38.817	-17.092	OWSG MWD+IFR1+MS
12400.000	90.000	179.928	10892.958	25.984	0.000	40.146	-0.000	25.984	0.000	0.000	40.270	38.816	-17.206	OWSG MWD+IFR1+MS
12500.000	90.000	179.921	10892.958	26.409	0.000	40.293	-0.000	26.409	0.000	0.000	40.430	38.816	-17.197	OWSG MWD+IFR1+MS
12600.000	90.000	179.914	10892.958	26.851	0.000	40.450	-0.000	26.851	0.000	0.000	40.600	38.819	-17.097	OWSG MWD+IFR1+MS
12700.000	90.000	179.907	10892.959	27.307	0.000	40.618	-0.000	27.307	0.000	0.000	40.779	38.823	-16.932	OWSG MWD+IFR1+MS
12800.000	90.000	179.901	10892.959	27.779	0.000	40.796	-0.000	27.779	0.000	0.000	40.967	38.830	-16.720	OWSG MWD+IFR1+MS
12900.000	90.000	179.894	10892.959	28.264	0.000	40.985	-0.000	28.264	0.000	0.000	41.165	38.838	-16.475	OWSG MWD+IFR1+MS
13000.000	90.000	179.887	10892.959	28.763	0.000	41.183	-0.000	28.763	0.000	0.000	41.371	38.848	-16.207	OWSG MWD+IFR1+MS
13100.000	90.000	179.880	10892.959	29.274	0.000	41.391	-0.000	29.274	0.000	0.000	41.587	38.860	-15.923	OWSG MWD+IFR1+MS
13200.000	90.000	179.873	10892.959	29.797	0.000	41.608	-0.000	29.797	0.000	0.000	41.811	38.873	-15.630	OWSG MWD+IFR1+MS
13300.000	90.000	179.866	10892.959	30.331	0.000	41.836	-0.000	30.331	0.000	0.000	42.045	38.888	-15.332	

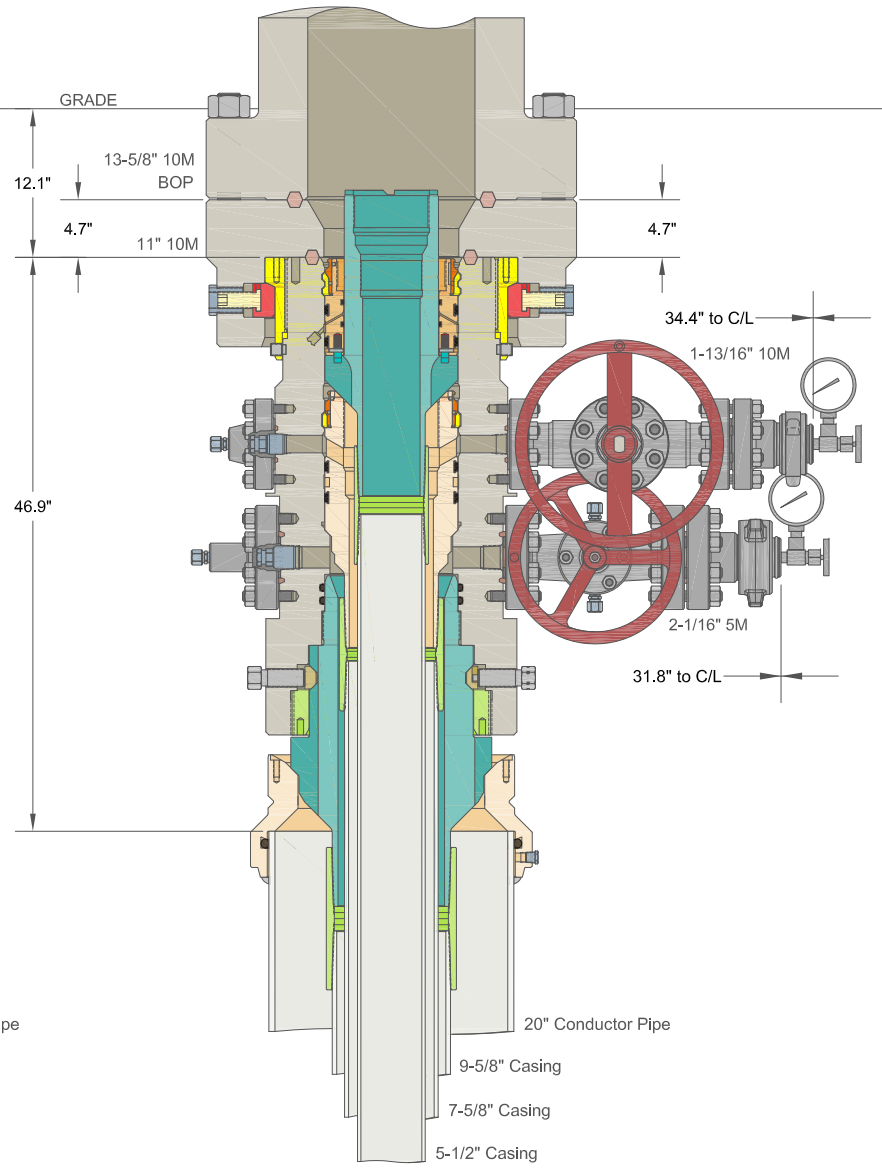
															OWSG MWD+IFR1+MS
13400.000	90.000	179.859	10892.960	30.876	0.000	42.072	-0.000	30.876	0.000	0.000	42.287	38.904	-15.032	OWSG MWD+IFR1+MS
13500.000	90.000	179.853	10892.960	31.431	0.000	42.318	-0.000	31.431	0.000	0.000	42.538	38.922	-14.733	OWSG MWD+IFR1+MS
13600.000	90.000	179.846	10892.960	31.996	0.000	42.573	-0.000	31.996	0.000	0.000	42.797	38.942	-14.437	OWSG MWD+IFR1+MS
13700.000	90.000	179.839	10892.960	32.570	0.000	42.836	-0.000	32.570	0.000	0.000	43.065	38.963	-14.145	OWSG MWD+IFR1+MS
13800.000	90.000	179.832	10892.960	33.152	0.000	43.109	-0.000	33.152	0.000	0.000	43.341	38.985	-13.858	OWSG MWD+IFR1+MS
13900.000	90.000	179.825	10892.961	33.743	0.000	43.390	-0.000	33.743	0.000	0.000	43.625	39.009	-13.577	OWSG MWD+IFR1+MS
14000.000	90.000	179.818	10892.961	34.342	0.000	43.679	-0.000	34.342	0.000	0.000	43.918	39.034	-13.303	OWSG MWD+IFR1+MS
14100.000	90.000	179.811	10892.961	34.948	0.000	43.977	-0.000	34.948	0.000	0.000	44.218	39.060	-13.036	OWSG MWD+IFR1+MS
14200.000	90.000	179.805	10892.961	35.560	0.000	44.283	-0.000	35.560	0.000	0.000	44.525	39.088	-12.776	OWSG MWD+IFR1+MS
14300.000	90.000	179.798	10892.962	36.180	0.000	44.596	-0.000	36.180	0.000	0.000	44.841	39.117	-12.523	OWSG MWD+IFR1+MS
14400.000	90.000	179.791	10892.962	36.806	0.000	44.917	-0.000	36.806	0.000	0.000	45.164	39.147	-12.278	OWSG MWD+IFR1+MS
14500.000	90.000	179.784	10892.962	37.438	0.000	45.246	-0.000	37.438	0.000	0.000	45.494	39.179	-12.040	OWSG MWD+IFR1+MS
14600.000	90.000	179.777	10892.962	38.075	0.000	45.583	-0.000	38.075	0.000	0.000	45.831	39.211	-11.809	OWSG MWD+IFR1+MS
14700.000	90.000	179.770	10892.963	38.718	0.000	45.926	-0.000	38.718	0.000	0.000	46.175	39.245	-11.586	OWSG MWD+IFR1+MS
14800.000	90.000	179.763	10892.963	39.366	0.000	46.277	-0.000	39.366	0.000	0.000	46.527	39.280	-11.369	OWSG MWD+IFR1+MS
14900.000	90.000	179.757	10892.963	40.019	0.000	46.634	-0.000	40.019	0.000	0.000	46.884	39.316	-11.159	OWSG MWD+IFR1+MS
15000.000	90.000	179.750	10892.964	40.677	0.000	46.999	-0.000	40.677	0.000	0.000	47.249	39.353	-10.955	OWSG MWD+IFR1+MS
15100.000	90.000	179.743	10892.964	41.339	0.000	47.370	-0.000	41.339	0.000	0.000	47.620	39.392	-10.758	OWSG MWD+IFR1+MS
15200.000	90.000	179.736	10892.964	42.005	0.000	47.747	-0.000	42.005	0.000	0.000	47.997	39.431	-10.567	OWSG MWD+IFR1+MS
15300.000	90.000	179.729	10892.965	42.675	0.000	48.131	-0.000	42.675	0.000	0.000	48.381	39.472	-10.383	OWSG MWD+IFR1+MS
15400.000	90.000	179.722	10892.965	43.349	0.000	48.520	-0.000	43.349	0.000	0.000	48.770	39.514	-10.204	OWSG MWD+IFR1+MS
15500.000	90.000	179.715	10892.965	44.027	0.000	48.916	-0.000	44.027	0.000	0.000	49.165	39.557	-10.030	OWSG MWD+IFR1+MS
15600.000	90.000	179.709	10892.966	44.709	0.000	49.318	-0.000	44.709	0.000	0.000	49.566	39.600	-9.862	OWSG MWD+IFR1+MS
15700.000	90.000	179.702	10892.966	45.393	0.000	49.725	-0.000	45.393	0.000	0.000	49.973	39.645	-9.699	OWSG MWD+IFR1+MS
15800.000	90.000	179.695	10892.967	46.081	0.000	50.138	-0.000	46.081	0.000	0.000	50.385	39.691	-9.541	OWSG MWD+IFR1+MS
15900.000	90.000	179.688	10892.967	46.772	0.000	50.557	-0.000	46.772	0.000	0.000	50.803	39.738	-9.388	OWSG MWD+IFR1+MS
16000.000	90.000	179.681	10892.967	47.466	0.000	50.981	-0.000	47.466	0.000	0.000	51.226	39.786	-9.240	OWSG MWD+IFR1+MS
16100.000	90.000	179.674	10892.968	48.162	0.000	51.410	-0.000	48.162	0.000	0.000	51.653	39.836	-9.096	OWSG MWD+IFR1+MS
16200.000	90.000	179.667	10892.968	48.862	0.000	51.843	-0.000	48.862	0.000	0.000	52.086	39.886	-8.956	OWSG MWD+IFR1+MS
16300.000	90.000	179.661	10892.969	49.564	0.000	52.282	-0.000	49.564	0.000	0.000	52.524	39.937	-8.820	OWSG MWD+IFR1+MS
16400.000	90.000	179.654	10892.969	50.268	0.000	52.726	-0.000	50.268	0.000	0.000	52.966	39.989	-8.689	OWSG MWD+IFR1+MS
16500.000	90.000	179.647	10892.970	50.974	0.000	53.174	-0.000	50.975	0.000	0.000	53.413	40.042	-8.561	

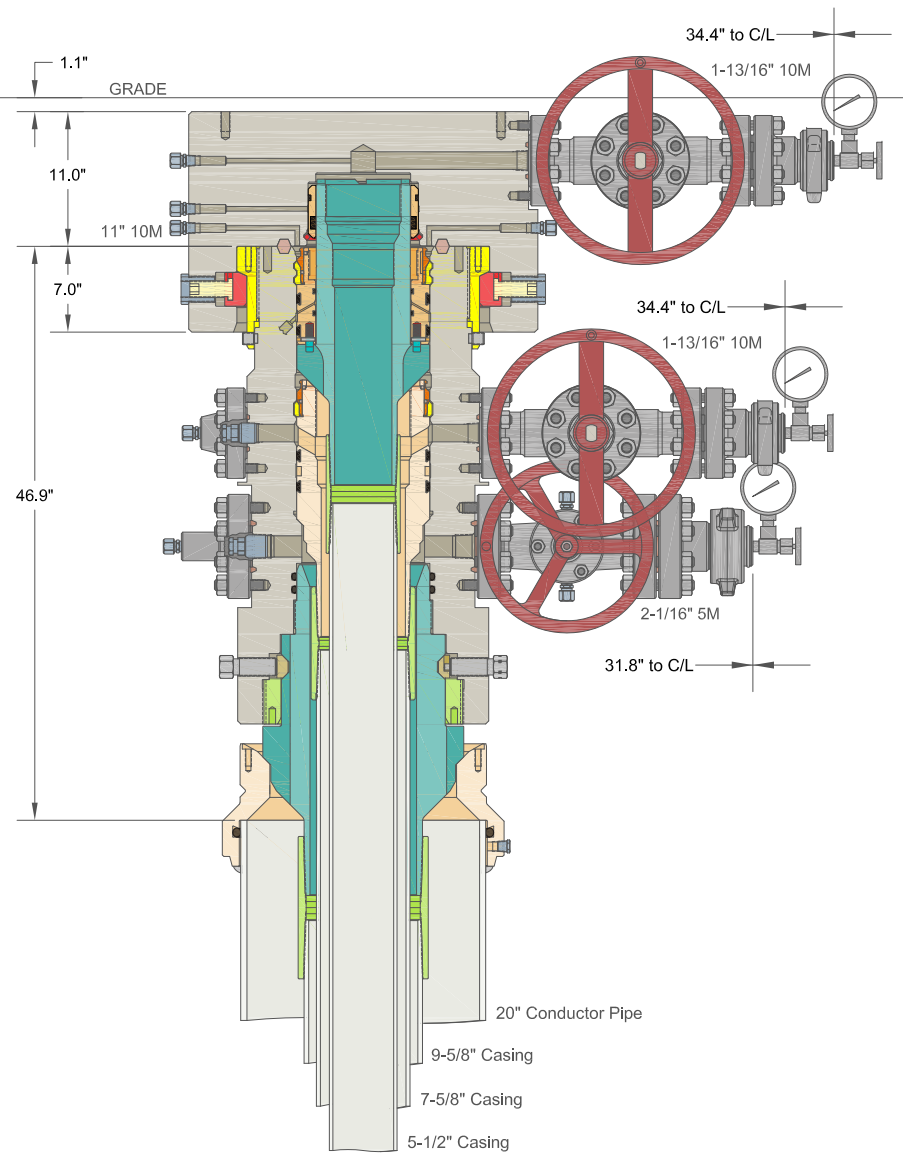
														OWSG MWD+IFR1+MS
16600.000	90.000	179.640	10892.970	51.683	0.000	53.627	-0.000	51.683	0.000	0.000	53.865	40.096	-8.437	OWSG MWD+IFR1+MS
16700.000	90.000	179.633	10892.971	52.394	0.000	54.085	-0.000	52.394	0.000	0.000	54.321	40.151	-8.316	OWSG MWD+IFR1+MS
16800.000	90.000	179.626	10892.971	53.108	0.000	54.547	-0.000	53.108	0.000	0.000	54.781	40.207	-8.199	OWSG MWD+IFR1+MS
16900.000	90.000	179.619	10892.971	53.823	0.000	55.012	-0.000	53.823	0.000	0.000	55.246	40.264	-8.085	OWSG MWD+IFR1+MS
17000.000	90.000	179.613	10892.972	54.540	0.000	55.483	-0.000	54.540	0.000	0.000	55.714	40.322	-7.975	OWSG MWD+IFR1+MS
17100.000	90.000	179.606	10892.973	55.259	0.000	55.957	-0.000	55.259	0.000	0.000	56.187	40.381	-7.867	OWSG MWD+IFR1+MS
17200.000	90.000	179.599	10892.973	55.979	0.000	56.435	-0.000	55.979	0.000	0.000	56.663	40.441	-7.763	OWSG MWD+IFR1+MS
17300.000	90.000	179.592	10892.974	56.702	0.000	56.916	-0.000	56.702	0.000	0.000	57.144	40.502	-7.661	OWSG MWD+IFR1+MS
17400.000	90.000	179.585	10892.974	57.426	0.000	57.402	-0.000	57.426	0.000	0.000	57.627	40.564	-7.562	OWSG MWD+IFR1+MS
17500.000	90.000	179.578	10892.975	58.151	0.000	57.891	-0.000	58.151	0.000	0.000	58.115	40.626	-7.465	OWSG MWD+IFR1+MS
17600.000	90.000	179.571	10892.975	58.878	0.000	58.384	-0.000	58.878	0.000	0.000	58.606	40.690	-7.371	OWSG MWD+IFR1+MS
17700.000	90.000	179.565	10892.976	59.607	0.000	58.880	-0.000	59.607	0.000	0.000	59.101	40.754	-7.280	OWSG MWD+IFR1+MS
17800.000	90.000	179.558	10892.976	60.337	0.000	59.380	-0.000	60.337	0.000	0.000	59.598	40.820	-7.191	OWSG MWD+IFR1+MS
17900.000	90.000	179.551	10892.977	61.068	0.000	59.882	-0.000	61.068	0.000	0.000	60.100	40.886	-7.104	OWSG MWD+IFR1+MS
18000.000	90.000	179.544	10892.977	61.801	0.000	60.388	-0.000	61.801	0.000	0.000	60.604	40.953	-7.019	OWSG MWD+IFR1+MS
18100.000	90.000	179.537	10892.978	62.535	0.000	60.897	-0.000	62.535	0.000	0.000	61.111	41.021	-6.937	OWSG MWD+IFR1+MS
18200.000	90.000	179.530	10892.979	63.270	0.000	61.410	-0.000	63.270	0.000	0.000	61.622	41.090	-6.856	OWSG MWD+IFR1+MS
18300.000	90.000	179.523	10892.979	64.006	0.000	61.925	-0.000	64.006	0.000	0.000	62.135	41.160	-6.778	OWSG MWD+IFR1+MS
18400.000	90.000	179.517	10892.980	64.744	0.000	62.443	-0.000	64.744	0.000	0.000	62.651	41.231	-6.701	OWSG MWD+IFR1+MS
18500.000	90.000	179.510	10892.981	65.482	0.000	62.963	-0.000	65.482	0.000	0.000	63.170	41.303	-6.627	OWSG MWD+IFR1+MS
18600.000	90.000	179.503	10892.981	66.222	0.000	63.487	-0.000	66.222	0.000	0.000	63.692	41.375	-6.554	OWSG MWD+IFR1+MS
18700.000	90.000	179.496	10892.982	66.963	0.000	64.013	-0.000	66.963	0.000	0.000	64.217	41.449	-6.483	OWSG MWD+IFR1+MS
18800.000	90.000	179.489	10892.982	67.704	0.000	64.542	-0.000	67.704	0.000	0.000	64.744	41.523	-6.413	OWSG MWD+IFR1+MS
18900.000	90.000	179.482	10892.983	68.447	0.000	65.074	-0.000	68.447	0.000	0.000	65.274	41.598	-6.345	OWSG MWD+IFR1+MS
19000.000	90.000	179.475	10892.984	69.190	0.000	65.607	-0.000	69.190	0.000	0.000	65.806	41.674	-6.279	OWSG MWD+IFR1+MS
19100.000	90.000	179.468	10892.985	69.935	0.000	66.144	-0.000	69.935	0.000	0.000	66.340	41.751	-6.214	OWSG MWD+IFR1+MS
19200.000	90.000	179.462	10892.985	70.680	0.000	66.682	-0.000	70.680	0.000	0.000	66.877	41.828	-6.151	OWSG MWD+IFR1+MS
19300.000	90.000	179.455	10892.986	71.426	0.000	67.223	-0.000	71.426	0.000	0.000	67.417	41.907	-6.089	OWSG MWD+IFR1+MS
19400.000	90.000	179.448	10892.987	72.173	0.000	67.767	-0.000	72.173	0.000	0.000	67.958	41.986	-6.029	OWSG MWD+IFR1+MS
19500.000	90.000	179.441	10892.987	72.921	0.000	68.312	-0.000	72.921	0.000	0.000	68.502	42.066	-5.970	OWSG MWD+IFR1+MS
19600.000	90.000	179.434	10892.988	73.670	0.000	68.860	-0.000	73.670	0.000	0.000	69.048	42.147	-5.912	OWSG MWD+IFR1+MS
19700.000	90.000	179.427	10892.989	74.419	0.000	69.410	-0.000	74.419	0.000	0.000	69.596	42.229	-5.856	

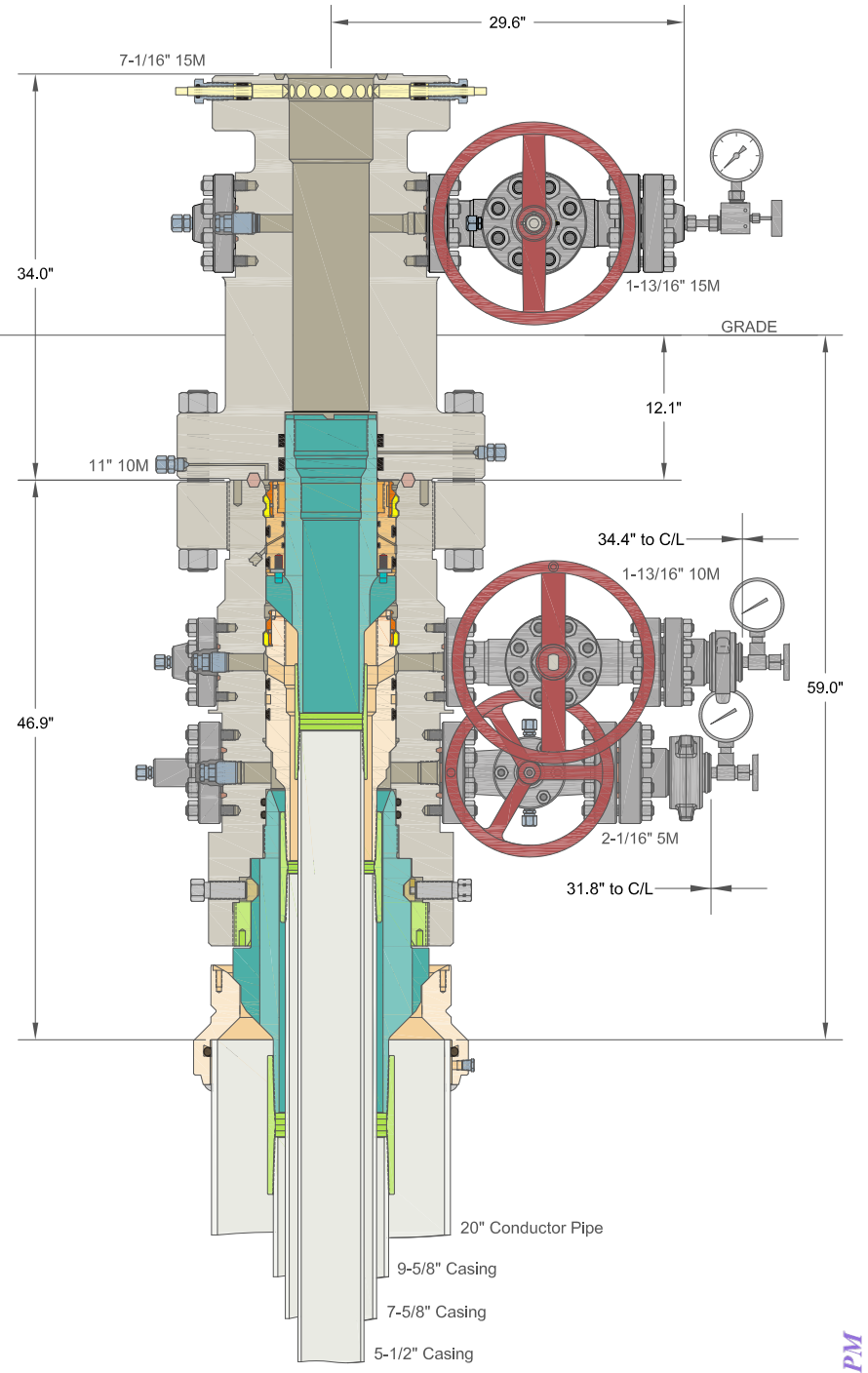
														OWSG MWD+IFR1+MS
19800.000	90.000	179.420	10892.990	75.169	0.000	69.961	-0.000	75.169	0.000	0.000	70.146	42.311	-5.800	OWSG MWD+IFR1+MS
19900.000	90.000	179.414	10892.990	75.920	0.000	70.515	-0.000	75.920	0.000	0.000	70.698	42.395	-5.746	OWSG MWD+IFR1+MS
20000.000	90.000	179.407	10892.991	76.671	0.000	71.071	-0.000	76.671	0.000	0.000	71.252	42.479	-5.693	OWSG MWD+IFR1+MS
20100.000	90.000	179.400	10892.992	77.423	0.000	71.628	-0.000	77.423	0.000	0.000	71.808	42.564	-5.641	OWSG MWD+IFR1+MS
20200.000	90.000	179.393	10892.993	78.176	0.000	72.188	-0.000	78.176	0.000	0.000	72.366	42.649	-5.591	OWSG MWD+IFR1+MS
20300.000	90.000	179.386	10892.993	78.929	0.000	72.749	-0.000	78.929	0.000	0.000	72.926	42.736	-5.541	OWSG MWD+IFR1+MS
20400.000	90.000	179.379	10892.994	79.683	0.000	73.312	-0.000	79.683	0.000	0.000	73.488	42.823	-5.492	OWSG MWD+IFR1+MS
20500.000	90.000	179.372	10892.995	80.437	0.000	73.877	-0.000	80.438	0.000	0.000	74.051	42.911	-5.445	OWSG MWD+IFR1+MS
20600.000	90.000	179.366	10892.996	81.193	0.000	74.444	-0.000	81.193	0.000	0.000	74.616	43.000	-5.398	OWSG MWD+IFR1+MS
20700.000	90.000	179.359	10892.997	81.948	0.000	75.012	-0.000	81.948	0.000	0.000	75.182	43.089	-5.352	OWSG MWD+IFR1+MS
20800.000	90.000	179.352	10892.998	82.704	0.000	75.582	-0.000	82.704	0.000	0.000	75.751	43.180	-5.308	OWSG MWD+IFR1+MS
20900.000	90.000	179.345	10892.998	83.461	0.000	76.153	-0.000	83.461	0.000	0.000	76.321	43.271	-5.264	OWSG MWD+IFR1+MS
21000.000	90.000	179.338	10892.999	84.218	0.000	76.726	-0.000	84.218	0.000	0.000	76.892	43.362	-5.221	OWSG MWD+IFR1+MS
21089.078	90.000	179.332	10893.000	84.893	0.000	77.238	-0.000	84.893	0.000	0.000	77.402	43.445	-5.183	OWSG MWD+IFR1+MS

Plan Targets	PLU 16 TWR 127H				
	Measured Depth	**Grid Northing**	**Grid Easting**	**TVD MSL**	**Target Shape**
Target Name	**(ft)**	**(ft)**	**(ft)**	**(ft)**	
PLU 16 TWR FTP 9	11178.38	440216.76	672382.60	7350.00	CIRCLE
PLU 16 TWR BHL 9	21089.08	430179.42	672439.36	7350.00	CIRCLE









ALL DIMENSIONS APPROXIMATE

CACTUS WELLHEAD LLC

20" x 9-5/8" x 7-5/8" x 5-1/2" MBU-T-CFL-R-DBLO Wellhead
With 11" 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	

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

CONDITIONS

Action 221728

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 221728
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Prior to the submission of this C-104, there was a C-103 NOI submitted for approval. The C-103 NOI was not approved or rejected; however, the work requested in the C-103 NOI was performed and completed without NMOCD approval. This action is currently under review from our legal department.	2/25/2025