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

Sundry Print Report

10/17/2022

Well Name: SHADY PINES 24-36 STATE FED COM

Well Location: T26S / R29E / SEC 24 / SWSE /

County or Parish/State:

Well Number: 101H

Type of Well: CONVENTIONAL GAS WELL

Allottee or Tribe Name:

Lease Number: NMNM017225A

Unit or CA Name:

Unit or CA Number:

US Well Number: 3001550013

Well Status: Approved Application for Permit to Drill

Operator: XTO ENERGY INCORPORATED

Notice of Intent

Sundry ID: 2694774

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 09/26/2022

Time Sundry Submitted: 02:07

Date proposed operation will begin: 10/14/2022

Procedure Description: **Well Name and Number Change, Bottom Hole Location Change, First and Last Take Point Changes, and Casing/Cement Changes XTO Energy, Inc. requests permission to make the following changes to the original APD: Well Name Change from Shady Pines 24-36 to Shady Pines State Fed Com. Well Number Change from 131H to 101H. No Additional Surface Disturbance. Change BHL from 200'FSL & 2010'FEL to 396"FSL & 2498'FEL, Section 24-T26S-R29E Change FTP fr/330'FNL & 2010'FEL to 330'FNL & 1370'FEL Change LTP fr/330'FSL & 2010'FEL to 330'FSL & 1572'FEL Casing/Cement design per the attached drilling program. Attachments: C102 Drilling Program Directional Plan Multibowl Diagram

NOI Attachments

Procedure Description

Shady_Pines_24_36_State_Fed_Com_101H_Attachments_20220926140617.pdf

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Operator: XTO ENERGY INCORPORATED

Conditions of Approval

Additional

Sundry_2694774_Shady_Pines_24_36_State_Fed_Com_101H_COAs_20221014073736.pdf

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: SEP 26, 2022 02:06 PM

Name: XTO ENERGY INCORPORATED

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: 10/17/2022

Signature: Chris Walls

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- 50013	98220	Purple Sage; Wolfcamp

[4] Property Code	[5] Property Name	[6] Well Number
	SHADY PINES 24-36	101H
[7] OGRID No.	**[8] Operator Name**	**[9] Elevation**
005380	XTO ENERGY, INC.	2,976'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	24	26 S	29 E		396	SOUTH	2,498	EAST	EDDY

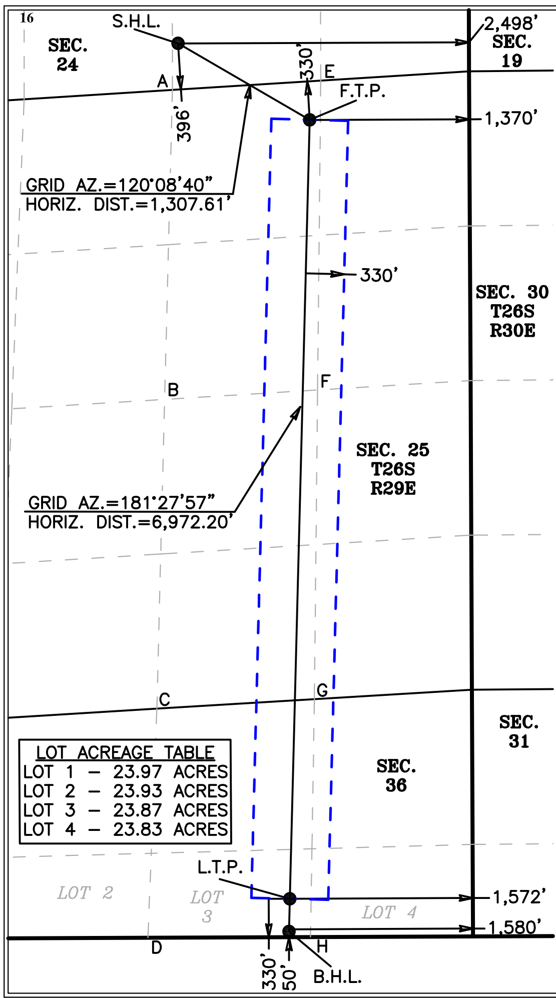
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
3	36	26 S	29 E		50	SOUTH	1,580	EAST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
447.7			

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 =	371,685.0	Y =	364,338.4
X =	664,083.7	X =	665,043.3
LAT. =	32.021224 °N	LAT. =	32.001019 °N
LONG. =	103.937273 °W	LONG. =	103.934264 °W
FTP (NAD83 NME)		**BHL (NAD83 NME)**	
Y =	371,028.3	Y =	364,058.4
X =	665,214.5	X =	665,036.1
LAT. =	32.019407 °N	LAT. =	32.000249 °N
LONG. =	103.933632 °W	LONG. =	103.934291 °W

CORNER COORDINATES (NAD83 NME)

A - Y =	371,284.9 N	X =	664,035.4 E
B - Y =	368,627.0 N	X =	663,968.5 E
C - Y =	365,971.1 N	X =	663,901.7 E
D - Y =	364,003.6 N	X =	663,825.4 E
E - Y =	371,364.9 N	X =	665,309.0 E
F - Y =	368,707.7 N	X =	665,281.7 E
G - Y =	366,052.5 N	X =	665,254.3 E
H - Y =	364,009.1 N	X =	665,220.9 E

SHL (NAD27 NME)		LTP (NAD27 NME)	
Y =	371,627.5	Y =	364,281.2
X =	622,898.1	X =	623,857.4
LAT. =	32.021098 °N	LAT. =	32.000893 °N
LONG. =	103.936792 °W	LONG. =	103.933784 °W
FTP (NAD27 NME)		**BHL (NAD27 NME)**	
Y =	370,970.8	Y =	364,001.1
X =	624,028.8	X =	623,850.3
LAT. =	32.019282 °N	LAT. =	32.000124 °N
LONG. =	103.933151 °W	LONG. =	103.933810 °W

CORNER COORDINATES (NAD27 NME)

A - Y =	371,227.4 N	X =	622,849.8 E
B - Y =	368,569.6 N	X =	622,782.8 E
C - Y =	365,913.8 N	X =	622,715.9 E
D - Y =	363,946.3 N	X =	622,639.6 E
E - Y =	371,307.4 N	X =	624,123.3 E
F - Y =	368,650.3 N	X =	624,096.0 E
G - Y =	365,995.2 N	X =	624,068.5 E
H - Y =	363,951.9 N	X =	624,035.0 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.

Jessica Dooling 9/26/2022
Signature Date

Jessica Dooling
Printed Name

jessica.dooling@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.

09/23/2022
Date of Survey

Signatue and Seal of Professional Surveyor:

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

MARK DILLON HARP 23786
Certificate Number AW 2019061748

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

XTO Energy Inc.
Shady Pines 24-36 State Fed Com 101H
Projected TD: 16851.4' MD / 10311' TVD
SHL: 396' FSL & 2498' FEL , Section 24, T26S, R29E
BHL: 50' FSL & 1580' FEL , Section 36, T26S, R29E
Eddy County, NM

1. Geologic Name of Surface Formation

A. Quaternary

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

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	878'	Water
Top of Salt	1368'	Water
Base of Salt	2997'	Water
Delaware	3180'	Water
Brushy Canyon	5361'	Water/Oil/Gas
Bone Spring	6933'	Water
1st Bone Spring Ss	7901'	Water/Oil/Gas
2nd Bone Spring Ss	8692'	Water/Oil/Gas
3rd Bone Spring Sh	9363'	Water/Oil/Gas
Wolfcamp	10133'	Water/Oil/Gas
Wolfcamp X	10158'	Water/Oil/Gas
Wolfcamp Y	10236'	Water/Oil/Gas
Wolfcamp A	10261'	Water/Oil/Gas
Target/Land Curve	10311'	Water/Oil/Gas

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

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13.375 inch casing @ 1343' (25' above the salt) and circulating cement back to surface. The salt will be isolated by setting 9.625 inch casing at 3097' and circulating cement to surface. The second intermediate will isolate from the salt down to the next casing seat by setting 7.625 inch casing at 9398' and cementing to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 16851.4 MD/TD and 5.5 inch production casing will be set at TD and cemented back up to 2nd intermediate (estimated TOC 8898 feet).

3. Casing Design

Hole Size	MD	TVD	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 1343'	1343'	13.375	54.5	J-55	BTC	New	3.11	1.95	11.65
12.25	0' – 3097'	3091'	9.625	40	J-55	BTC	New	1.48	2.88	5.09
8.75	0' – 3197'	3190'	7.625	29.7	RY P-110	Flush Joint	New	2.27	3.32	2.00
8.75	3197' – 9398'	9337'	7.625	29.7	HC L-80	Flush Joint	New	1.65	2.84	2.20
6.75	0' – 9298'	9237'	5.5	20	RY P-110	Semi-Premium	New	1.05	1.91	2.48
6.75	9298' - 16851.4'	10311'	5.5	20	RY P-110	Semi-Flush	New	1.05	1.72	6.92

· 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 and intermediate 1 casing per this Sundry
· XTO requests to not utilize centralizers in the curve and lateral
· 9.625 Collapse analyzed using 50% evacuation based on regional experience.
· 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 5M annular & 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: 13-5/8" 10M top flange x 13-3/8" 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: 13.375, 54.5 New BTC, J-55 casing to be set at +/- 1343'

Lead: 770 sxs EconoCem-HLTRRC (mixed at 12.9 ppg, 1.87 ft3/sx, 10.13 gal/sx water)
Tail: 300 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 = 250 psi 24 hr = 500 psi

Due to the high probability of not getting cement to surface during conventional top-out jobs in the area, ~10-20 ppb gravel will be added on the backside using 1" pipe to get cement to surface, if required.

1st Intermediate Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 3097'

Lead: 1260 sxs Class C (mixed at 12.9 ppg, 1.39 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 +/- 9398'
1st Stage
Optional Lead: 130 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water)
TOC: 2897
Tail: 370 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
TOC: Brushy Canyon @ 5361
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: 320 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 (5361') 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. 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 +/- 16851.4'

Lead: 30 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 8898 feet
Tail: 510 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 9661.23 feet
Compressives: 12-hr = 1375 psi 24 hr = 2285 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 13.375 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 4167 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 13.375, 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.

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' - 1343'	17.5	FW/Native	8.3-8.8	35-40	NC
1343' - 3097'	12.25	Brine	9.7-10.2	30-32	NC
3097' - 9398'	8.75	BDE/OBM or FW/Brine	9.7-10.2	30-32	NC
9398' - 16851.4'	6.75	OBM	12-12.5	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 13-3/8" surface casing with brine solution. A 9.7 ppg -10.2 ppg brine mud will be used while drilling through the salt formation. Use fibrous materials as needed to control seepage and lost circulation. Pump viscous sweeps as needed for hole cleaning. Pump speed will be recorded on a daily drilling report after mudding up. A Pason or Totco will be used to detect changes in loss or gain of mud volume. A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system.

7. Auxiliary Well Control and Monitoring Equipment

A. A Kelly cock will be in the drill string at all times.
B. A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.
C. H2S monitors will be on location when drilling below the 13.375 casing.

8. Logging, Coring and Testing Program

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

Open hole logging will not be done on this well.

9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 170 to 190 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 6436 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.

COMPANY	Delaware Basin Asset (Plans)
FIELD	Eddy County
SITE	Shady Pines
WELL	101H
WELLPATH	OH
DESIGN	Plan 1
DEPTHUNT	(ft)

WELL INFO	
MAP DATUM	NAD 1927 (NADCON CONUS)
MAP SYSTEM	US State Plane 1927 (Exact solution)
MAP ZONE	New Mexico East 3001
WELL LAT	32.021098
WELL LON	-103.936792
WELL EW MAP	622897.9
WELL NS MAP	371627.5
CONVERGENCE	0.21
MAGMODEL	IGRF2020
DECLINATION	6.56
NORTH REF	Grid
GROUND ELEVN	2976
KB ELEVN	3009
VS AZI	176.01

SURVEY TYPE INFORMATION

H 0.00 - 16851.40
PLAN 1 :
XOMR2_OWSG
MWD+IFR1+MS

SURVEY LIST

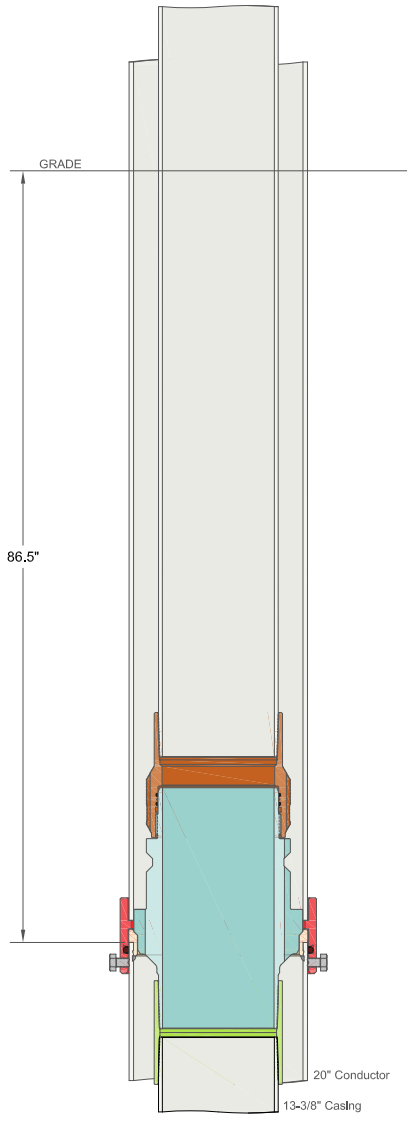
Measured Depth MD	Inclination INC	Azimuth AZI	Course Length CL	True Vertical Depth(TVD) TVD	SubSea TVD SSTVD	Local N/-S NS	Local E/-W EW	Easting X	Northing Y	Latitude LAT	Longitude LON	Dogleg Severity DLS	Build Rate BLD	Turn Rate TRN	Vertical Section VS
0	0	0	0	0	3009	0	0	622897.9	371627.5	32.021098	-103.936792	0	0	0	0
2000	0	0	2000	2000	1009	0	0	622897.9	371627.5	32.021098	-103.936792	0	0	0	0
2100	2	144.835	100	2099.98	909.02	-1.427	1.005	622898.905	371626.073	32.021094	-103.936789	2	2	0	1.493
2200	4	144.835	100	2199.838	809.162	-5.705	4.019	622901.919	371621.795	32.021083	-103.936779	2	2	0	5.971
2300	6	144.835	100	2299.452	709.548	-12.829	9.038	622906.938	371614.671	32.021063	-103.936763	2	2	0	13.427
2400	8	144.835	100	2398.702	610.298	-22.792	16.057	622913.957	371604.708	32.021035	-103.936741	2	2	0	23.854
2435.502	8.71	144.835	35.502	2433.827	575.173	-27.009	19.028	622916.928	371600.491	32.021024	-103.936731	2	2	0	28.267
2500	8.71	144.835	64.498	2497.581	511.419	-34.994	24.653	622922.553	371592.506	32.021002	-103.936713	0	0	0	36.624
2600	8.71	144.835	100	2596.427	412.573	-47.373	33.375	622931.275	371580.127	32.020968	-103.936685	0	0	0	49.58
2700	8.71	144.835	100	2695.274	313.726	-59.753	42.096	622939.996	371567.747	32.020934	-103.936657	0	0	0	62.537
2800	8.71	144.835	100	2794.121	214.879	-72.133	50.818	622948.718	371555.367	32.020899	-103.936629	0	0	0	75.493
2900	8.71	144.835	100	2892.968	116.032	-84.512	59.54	622957.44	371542.988	32.020865	-103.936601	0	0	0	88.45

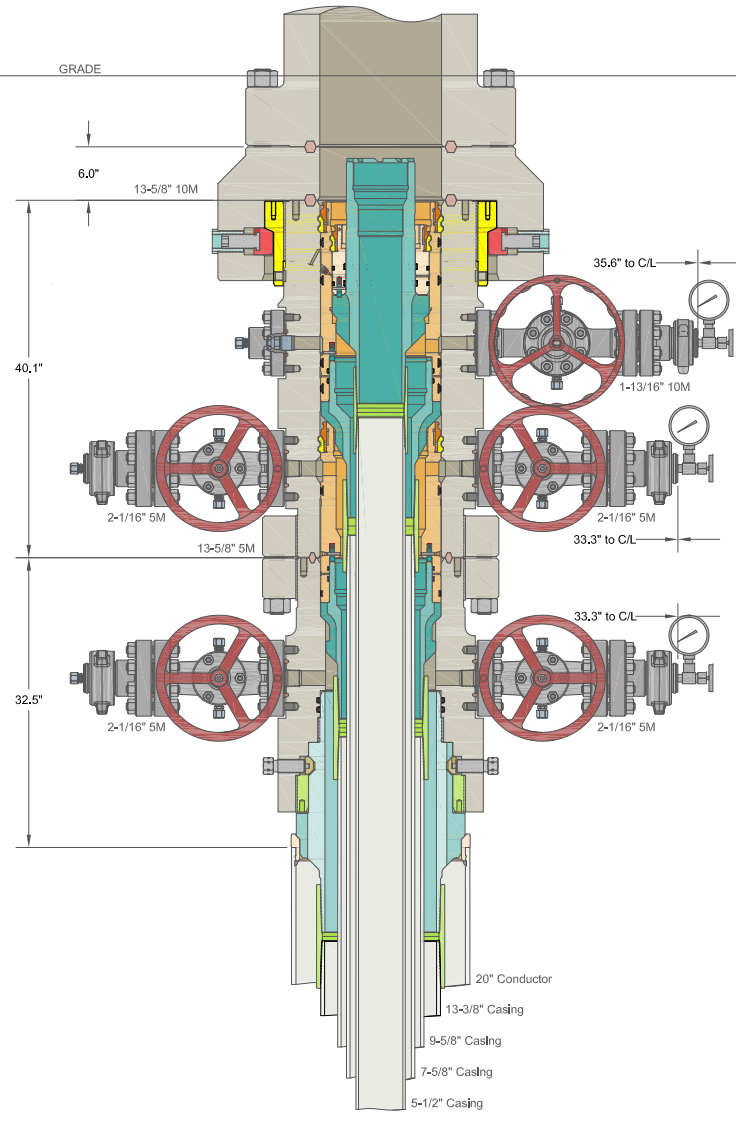
3000	8.71	144.835	100	2991.814	17.186	-96.892	68.261	622966.161	371530.608	32.020831	-103.936573	0	0	0	101.406
3100	8.71	144.835	100	3090.661	-81.661	-109.272	76.983	622974.883	371518.228	32.020797	-103.936545	0	0	0	114.363
3200	8.71	144.835	100	3189.508	-180.508	-121.651	85.704	622983.604	371505.849	32.020763	-103.936517	0	0	0	127.319
3300	8.71	144.835	100	3288.355	-279.355	-134.031	94.426	622992.326	371493.469	32.020729	-103.936489	0	0	0	140.275
3400	8.71	144.835	100	3387.201	-378.201	-146.411	103.147	623001.047	371481.089	32.020695	-103.936461	0	0	0	153.232
3500	8.71	144.835	100	3486.048	-477.048	-158.791	111.869	623009.769	371468.709	32.020661	-103.936433	0	0	0	166.188
3600	8.71	144.835	100	3584.895	-575.895	-171.17	120.591	623018.491	371456.33	32.020626	-103.936405	0	0	0	179.145
3700	8.71	144.835	100	3683.742	-674.742	-183.55	129.312	623027.212	371443.95	32.020592	-103.936377	0	0	0	192.101
3800	8.71	144.835	100	3782.588	-773.588	-195.93	138.034	623035.934	371431.57	32.020558	-103.936349	0	0	0	205.058
3900	8.71	144.835	100	3881.435	-872.435	-208.309	146.755	623044.655	371419.191	32.020524	-103.936321	0	0	0	218.014
4000	8.71	144.835	100	3980.282	-971.282	-220.689	155.477	623053.377	371406.811	32.02049	-103.936293	0	0	0	230.971
4100	8.71	144.835	100	4079.128	-1070.128	-233.069	164.198	623062.098	371394.431	32.020456	-103.936265	0	0	0	243.927
4200	8.71	144.835	100	4177.975	-1168.975	-245.448	172.92	623070.82	371382.052	32.020422	-103.936237	0	0	0	256.884
4300	8.71	144.835	100	4276.822	-1267.822	-257.828	181.642	623079.542	371369.672	32.020388	-103.936209	0	0	0	269.84
4400	8.71	144.835	100	4375.669	-1366.669	-270.208	190.363	623088.263	371357.292	32.020354	-103.936181	0	0	0	282.796
4500	8.71	144.835	100	4474.515	-1465.515	-282.588	199.085	623096.985	371344.912	32.020319	-103.936153	0	0	0	295.753
4600	8.71	144.835	100	4573.362	-1564.362	-294.967	207.806	623105.706	371332.533	32.020285	-103.936125	0	0	0	308.709
4700	8.71	144.835	100	4672.209	-1663.209	-307.347	216.528	623114.428	371320.153	32.020251	-103.936097	0	0	0	321.666
4800	8.71	144.835	100	4771.056	-1762.056	-319.727	225.249	623123.149	371307.773	32.020217	-103.936069	0	0	0	334.622
4900	8.71	144.835	100	4869.902	-1860.902	-332.106	233.971	623131.871	371295.394	32.020183	-103.936041	0	0	0	347.579
5000	8.71	144.835	100	4968.749	-1959.749	-344.486	242.693	623140.593	371283.014	32.020149	-103.936013	0	0	0	360.535
5100	8.71	144.835	100	5067.596	-2058.596	-356.866	251.414	623149.314	371270.634	32.020115	-103.935985	0	0	0	373.492
5200	8.71	144.835	100	5166.443	-2157.443	-369.245	260.136	623158.036	371258.255	32.020081	-103.935957	0	0	0	386.448
5300	8.71	144.835	100	5265.289	-2256.289	-381.625	268.857	623166.757	371245.875	32.020046	-103.935929	0	0	0	399.404
5400	8.71	144.835	100	5364.136	-2355.136	-394.005	277.579	623175.479	371233.495	32.020012	-103.935901	0	0	0	412.361
5500	8.71	144.835	100	5462.983	-2453.983	-406.385	286.301	623184.201	371221.115	32.019978	-103.935873	0	0	0	425.317
5600	8.71	144.835	100	5561.83	-2552.83	-418.764	295.022	623192.922	371208.736	32.019944	-103.935845	0	0	0	438.274
5700	8.71	144.835	100	5660.676	-2651.676	-431.144	303.744	623201.644	371196.356	32.01991	-103.935817	0	0	0	451.23
5800	8.71	144.835	100	5759.523	-2750.523	-443.524	312.465	623210.365	371183.976	32.019876	-103.935789	0	0	0	464.187
5900	8.71	144.835	100	5858.37	-2849.37	-455.903	321.187	623219.087	371171.597	32.019842	-103.935761	0	0	0	477.143
6000	8.71	144.835	100	5957.216	-2948.216	-468.283	329.908	623227.808	371159.217	32.019808	-103.935733	0	0	0	490.1
6100	8.71	144.835	100	6056.063	-3047.063	-480.663	338.63	623236.53	371146.837	32.019773	-103.935705	0	0	0	503.056
6200	8.71	144.835	100	6154.91	-3145.91	-493.042	347.352	623245.252	371134.458	32.019739	-103.935677	0	0	0	516.013
6300	8.71	144.835	100	6253.757	-3244.757	-505.422	356.073	623253.973	371122.078	32.019705	-103.935649	0	0	0	528.969
6400	8.71	144.835	100	6352.603	-3343.603	-517.802	364.795	623262.695	371109.698	32.019671	-103.935621	0	0	0	541.925
6500	8.71	144.835	100	6451.45	-3442.45	-530.182	373.516	623271.416	371097.318	32.019637	-103.935593	0	0	0	554.882
6600	8.71	144.835	100	6550.297	-3541.297	-542.561	382.238	623280.138	371084.939	32.019603	-103.935565	0	0	0	567.838
6700	8.71	144.835	100	6649.144	-3640.144	-554.941	390.959	623288.859	371072.559	32.019569	-103.935537	0	0	0	580.795
6800	8.71	144.835	100	6747.99	-3738.99	-567.321	399.681	623297.581	371060.179	32.019535	-103.935509	0	0	0	593.751
6900	8.71	144.835	100	6846.837	-3837.837	-579.7	408.403	623306.303	371047.8	32.0195	-103.935481	0	0	0	606.708
7000	8.71	144.835	100	6945.684	-3936.684	-592.08	417.124	623315.024	371035.42	32.019466	-103.935453	0	0	0	619.664
7100	8.71	144.835	100	7044.531	-4035.531	-604.46	425.846	623323.746	371023.04	32.019432	-103.935425	0	0	0	632.621
7200	8.71	144.835	100	7143.377	-4134.377	-616.839	434.567	623332.467	371010.661	32.019398	-103.935397	0	0	0	645.577
7300	8.71	144.835	100	7242.224	-4233.224	-629.219	443.289	623341.189	370998.281	32.019364	-103.935369	0	0	0	658.533
7400	8.71	144.835	100	7341.071	-4332.071	-641.599	452.01	623349.91	370985.901	32.01933	-103.935341	0	0	0	671.49
7500	8.71	144.835	100	7439.917	-4430.917	-653.979	460.732	623358.632	370973.521	32.019296	-103.935313	0	0	0	684.446

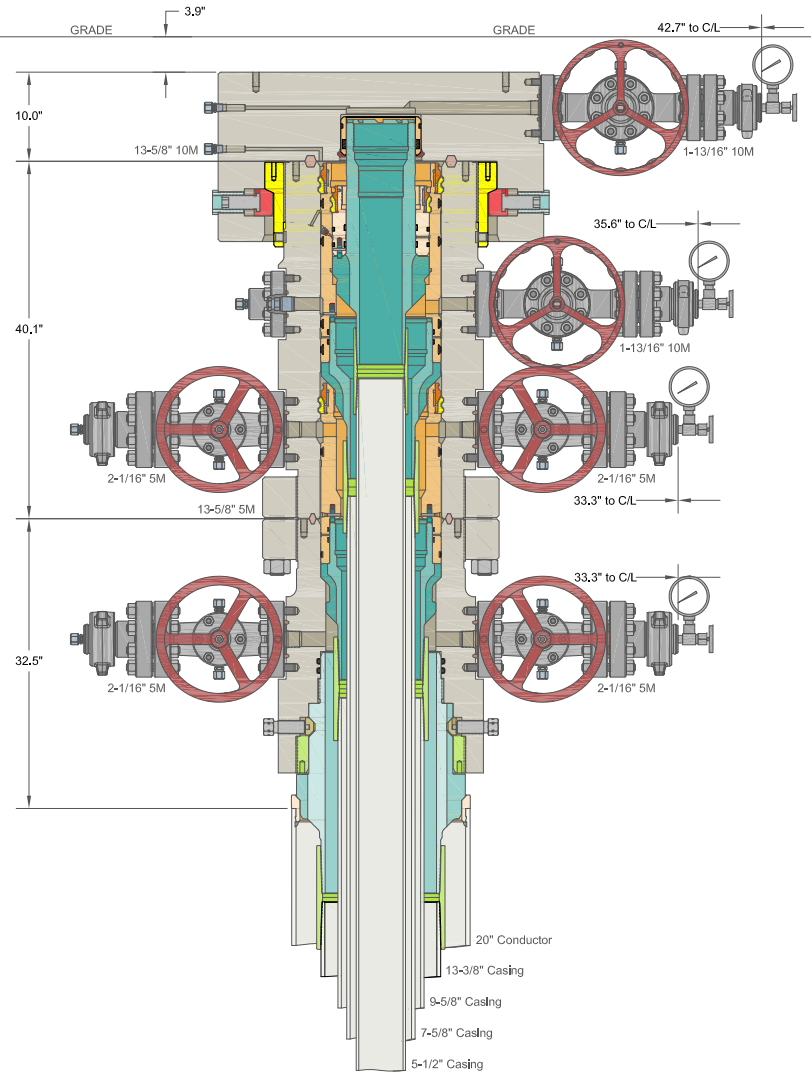
7600	8.71	144.835	100	7538.764	-4529.764	-666.358	469.454	623367.354	370961.142	32.019262	-103.935285	0	0	0	697.403
7627.729	8.71	144.835	27.729	7566.173	-4557.173	-669.791	471.872	623369.772	370957.709	32.019252	-103.935278	0	0	0	700.995
7700	7.265	144.835	72.271	7637.741	-4628.741	-678	477.656	623375.556	370949.5	32.01923	-103.935259	2	-2	0	709.587
7800	5.265	144.835	100	7737.139	-4728.139	-686.921	483.94	623381.84	370940.579	32.019205	-103.935239	2	-2	0	718.923
7900	3.265	144.835	100	7836.857	-4827.857	-692.999	488.222	623386.122	370934.501	32.019188	-103.935225	2	-2	0	725.285
8000	1.265	144.835	100	7936.774	-4927.774	-696.23	490.498	623388.398	370931.27	32.019179	-103.935218	2	-2	0	728.666
8063.231	0	0	63.231	8000	-4991	-696.8	490.9	623388.8	370930.7	32.019178	-103.935217	2	-2	0	729.263
8100	0	0	36.769	8036.769	-5027.769	-696.8	490.9	623388.8	370930.7	32.019178	-103.935217	0	0	0	729.263
8200	0	0	100	8136.769	-5127.769	-696.8	490.9	623388.8	370930.7	32.019178	-103.935217	0	0	0	729.263
8300	0	0	100	8236.769	-5227.769	-696.8	490.9	623388.8	370930.7	32.019178	-103.935217	0	0	0	729.263
8400	0	0	100	8336.769	-5327.769	-696.8	490.9	623388.8	370930.7	32.019178	-103.935217	0	0	0	729.263
8500	0	0	100	8436.769	-5427.769	-696.8	490.9	623388.8	370930.7	32.019178	-103.935217	0	0	0	729.263
8600	0	0	100	8536.769	-5527.769	-696.8	490.9	623388.8	370930.7	32.019178	-103.935217	0	0	0	729.263
8700	0	0	100	8636.769	-5627.769	-696.8	490.9	623388.8	370930.7	32.019178	-103.935217	0	0	0	729.263
8800	0	0	100	8736.769	-5727.769	-696.8	490.9	623388.8	370930.7	32.019178	-103.935217	0	0	0	729.263
8900	0	0	100	8836.769	-5827.769	-696.8	490.9	623388.8	370930.7	32.019178	-103.935217	0	0	0	729.263
9000	0	0	100	8936.769	-5927.769	-696.8	490.9	623388.8	370930.7	32.019178	-103.935217	0	0	0	729.263
9100	0	0	100	9036.769	-6027.769	-696.8	490.9	623388.8	370930.7	32.019178	-103.935217	0	0	0	729.263
9200	0	0	100	9136.769	-6127.769	-696.8	490.9	623388.8	370930.7	32.019178	-103.935217	0	0	0	729.263
9300	0	0	100	9236.769	-6227.769	-696.8	490.9	623388.8	370930.7	32.019178	-103.935217	0	0	0	729.263
9400	0	0	100	9336.769	-6327.769	-696.8	490.9	623388.8	370930.7	32.019178	-103.935217	0	0	0	729.263
9500	0	0	100	9436.769	-6427.769	-696.8	490.9	623388.8	370930.7	32.019178	-103.935217	0	0	0	729.263
9600	0	0	100	9536.769	-6527.769	-696.8	490.9	623388.8	370930.7	32.019178	-103.935217	0	0	0	729.263
9661.231	0	0	61.231	9598	-6589	-696.8	490.9	623388.8	370930.7	32.019178	-103.935217	0	0	0	729.263
9700	3.102	179.741	38.769	9636.75	-6627.75	-697.849	490.905	623388.805	370929.651	32.019175	-103.935217	8	8	0	730.31
9750	7.102	179.741	50	9686.542	-6677.542	-702.294	490.925	623388.825	370925.206	32.019163	-103.935217	8	8	0	734.745
9800	11.102	179.741	50	9735.902	-6726.902	-710.202	490.96	623388.86	370917.298	32.019141	-103.935217	8	8	0	742.636
9850	15.102	179.741	50	9784.591	-6775.591	-721.533	491.012	623388.912	370905.967	32.01911	-103.935217	8	8	0	753.944
9900	19.102	179.741	50	9832.37	-6823.37	-736.233	491.078	623388.978	370891.267	32.019069	-103.935217	8	8	0	768.613
9950	23.102	179.741	50	9879.008	-6870.008	-754.23	491.159	623389.059	370873.27	32.01902	-103.935216	8	8	0	786.572
10000	27.102	179.741	50	9924.277	-6915.277	-775.437	491.255	623389.155	370852.063	32.018962	-103.935216	8	8	0	807.734
10050	31.102	179.741	50	9967.956	-6958.956	-799.75	491.365	623389.265	370827.75	32.018895	-103.935216	8	8	0	831.995
10100	35.102	179.741	50	10009.833	-7000.833	-827.05	491.488	623389.388	370800.45	32.01882	-103.935216	8	8	0	859.238
10150	39.102	179.741	50	10049.703	-7040.703	-857.205	491.624	623389.524	370770.295	32.018737	-103.935216	8	8	0	889.33
10200	43.102	179.741	50	10087.373	-7078.373	-890.068	491.772	623389.672	370737.432	32.018646	-103.935216	8	8	0	922.123
10250	47.102	179.741	50	10122.658	-7113.658	-925.478	491.932	623389.832	370702.022	32.018549	-103.935216	8	8	0	957.459
10300	51.102	179.741	50	10155.387	-7146.387	-963.264	492.102	623390.002	370664.236	32.018445	-103.935216	8	8	0	995.165
10350	55.102	179.741	50	10185.401	-7176.401	-1003.24	492.283	623390.183	370624.26	32.018335	-103.935216	8	8	0	1035.06
10400	59.102	179.741	50	10212.553	-7203.553	-1045.213	492.472	623390.372	370582.287	32.01822	-103.935216	8	8	0	1076.94
10450	63.102	179.741	50	10236.711	-7227.711	-1088.978	492.67	623390.57	370538.522	32.0181	-103.935216	8	8	0	1120.61
10500	67.102	179.741	50	10257.758	-7248.758	-1134.321	492.874	623390.774	370493.179	32.017975	-103.935215	8	8	0	1165.86
10550	71.102	179.741	50	10275.59	-7266.59	-1181.021	493.085	623390.985	370446.479	32.017847	-103.935215	8	8	0	1212.46
10600	75.102	179.741	50	10290.121	-7281.121	-1228.852	493.301	623391.201	370398.648	32.017715	-103.935215	8	8	0	1260.19
10650	79.102	179.741	50	10301.28	-7292.28	-1277.58	493.521	623391.421	370349.92	32.017581	-103.935215	8	8	0	1308.82
10700	83.102	179.741	50	10309.012	-7300.012	-1326.968	493.744	623391.644	370300.532	32.017445	-103.935215	8	8	0	1358.1
10750	87.102	179.741	50	10313.281	-7304.281	-1376.775	493.968	623391.868	370250.725	32.017308	-103.935215	8	8	0	1407.8

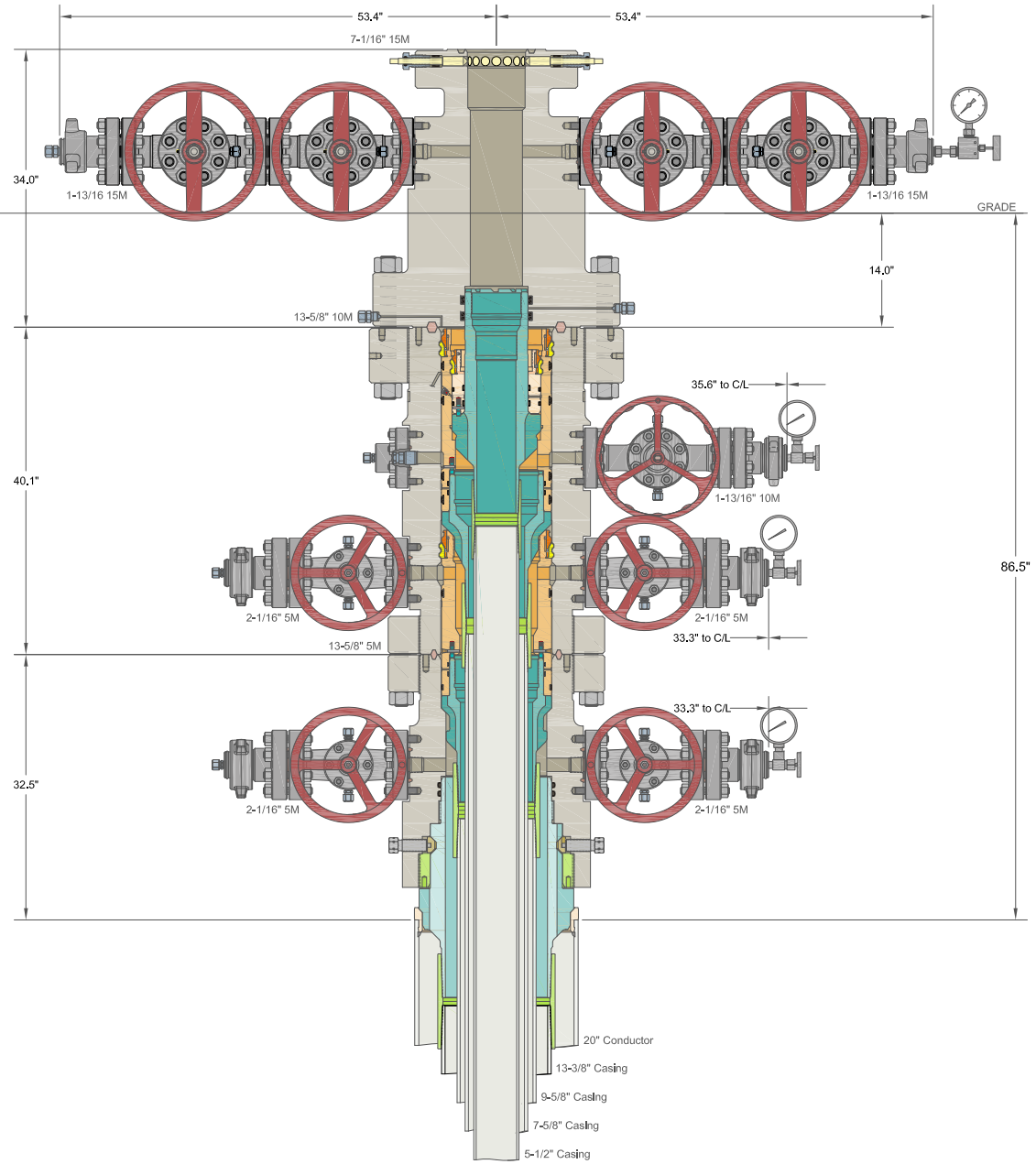
10786.609	90.03	179.741	36.609	10314.197	-7305.197	-1413.368	494.133	623392.033	370214.132	32.017208	-103.935215	8	8	0	1444.32
10800	90.03	179.741	13.391	10314.19	-7305.19	-1426.759	494.194	623392.094	370200.741	32.017171	-103.935215	0	0	0	1457.68
10900	90.03	179.741	100	10314.137	-7305.137	-1526.758	494.645	623392.545	370100.742	32.016896	-103.935214	0	0	0	1557.47
11000	90.03	179.741	100	10314.085	-7305.085	-1626.757	495.096	623392.996	370000.743	32.016621	-103.935214	0	0	0	1657.26
11100	90.03	179.741	100	10314.032	-7305.032	-1726.756	495.548	623393.448	369900.744	32.016346	-103.935214	0	0	0	1757.05
11200	90.03	179.741	100	10313.979	-7304.979	-1826.755	495.999	623393.899	369800.745	32.016071	-103.935214	0	0	0	1856.83
11300	90.03	179.741	100	10313.927	-7304.927	-1926.754	496.45	623394.35	369700.746	32.015797	-103.935213	0	0	0	1956.62
11400	90.03	179.741	100	10313.874	-7304.874	-2026.753	496.901	623394.801	369600.747	32.015522	-103.935213	0	0	0	2056.41
11500	90.03	179.741	100	10313.821	-7304.821	-2126.751	497.353	623395.253	369500.749	32.015247	-103.935213	0	0	0	2156.2
11600	90.03	179.741	100	10313.768	-7304.768	-2226.75	497.804	623395.704	369400.75	32.014972	-103.935213	0	0	0	2255.99
11700	90.03	179.741	100	10313.716	-7304.716	-2326.749	498.255	623396.155	369300.751	32.014697	-103.935212	0	0	0	2355.78
11800	90.03	179.741	100	10313.663	-7304.663	-2426.748	498.706	623396.606	369200.752	32.014422	-103.935212	0	0	0	2455.56
11900	90.03	179.741	100	10313.61	-7304.61	-2526.747	499.157	623397.057	369100.753	32.014147	-103.935212	0	0	0	2555.35
12000	90.03	179.741	100	10313.557	-7304.557	-2626.746	499.609	623397.509	369000.754	32.013872	-103.935211	0	0	0	2655.14
12100	90.03	179.741	100	10313.505	-7304.505	-2726.745	500.06	623397.96	368900.755	32.013597	-103.935211	0	0	0	2754.93
12200	90.03	179.741	100	10313.452	-7304.452	-2826.744	500.511	623398.411	368800.756	32.013322	-103.935211	0	0	0	2854.72
12300	90.03	179.741	100	10313.399	-7304.399	-2926.743	500.962	623398.862	368700.757	32.013047	-103.935211	0	0	0	2954.5
12400	90.03	179.741	100	10313.347	-7304.347	-3026.742	501.414	623399.314	368600.758	32.012773	-103.93521	0	0	0	3054.29
12500	90.03	179.741	100	10313.294	-7304.294	-3126.741	501.865	623399.765	368500.759	32.012498	-103.93521	0	0	0	3154.08
12600	90.03	179.741	100	10313.241	-7304.241	-3226.74	502.316	623400.216	368400.76	32.012223	-103.93521	0	0	0	3253.87
12700	90.03	179.741	100	10313.188	-7304.188	-3326.739	502.767	623400.667	368300.761	32.011948	-103.93521	0	0	0	3353.66
12800	90.03	179.741	100	10313.136	-7304.136	-3426.738	503.219	623401.119	368200.762	32.011673	-103.935209	0	0	0	3453.44
12900	90.03	179.741	100	10313.083	-7304.083	-3526.737	503.67	623401.57	368100.763	32.011398	-103.935209	0	0	0	3553.23
13000	90.03	179.741	100	10313.03	-7304.03	-3626.736	504.121	623402.021	368000.764	32.011123	-103.935209	0	0	0	3653.02
13100	90.03	179.741	100	10312.978	-7303.978	-3726.735	504.572	623402.472	367900.765	32.010848	-103.935209	0	0	0	3752.81
13200	90.03	179.741	100	10312.925	-7303.925	-3826.734	505.024	623402.924	367800.766	32.010573	-103.935208	0	0	0	3852.6
13300	90.03	179.741	100	10312.872	-7303.872	-3926.733	505.475	623403.375	367700.767	32.010298	-103.935208	0	0	0	3952.38
13400	90.03	179.741	100	10312.819	-7303.819	-4026.732	505.926	623403.826	367600.768	32.010024	-103.935208	0	0	0	4052.17
13500	90.03	179.741	100	10312.767	-7303.767	-4126.731	506.377	623404.277	367500.769	32.009749	-103.935207	0	0	0	4151.96
13600	90.03	179.741	100	10312.714	-7303.714	-4226.73	506.828	623404.728	367400.77	32.009474	-103.935207	0	0	0	4251.75
13700	90.03	179.741	100	10312.661	-7303.661	-4326.729	507.28	623405.18	367300.771	32.009199	-103.935207	0	0	0	4351.54
13800	90.03	179.741	100	10312.609	-7303.609	-4426.728	507.731	623405.631	367200.772	32.008924	-103.935207	0	0	0	4451.33
13900	90.03	179.741	100	10312.556	-7303.556	-4526.727	508.182	623406.082	367100.773	32.008649	-103.935206	0	0	0	4551.11
14000	90.03	179.741	100	10312.503	-7303.503	-4626.726	508.633	623406.533	367000.774	32.008374	-103.935206	0	0	0	4650.9
14100	90.03	179.741	100	10312.45	-7303.45	-4726.725	509.085	623406.985	366900.775	32.008099	-103.935206	0	0	0	4750.69
14200	90.03	179.741	100	10312.398	-7303.398	-4826.724	509.536	623407.436	366800.776	32.007824	-103.935206	0	0	0	4850.48
14300	90.03	179.741	100	10312.345	-7303.345	-4926.723	509.987	623407.887	366700.777	32.007549	-103.935205	0	0	0	4950.27
14400	90.03	179.741	100	10312.292	-7303.292	-5026.722	510.438	623408.338	366600.778	32.007275	-103.935205	0	0	0	5050.05
14500	90.03	179.741	100	10312.24	-7303.24	-5126.721	510.89	623408.79	366500.779	32.007	-103.935205	0	0	0	5149.84
14600	90.03	179.741	100	10312.187	-7303.187	-5226.72	511.341	623409.241	366400.78	32.006725	-103.935205	0	0	0	5249.63
14700	90.03	179.741	100	10312.134	-7303.134	-5326.718	511.792	623409.692	366300.782	32.00645	-103.935204	0	0	0	5349.42
14800	90.03	179.741	100	10312.081	-7303.081	-5426.717	512.243	623410.143	366200.783	32.006175	-103.935204	0	0	0	5449.21
14900	90.03	179.741	100	10312.029	-7303.029	-5526.716	512.695	623410.595	366100.784	32.0059	-103.935204	0	0	0	5548.99
15000	90.03	179.741	100	10311.976	-7302.976	-5626.715	513.146	623411.046	366000.785	32.005625	-103.935203	0	0	0	5648.78
15100	90.03	179.741	100	10311.923	-7302.923	-5726.714	513.597	623411.497	365900.786	32.00535	-103.935203	0	0	0	5748.57
15200	90.03	179.741	100	10311.871	-7302.871	-5826.713	514.048	623411.948	365800.787	32.005075	-103.935203	0	0	0	5848.36

15300	90.03	179.741	100	10311.818	-7302.818	-5926.712	514.5	623412.4	365700.788	32.0048	-103.935203	0	0	0	5948.15
15400	90.03	179.741	100	10311.765	-7302.765	-6026.711	514.951	623412.851	365600.789	32.004525	-103.935202	0	0	0	6047.93
15500	90.03	179.741	100	10311.712	-7302.712	-6126.71	515.402	623413.302	365500.79	32.004251	-103.935202	0	0	0	6147.72
15600	90.03	179.741	100	10311.66	-7302.66	-6226.709	515.853	623413.753	365400.791	32.003976	-103.935202	0	0	0	6247.51
15700	90.03	179.741	100	10311.607	-7302.607	-6326.708	516.304	623414.204	365300.792	32.003701	-103.935202	0	0	0	6347.3
15800	90.03	179.741	100	10311.554	-7302.554	-6426.707	516.756	623414.656	365200.793	32.003426	-103.935201	0	0	0	6447.09
15900	90.03	179.741	100	10311.502	-7302.502	-6526.706	517.207	623415.107	365100.794	32.003151	-103.935201	0	0	0	6546.87
16000	90.03	179.741	100	10311.449	-7302.449	-6626.705	517.658	623415.558	365000.795	32.002876	-103.935201	0	0	0	6646.66
16100	90.03	179.741	100	10311.396	-7302.396	-6726.704	518.109	623416.009	364900.796	32.002601	-103.935201	0	0	0	6746.45
16200	90.03	179.741	100	10311.343	-7302.343	-6826.703	518.561	623416.461	364800.797	32.002326	-103.9352	0	0	0	6846.24
16300	90.03	179.741	100	10311.291	-7302.291	-6926.702	519.012	623416.912	364700.798	32.002051	-103.9352	0	0	0	6946.03
16400	90.03	179.741	100	10311.238	-7302.238	-7026.701	519.463	623417.363	364600.799	32.001776	-103.9352	0	0	0	7045.82
16500	90.03	179.741	100	10311.185	-7302.185	-7126.7	519.914	623417.814	364500.8	32.001502	-103.935199	0	0	0	7145.6
16600	90.03	179.741	100	10311.133	-7302.133	-7226.699	520.366	623418.266	364400.801	32.001227	-103.935199	0	0	0	7245.39
16700	90.03	179.741	100	10311.08	-7302.08	-7326.698	520.817	623418.717	364300.802	32.000952	-103.935199	0	0	0	7345.18
16800	90.03	179.741	100	10311.027	-7302.027	-7426.697	521.268	623419.168	364200.803	32.000677	-103.935199	0	0	0	7444.97
16851.404	90.03	179.741	51.404	10311	-7302	-7478.1	521.5	623419.4	364149.4	32.000535	-103.935199	0	0	0	7496.26









ALL DIMENSIONS APPROXIMA

CACTUS WELLHEAD LLC

(20") x 13-3/8" x 9-5/8" x 7-5/8" x 5-1/2" MBU-4T-CFL-R-DBLO
With 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS-SB Tubing Head
And Drilling & Skid Configurations

XTO ENERGY INC
DELAWARE BASIN

DRAWN	VJK	31MAR22
APPRV		
DRAWING NO.	SDT-3301	

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Energy Incorporated
WELL NAME & NO.:	Shady Pines 24-36 State Fed Com 101H
LOCATION:	Sec 24-26S-29E-NMP
COUNTY:	Eddy County, New Mexico

*Updated COAs per Sundry **2694774** approved through engineering on 10/14/2022.*
*Previously known as **Shady Pines 24-36 131H.***

COA

H2S	(•) Yes	( ) No	
Potash	(•) None	( ) Secretary	( ) R-111-P
Cave/Karst Potential	( ) Low	(•) Medium	( ) High
Cave/Karst Potential	( ) Critical		
Variance	( ) None	(•) Flex Hose	( ) Other
Wellhead	( ) Conventional	(•) Multibowl	( ) Both
Other	[ ] 4 String Area	[ ] Capitan Reef	[ ] WIPP
Other	[x] Fluid Filled	[ ] Cement Squeeze	[ ] Pilot Hole
Special Requirements	[ ] Water Disposal	[x] COM	[ ] Unit

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Brushy Draw Pool** formation. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately 850 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface.

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

hours or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)

c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
d. If cement falls back, remedial cementing will be done prior to drilling out that string.

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

- Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**

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

3. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.

b. Second stage above DV tool:

- Cement should tie-back at least **200 feet** into previous casing string. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**

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

4. The minimum required fill of cement behind the **5** inch production casing is:

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

C. PRESSURE CONTROL

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

2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
    e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

GENERAL REQUIREMENTS

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

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

c. BOPE tests (minimum of 4 hours)

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

☒ Lea County
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 689-5981

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

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

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

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

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or

if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

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

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

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

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

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

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

requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
    e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

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

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

    b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall

commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).

c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

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

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

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

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

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

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and

disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

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

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

CONDITIONS

Action 151473

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 151473
	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.	9/19/2024