

Well Name: POKER LAKE UNIT 20 DTD	Well Location: T24S / R30E / SEC 20 / NWNW / 32.208112 / -103.909221	County or Parish/State: EDDY / NM
Well Number: 112H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM02860	Unit or CA Name: POKER LAKE UNIT	Unit or CA Number: NMNM71016X
US Well Number:	Operator: XTO PERMIAN OPERATING LLC	

Notice of Intent

Sundry ID: 2776493

Type of Submission: Notice of Intent Type of Action: APD Change

Date Sundry Submitted: 02/23/2024 Time Sundry Submitted: 09:42

Date proposed operation will begin: 07/09/2024

Procedure Description: XTO Permian Operating LLC Respectfully submits a NOI to Change APD for the above well. We are changing the following for the well: Casing design, cement design, SHL, FTP, LTP, BHL, and proposed total depth. SHL: F/ 824' FNL & 920' FWL Sec 20, T-24S, R-30E TO: 939' FNL & 1290' FWL Sec 20, T-24S, R-30E FTP: F/ 100' FSL & 1430' FWL TO: 100' FNL & 394' FWL PPP: F/ TO: 0' FSL & 370' FWL LTP: F/ 330' FNL & 1430' FWL TO: 2348' FNL & 394' FWL BHL: F/ 200' FNL & 1430' FWL Sec 32, T-23S, R-30E TO: 2448' FNL & 394' FWL Sec 5, T-25S, R-30E Proposed TD: F/ 32,825' MD; 11,611' TVD (Wolfcamp) TO: 29,012' MD; 10,919' TVD (Wolfcamp) Attachments: C-102 Drilling Plan Directional Plan MBS Diagram

NOI Attachments

Procedure Description

Poker_Lake_Unit_20_DTD_112H_Attachments_20240223093708.pdf

Well Name: POKER LAKE UNIT 20
DTD

Well Location: T24S / R30E / SEC 20 /
NWNW / 32.208112 / -103.909221

County or Parish/State: EDDY /
NM

Well Number: 112H

Type of Well: CONVENTIONAL GAS
WELL

Allottee or Tribe Name:

Lease Number: NMNM02860

Unit or CA Name: POKER LAKE UNIT

Unit or CA Number:
NMNM71016X

US Well Number:

Operator: XTO PERMIAN OPERATING
LLC

Conditions of Approval

Additional

Sec_20_24S_30E_NMP_Sundry_2776493_Poker_Lake_Unit_20_DTD_112H_COAs_20240404151853.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: SAMANTHA WEIS

Signed on: FEB 23, 2024 09:41 AM

Name: XTO PERMIAN OPERATING LLC

Title: Permitting Advisor

Street Address: 22777 SPRINGWOODS VILLAGE PARKWAY

City: SPRING

State: TX

Phone: (832) 625-7361

Email address: SAMANTHA.R.BARTNIK@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: 05/08/2024

Signature: Chris Walls

Form 3160-5 (June 2019)	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT	FORM APPROVED OMB No. 1004-0137 Expires: October 31, 2021
SUNDRY NOTICES AND REPORTS ON WELLS <i>Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.</i>		5. Lease Serial No.
		6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2		7. If Unit of CA/Agreement, Name and/or No.
1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Well Name and No.
2. Name of Operator		9. API Well No.
3a. Address	3b. Phone No. (include area code)	10. Field and Pool or Exploratory Area
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)		11. Country or Parish, State

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA				
TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

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

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)		
	Title	
Signature	Date	

THE SPACE FOR FEDERAL OR STATE OFFICE USE		
Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

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

(Instructions on page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Additional Information

Additional Remarks

Drilling Plan
Directional Plan
MBS Diagram

Location of Well

0. SHL: NWNW / 824 FNL / 920 FWL / TWSP: 24S / RANGE: 30E / SECTION: 20 / LAT: 32.208112 / LONG: -103.909221 (TVD: 0 feet, MD: 0 feet)
PPP: SESW / 330 FSL / 1430 FWL / TWSP: 24S / RANGE: 30E / SECTION: 8 / LAT: 32.22531 / LONG: -103.90758 (TVD: 11611 feet, MD: 17300 feet)
PPP: SESW / 100 FSL / 1430 FWL / TWSP: 24S / RANGE: 30E / SECTION: 17 / LAT: 32.210661 / LONG: -103.907587 (TVD: 11611 feet, MD: 12000 feet)
PPP: SESW / 330 FSL / 1430 FWL / TWSP: 24S / RANGE: 30E / SECTION: 5 / LAT: 32.23997 / LONG: -103.90758 (TVD: 11611 feet, MD: 22600 feet)
BHL: NENW / 200 FNL / 1430 FWL / TWSP: 23S / RANGE: 30E / SECTION: 32 / LAT: 32.268022 / LONG: -103.907584 (TVD: 11611 feet, MD: 32825 feet)

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Permian Operating LLC
WELL NAME & NO.:	Poker Lake Unit 20 112H
LOCATION:	Sec 20-24S-30E-NMP
COUNTY:	Eddy County, New Mexico

Changes approved through engineering via **Sundry 2776493** on 04/04/2024. Any previous COAs not addressed within the updated COAs still apply.

COA

H₂S	<input checked="" type="radio"/> No	<input type="radio"/> Yes		
Potash / WIPP	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P	<input type="checkbox"/> WIPP
Cave / Karst	<input checked="" type="radio"/> Low	<input type="radio"/> Medium	<input type="radio"/> High	<input type="radio"/> Critical
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both	<input type="radio"/> Diverter
Cementing	<input type="checkbox"/> Primary Squeeze	<input checked="" type="checkbox"/> Cont. Squeeze	<input type="checkbox"/> EchoMeter	<input type="checkbox"/> DV Tool
Special Req	<input checked="" type="checkbox"/> Break Testing	<input type="checkbox"/> Water Disposal	<input type="checkbox"/> COM	<input checked="" type="checkbox"/> Unit
Variance	<input checked="" type="checkbox"/> Flex Hose	<input type="checkbox"/> Casing Clearance	<input type="checkbox"/> Pilot Hole	<input type="checkbox"/> Capitan Reef
Variance	<input type="checkbox"/> Four-String	<input checked="" type="checkbox"/> Offline Cementing	<input type="checkbox"/> Fluid-Filled	<input type="checkbox"/> Open Annulus
<input type="checkbox"/> Batch APD / Sundry				

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H₂S) monitors shall be installed prior to drilling out the surface shoe. If H₂S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet 43 CFR 3176 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately 700 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface. ***Set depth adjusted per BLM geologist.***
 - 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, Capitan Reef, or potash.**

Operator has proposed to pump down 13-3/8" X 9-5/8" annulus after primary cementing stage. Operator must run a CBL from TD of the 9-5/8" casing to surface. Submit results to the BLM.

If cement does not tie-back into the previous casing shoe, a third stage remediation BH may be performed. The appropriate BLM office shall be notified.

3. The minimum required fill of cement behind the **6** 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. 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 43 CFR 3172 must be followed.

D. SPECIAL REQUIREMENT (S)

Unit Wells

The well sign for a unit well shall include the unit number in addition to the surface and bottom hole lease numbers. This also applies to participating area numbers. If a participating area has not been established, the operator can use the general unit designation, but will replace the unit number with the participating area number when the sign is replaced.

Commercial Well Determination

A commercial well determination shall be submitted after production has been established for at least six months.

BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. (**Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP**)
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer (575-706-2779) prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per Onshore Oil and Gas Order No. 2.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

Offline Cementing

Contact the BLM prior to the commencement of any offline cementing procedure.

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 (API No. / US Well No. contains 30-015-#####)

Email **or** call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
BLM NM CFO DrillingNotifications@blm.gov; (575) 361-2822

Lea County (API No. / US Well No. contains 30-025-#####)

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 **43 CFR part 3170 Subpart 3172** 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 integrity 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 integrity 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 **43 CFR part 3170 Subpart 3172** and **API STD 53 Sec. 5.3**.
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 **43 CFR part 3170 Subpart 3172** 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 cement), 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 cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
 - c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR part 3170 Subpart 3172** 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 **43 CFR part 3170 Subpart 3172**.

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.

☒ AMENDED REPORT
APD ID # 10400089371

RP 618.013003.06-34

Intent ☐ As Drilled ☐

API #		
Operator Name:	Property Name:	Well Number

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Is this well the defining well for the Horizontal Spacing Unit? ☐Is this well an infill well? ☐

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

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018

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

XTO Energy Inc.
PLU 20 Dog Town Draw 112H
Projected TD: 29012.47' MD / 10919' TVD
SHL: 939' FNL & 1290' FWL , Section 20, T24S, R30E
BHL: 2448' FNL & 394' FWL , Section 5, T25S, R30E
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	785'	Water
Top of Salt	1188'	Water
Base of Salt	3381'	Water
Delaware	3575'	Water
Brushy Canyon	6073'	Water/Oil/Gas
Bone Spring	7369'	Water
1st Bone Spring	8355'	Water/Oil/Gas
2nd Bone Spring	9173'	Water/Oil/Gas
3rd Bone Spring	10267'	Water/Oil/Gas
Wolfcamp	10658'	Water/Oil/Gas
Wolfcamp X	10679'	Water/Oil/Gas
Wolfcamp Y	10757'	Water/Oil/Gas
Wolfcamp A	10799'	Water/Oil/Gas
Target/Land Curve	10919'	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 @ 885' (303' 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 9.625 inch casing at 10165.52' and cemented to surface. A 8.5 inch curve and 8.5 inch lateral hole will be drilled to 29012.47 MD/TD and 6 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 9865.52 feet).

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 885'	13.375	54.5	J-55	BTC	New	1.13	2.92	18.85
12.25	0' – 4000'	9.625	40	HC P-110	BTC	New	1.92	2.31	3.11
12.25	4000' – 10165.52'	9.625	40	HC L-80	BTC	New	1.39	1.72	3.71
8.5	0' – 10065.52'	6	26	P-110	Semi-Premium	New	1.17	2.25	1.62
8.5	10065.52' - 29012.47'	6	26	P-110	Semi-Premium	New	1.17	2.08	1.83

- 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
- 9.625 Collapse analyzed using 50% evacuation based on regional experience.
- 6 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

Wellhead:

Permanent Wellhead – Multibowl System

A. Starting Head: 13-5/8" 10M top flange x 13-3/8" SOW bottom (or equivalent)

B. Tubing Head: 13-5/8" 10M bottom flange x 7-1/16" 15M top flange (or equivalent)

- Wellhead will be installed by manufacturer's representatives.
- Manufacturer will monitor welding process to ensure appropriate temperature of seal.
- Operator will test the 9-5/8" 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 +/- 885'

Lead: 430 sxs EconoCem-HLTRRC (mixed at 10.5 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 = 900 psi 24 hr = 1500 psi

2nd Intermediate Casing: 9.625, 40 New casing to be set at +/- 10165.52'

1st Stage

Optional Lead: 1030 sxs Class C (mixed at 10.5 ppg, 2.77 ft³/sx, 15.59 gal/sx water)

TOC: Surface

Tail: 1180 sxs Class C (mixed at 14.8 ppg, 1.35 ft³/sx, 6.39 gal/sx water)

TOC: Brushy Canyon @ 6073

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: 2140 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 9-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brush Canyon (6073') 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 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: 6, 26 New Semi-Premium, P-110 casing to be set at +/- 29012.47'

Lead: 40 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft³/sx, 15.00 gal/sx water) Top of Cement: 9865.52 feet

Tail: 3170 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft³/sx, 8.38 gal/sx water) Top of Cement: 10365.52 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 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 10M Double Ram BOP. MASP should not exceed 4127 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 nipping up on the 13.375, 5M bradenhead and flange, the BOP test will be limited to 5000 psi. When nipping up on the 9.625, 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 week.

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' - 885'	17.5	FW/Native	8.4-8.9	35-40	NC
885' - 10165.52'	12.25	FW / Cut Brine / Direct Emulsion	8.8-9.3	30-32	NC
10165.52' - 29012.47'	8.5	OBM	11.5-12	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 Kelly cock will be in the drill string at all times.
- A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.
- H2S monitors will be on location when drilling below the 13.375 casing.

8. Logging, Coring and Testing Program

Open hole logging will not be done on this well.

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 6530 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 - Poker Lake Unit 20 DTD South 112H

Measured Depth:	29012.47 ft
TVD RKB:	10919.00 ft
Location	
Cartographic Reference System:	New Mexico East - NAD 27
Northing:	439533.50 ft
Easting:	631697.50 ft
RKB:	3253.00 ft
Ground Level:	3221.00 ft
North Reference:	Grid
Convergence Angle:	0.23 Deg

Plan SectionsPoker Lake Unit 20 DTD South 112H

Measured		TVD		Build		Turn		Dogleg	
Depth	Inclination	Azimuth	RKB	Y Offset	X Offset	Rate	Rate	Rate	Target
(ft)	(Deg)	(Deg)	(ft)	(ft)	(ft)	(Deg/100ft)	(Deg/100ft)	(Deg/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	0.00	
1923.44	16.47	311.45	1912.14	77.80	-88.09	2.00	0.00	2.00	
5339.28	16.47	311.45	5187.86	718.81	-813.93	0.00	0.00	0.00	
6162.72	0.00	0.00	6000.00	796.61	-902.02	-2.00	0.00	2.00	
10365.52	0.00	0.00	10202.80	796.61	-902.02	0.00	0.00	0.00	
11490.52	90.00	179.68	10919.00	80.42	-897.97	8.00	0.00	8.00	
28913.36	90.00	179.68	10919.00	-17342.14	-799.45	0.00	0.00	0.00	LTP 2
29012.47	90.00	179.68	10919.00	-17441.25	-798.89	0.00	0.00	0.00	BHL 2

Position UncertaintyPoker Lake Unit 20 DTD South 112H

Measured	TVD	Highside	Lateral	Vertical	Magnitude	Semi-major	Semi-minor	Semi-minor	Tool
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Depth	Inclination	Azimuth	RKB	Error	Bias	Error	Bias	Error	Bias	of Bias	Error	Error	Azimuth	Used
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	MWD+IFR1+MS
100.000	0.000	0.000	100.000	0.700	0.000	0.350	0.000	2.300	0.000	0.000	0.751	0.220	112.264	MWD+IFR1+MS
200.000	0.000	0.000	200.000	1.112	0.000	0.861	0.000	2.309	0.000	0.000	1.259	0.627	122.711	MWD+IFR1+MS
300.000	0.000	0.000	300.000	1.497	0.000	1.271	0.000	2.325	0.000	0.000	1.698	0.986	125.469	MWD+IFR1+MS
400.000	0.000	0.000	400.000	1.871	0.000	1.658	0.000	2.346	0.000	0.000	2.108	1.344	126.713	MWD+IFR1+MS
500.000	0.000	0.000	500.000	2.240	0.000	2.034	0.000	2.373	0.000	0.000	2.503	1.701	127.419	MWD+IFR1+MS
600.000	0.000	0.000	600.000	2.607	0.000	2.405	0.000	2.405	0.000	0.000	2.888	2.059	127.873	MWD+IFR1+MS
700.000	0.000	0.000	700.000	2.971	0.000	2.773	0.000	2.442	0.000	0.000	3.267	2.417	128.190	MWD+IFR1+MS
800.000	0.000	0.000	800.000	3.334	0.000	3.138	0.000	2.483	0.000	0.000	3.642	2.775	128.423	MWD+IFR1+MS
900.000	0.000	0.000	900.000	3.696	0.000	3.502	0.000	2.529	0.000	0.000	4.014	3.133	128.602	MWD+IFR1+MS
1000.000	0.000	0.000	1000.000	4.058	0.000	3.865	0.000	2.578	0.000	0.000	4.384	3.491	128.744	MWD+IFR1+MS
1100.000	0.000	0.000	1100.000	4.419	0.000	4.228	0.000	2.631	0.000	0.000	4.752	3.849	128.859	MWD+IFR1+MS
1200.000	2.000	311.449	1199.980	4.356	0.000	5.096	0.000	2.687	0.000	0.000	5.117	4.333	121.652	MWD+IFR1+MS
1300.000	4.000	311.449	1299.838	5.238	0.000	5.425	0.000	2.747	0.000	0.000	5.599	5.059	96.182	MWD+IFR1+MS
1400.000	6.000	311.449	1399.452	6.007	0.000	5.758	0.000	2.812	0.000	0.000	6.259	5.500	76.224	MWD+IFR1+MS
1500.000	8.000	311.449	1498.702	6.700	0.000	6.094	0.000	2.885	0.000	0.000	6.940	5.851	68.622	MWD+IFR1+MS
1600.000	10.000	311.449	1597.465	7.338	0.000	6.433	0.000	2.967	0.000	0.000	7.588	6.184	65.216	MWD+IFR1+MS
1700.000	12.000	311.449	1695.623	7.932	0.000	6.776	0.000	3.062	0.000	0.000	8.203	6.515	63.377	MWD+IFR1+MS
1800.000	14.000	311.449	1793.055	8.491	0.000	7.122	0.000	3.170	0.000	0.000	8.788	6.848	62.270	MWD+IFR1+MS
1900.000	16.000	311.449	1889.643	9.021	0.000	7.473	0.000	3.293	0.000	0.000	9.348	7.185	61.565	MWD+IFR1+MS
1923.436	16.469	311.449	1912.145	9.077	0.000	7.551	0.000	3.305	0.000	0.000	9.418	7.264	61.575	MWD+IFR1+MS
2000.000	16.469	311.449	1985.567	9.294	0.000	7.809	0.000	3.371	0.000	0.000	9.629	7.524	61.830	MWD+IFR1+MS
2100.000	16.469	311.449	2081.465	9.590	0.000	8.166	0.000	3.465	0.000	0.000	9.923	7.874	62.438	MWD+IFR1+MS
2200.000	16.469	311.449	2177.362	9.898	0.000	8.531	0.000	3.564	0.000	0.000	10.230	8.230	63.139	MWD+IFR1+MS
2300.000	16.469	311.449	2273.260	10.214	0.000	8.899	0.000	3.667	0.000	0.000	10.544	8.589	63.836	MWD+IFR1+MS
2400.000	16.469	311.449	2369.157	10.536	0.000	9.271	0.000	3.774	0.000	0.000	10.864	8.951	64.528	MWD+IFR1+MS
2500.000	16.469	311.449	2465.055	10.864	0.000	9.645	0.000	3.884	0.000	0.000	11.190	9.316	65.215	MWD+IFR1+MS
2600.000	16.469	311.449	2560.952	11.198	0.000	10.021	0.000	3.997	0.000	0.000	11.521	9.683	65.896	MWD+IFR1+MS
2700.000	16.469	311.449	2656.849	11.536	0.000	10.400	0.000	4.113	0.000	0.000	11.856	10.051	66.571	MWD+IFR1+MS
2800.000	16.469	311.449	2752.747	11.880	0.000	10.780	0.000	4.232	0.000	0.000	12.196	10.422	67.240	MWD+IFR1+MS
2900.000	16.469	311.449	2848.644	12.227	0.000	11.162	0.000	4.354	0.000	0.000	12.540	10.794	67.901	MWD+IFR1+MS

3000.000	16.469	311.449	2944.542	12.578	0.000	11.545	0.000	4.478	0.000	0.000	12.887	11.167	68.554	MWD+IFR1+MS
3100.000	16.469	311.449	3040.439	12.933	0.000	11.930	0.000	4.604	0.000	0.000	13.238	11.542	69.199	MWD+IFR1+MS
3200.000	16.469	311.449	3136.337	13.291	0.000	12.316	0.000	4.733	0.000	0.000	13.592	11.918	69.836	MWD+IFR1+MS
3300.000	16.469	311.449	3232.234	13.652	0.000	12.703	0.000	4.863	0.000	0.000	13.949	12.294	70.464	MWD+IFR1+MS
3400.000	16.469	311.449	3328.132	14.016	0.000	13.091	0.000	4.996	0.000	0.000	14.309	12.672	71.082	MWD+IFR1+MS
3500.000	16.469	311.449	3424.029	14.382	0.000	13.480	0.000	5.131	0.000	0.000	14.671	13.051	71.691	MWD+IFR1+MS
3600.000	16.469	311.449	3519.927	14.751	0.000	13.870	0.000	5.267	0.000	0.000	15.036	13.430	72.290	MWD+IFR1+MS
3700.000	16.469	311.449	3615.824	15.121	0.000	14.261	0.000	5.406	0.000	0.000	15.402	13.810	72.878	MWD+IFR1+MS
3800.000	16.469	311.449	3711.722	15.494	0.000	14.652	0.000	5.546	0.000	0.000	15.771	14.191	73.457	MWD+IFR1+MS
3900.000	16.469	311.449	3807.619	15.869	0.000	15.044	0.000	5.688	0.000	0.000	16.141	14.573	74.025	MWD+IFR1+MS
4000.000	16.469	311.449	3903.516	16.245	0.000	15.437	0.000	5.831	0.000	0.000	16.514	14.954	74.583	MWD+IFR1+MS
4100.000	16.469	311.449	3999.414	16.624	0.000	15.830	0.000	5.976	0.000	0.000	16.888	15.337	75.130	MWD+IFR1+MS
4200.000	16.469	311.449	4095.311	17.003	0.000	16.224	0.000	6.123	0.000	0.000	17.263	15.720	75.666	MWD+IFR1+MS
4300.000	16.469	311.449	4191.209	17.384	0.000	16.618	0.000	6.271	0.000	0.000	17.640	16.103	76.191	MWD+IFR1+MS
4400.000	16.469	311.449	4287.106	17.767	0.000	17.013	0.000	6.421	0.000	0.000	18.018	16.487	76.706	MWD+IFR1+MS
4500.000	16.469	311.449	4383.004	18.150	0.000	17.408	0.000	6.573	0.000	0.000	18.397	16.871	77.210	MWD+IFR1+MS
4600.000	16.469	311.449	4478.901	18.535	0.000	17.803	0.000	6.726	0.000	0.000	18.778	17.256	77.702	MWD+IFR1+MS
4700.000	16.469	311.449	4574.799	18.921	0.000	18.199	0.000	6.881	0.000	0.000	19.160	17.641	78.185	MWD+IFR1+MS
4800.000	16.469	311.449	4670.696	19.308	0.000	18.595	0.000	7.037	0.000	0.000	19.542	18.026	78.656	MWD+IFR1+MS
4900.000	16.469	311.449	4766.594	19.696	0.000	18.991	0.000	7.195	0.000	0.000	19.926	18.412	79.117	MWD+IFR1+MS
5000.000	16.469	311.449	4862.491	20.085	0.000	19.388	0.000	7.354	0.000	0.000	20.311	18.798	79.567	MWD+IFR1+MS
5100.000	16.469	311.449	4958.389	20.475	0.000	19.785	0.000	7.515	0.000	0.000	20.696	19.184	80.007	MWD+IFR1+MS
5200.000	16.469	311.449	5054.286	20.865	0.000	20.183	0.000	7.677	0.000	0.000	21.083	19.570	80.437	MWD+IFR1+MS
5300.000	16.469	311.449	5150.183	21.257	0.000	20.580	0.000	7.841	0.000	0.000	21.470	19.957	80.856	MWD+IFR1+MS
5339.284	16.469	311.449	5187.855	21.408	0.000	20.734	0.000	7.906	0.000	0.000	21.617	20.109	80.992	MWD+IFR1+MS
5400.000	15.254	311.449	5246.259	21.671	0.000	20.969	0.000	8.007	0.000	0.000	21.847	20.343	81.120	MWD+IFR1+MS
5500.000	13.254	311.449	5343.175	22.149	0.000	21.355	0.000	8.180	0.000	0.000	22.278	20.737	80.236	MWD+IFR1+MS
5600.000	11.254	311.449	5440.892	22.635	0.000	21.736	0.000	8.349	0.000	0.000	22.740	21.130	78.779	MWD+IFR1+MS
5700.000	9.254	311.449	5539.289	23.082	0.000	22.108	0.000	8.507	0.000	0.000	23.194	21.514	77.425	MWD+IFR1+MS
5800.000	7.254	311.449	5638.248	23.492	0.000	22.471	0.000	8.654	0.000	0.000	23.640	21.888	76.178	MWD+IFR1+MS
5900.000	5.254	311.449	5737.648	23.863	0.000	22.826	0.000	8.792	0.000	0.000	24.077	22.251	75.038	MWD+IFR1+MS
6000.000	3.254	311.449	5837.368	24.196	0.000	23.171	0.000	8.923	0.000	0.000	24.505	22.605	74.004	MWD+IFR1+MS
6100.000	1.254	311.449	5937.285	24.491	0.000	23.508	0.000	9.048	0.000	0.000	24.923	22.949	73.073	MWD+IFR1+MS

6162.720	0.000	0.000	6000.000	24.978	0.000	23.325	0.000	9.124	0.000	0.000	25.138	23.152	73.178	MWD+IFR1+MS
6200.000	0.000	0.000	6037.280	25.093	0.000	23.443	0.000	9.169	0.000	0.000	25.251	23.273	73.275	MWD+IFR1+MS
6300.000	0.000	0.000	6137.280	25.402	0.000	23.764	0.000	9.291	0.000	0.000	25.553	23.602	73.535	MWD+IFR1+MS
6400.000	0.000	0.000	6237.280	25.715	0.000	24.090	0.000	9.416	0.000	0.000	25.858	23.937	73.891	MWD+IFR1+MS
6500.000	0.000	0.000	6337.280	26.030	0.000	24.417	0.000	9.543	0.000	0.000	26.165	24.273	74.250	MWD+IFR1+MS
6600.000	0.000	0.000	6437.280	26.346	0.000	24.745	0.000	9.673	0.000	0.000	26.473	24.609	74.610	MWD+IFR1+MS
6700.000	0.000	0.000	6537.280	26.663	0.000	25.073	0.000	9.806	0.000	0.000	26.782	24.946	74.972	MWD+IFR1+MS
6800.000	0.000	0.000	6637.280	26.981	0.000	25.403	0.000	9.941	0.000	0.000	27.093	25.283	75.335	MWD+IFR1+MS
6900.000	0.000	0.000	6737.280	27.299	0.000	25.733	0.000	10.080	0.000	0.000	27.405	25.620	75.700	MWD+IFR1+MS
7000.000	0.000	0.000	6837.280	27.619	0.000	26.064	0.000	10.221	0.000	0.000	27.718	25.959	76.066	MWD+IFR1+MS
7100.000	0.000	0.000	6937.280	27.940	0.000	26.395	0.000	10.365	0.000	0.000	28.033	26.297	76.433	MWD+IFR1+MS
7200.000	0.000	0.000	7037.280	28.262	0.000	26.728	0.000	10.512	0.000	0.000	28.349	26.636	76.802	MWD+IFR1+MS
7300.000	0.000	0.000	7137.280	28.585	0.000	27.061	0.000	10.662	0.000	0.000	28.666	26.975	77.171	MWD+IFR1+MS
7400.000	0.000	0.000	7237.280	28.908	0.000	27.394	0.000	10.815	0.000	0.000	28.984	27.314	77.541	MWD+IFR1+MS
7500.000	0.000	0.000	7337.280	29.232	0.000	27.729	0.000	10.971	0.000	0.000	29.303	27.654	77.912	MWD+IFR1+MS
7600.000	0.000	0.000	7437.280	29.557	0.000	28.063	0.000	11.130	0.000	0.000	29.623	27.994	78.284	MWD+IFR1+MS
7700.000	0.000	0.000	7537.280	29.883	0.000	28.399	0.000	11.292	0.000	0.000	29.944	28.335	78.656	MWD+IFR1+MS
7800.000	0.000	0.000	7637.280	30.210	0.000	28.735	0.000	11.458	0.000	0.000	30.266	28.676	79.028	MWD+IFR1+MS
7900.000	0.000	0.000	7737.280	30.537	0.000	29.071	0.000	11.626	0.000	0.000	30.589	29.017	79.400	MWD+IFR1+MS
8000.000	0.000	0.000	7837.280	30.865	0.000	29.408	0.000	11.797	0.000	0.000	30.913	29.358	79.773	MWD+IFR1+MS
8100.000	0.000	0.000	7937.280	31.194	0.000	29.746	0.000	11.971	0.000	0.000	31.238	29.700	80.146	MWD+IFR1+MS
8200.000	0.000	0.000	8037.280	31.523	0.000	30.084	0.000	12.148	0.000	0.000	31.563	30.042	80.518	MWD+IFR1+MS
8300.000	0.000	0.000	8137.280	31.853	0.000	30.422	0.000	12.329	0.000	0.000	31.890	30.384	80.890	MWD+IFR1+MS
8400.000	0.000	0.000	8237.280	32.183	0.000	30.761	0.000	12.512	0.000	0.000	32.217	30.726	81.262	MWD+IFR1+MS
8500.000	0.000	0.000	8337.280	32.515	0.000	31.101	0.000	12.699	0.000	0.000	32.545	31.069	81.634	MWD+IFR1+MS
8600.000	0.000	0.000	8437.280	32.846	0.000	31.441	0.000	12.889	0.000	0.000	32.874	31.412	82.004	MWD+IFR1+MS
8700.000	0.000	0.000	8537.280	33.179	0.000	31.781	0.000	13.081	0.000	0.000	33.204	31.755	82.374	MWD+IFR1+MS
8800.000	0.000	0.000	8637.280	33.511	0.000	32.121	0.000	13.278	0.000	0.000	33.534	32.098	82.743	MWD+IFR1+MS
8900.000	0.000	0.000	8737.280	33.845	0.000	32.462	0.000	13.477	0.000	0.000	33.865	32.442	83.111	MWD+IFR1+MS
9000.000	0.000	0.000	8837.280	34.179	0.000	32.804	0.000	13.679	0.000	0.000	34.196	32.785	83.478	MWD+IFR1+MS
9100.000	0.000	0.000	8937.280	34.513	0.000	33.146	0.000	13.885	0.000	0.000	34.529	33.129	83.844	MWD+IFR1+MS
9200.000	0.000	0.000	9037.280	34.848	0.000	33.488	0.000	14.093	0.000	0.000	34.862	33.473	84.208	MWD+IFR1+MS
9300.000	0.000	0.000	9137.280	35.183	0.000	33.830	0.000	14.305	0.000	0.000	35.195	33.817	84.571	MWD+IFR1+MS

9400.000	0.000	0.000	9237.280	35.519	0.000	34.173	0.000	14.520	0.000	0.000	35.529	34.162	84.932	MWD+IFR1+MS
9500.000	0.000	0.000	9337.280	35.855	0.000	34.516	0.000	14.739	0.000	0.000	35.864	34.507	85.291	MWD+IFR1+MS
9600.000	0.000	0.000	9437.280	36.191	0.000	34.859	0.000	14.960	0.000	0.000	36.199	34.851	85.649	MWD+IFR1+MS
9700.000	0.000	0.000	9537.280	36.528	0.000	35.203	0.000	15.185	0.000	0.000	36.535	35.196	86.005	MWD+IFR1+MS
9800.000	0.000	0.000	9637.280	36.866	0.000	35.547	0.000	15.413	0.000	0.000	36.871	35.541	86.359	MWD+IFR1+MS
9900.000	0.000	0.000	9737.280	37.204	0.000	35.891	0.000	15.644	0.000	0.000	37.208	35.887	86.711	MWD+IFR1+MS
10000.000	0.000	0.000	9837.280	37.542	0.000	36.236	0.000	15.878	0.000	0.000	37.545	36.232	87.061	MWD+IFR1+MS
10100.000	0.000	0.000	9937.280	37.880	0.000	36.581	0.000	16.116	0.000	0.000	37.883	36.578	87.408	MWD+IFR1+MS
10200.000	0.000	0.000	10037.280	38.219	0.000	36.926	0.000	16.357	0.000	0.000	38.221	36.924	87.753	MWD+IFR1+MS
10300.000	0.000	0.000	10137.280	38.559	0.000	37.271	0.000	16.601	0.000	0.000	38.560	37.269	88.096	MWD+IFR1+MS
10365.520	0.000	0.000	10202.800	38.779	0.000	37.496	0.000	16.762	0.000	0.000	38.781	37.494	88.243	MWD+IFR1+MS
10400.000	2.758	179.676	10237.267	38.710	0.000	37.607	-0.000	16.847	0.000	0.000	38.892	37.606	88.286	MWD+IFR1+MS
10500.000	10.758	179.676	10336.491	38.569	0.000	37.908	-0.000	17.114	0.000	0.000	39.660	37.908	89.892	MWD+IFR1+MS
10600.000	18.758	179.676	10433.114	38.450	0.000	38.191	-0.000	17.505	0.000	0.000	40.917	38.189	91.415	MWD+IFR1+MS
10700.000	26.758	179.676	10525.253	37.791	0.000	38.451	-0.000	18.084	0.000	0.000	42.021	38.444	92.161	MWD+IFR1+MS
10800.000	34.758	179.676	10611.116	36.676	0.000	38.685	-0.000	18.895	0.000	0.000	42.950	38.673	92.643	MWD+IFR1+MS
10900.000	42.758	179.676	10689.032	35.215	0.000	38.891	-0.000	19.954	0.000	0.000	43.695	38.874	92.997	MWD+IFR1+MS
11000.000	50.758	179.676	10757.484	33.556	0.000	39.069	-0.000	21.245	0.000	0.000	44.259	39.047	93.270	MWD+IFR1+MS
11100.000	58.758	179.676	10815.140	31.880	0.000	39.217	-0.000	22.729	0.000	0.000	44.652	39.192	93.468	MWD+IFR1+MS
11200.000	66.758	179.676	10860.877	30.407	0.000	39.337	-0.000	24.353	0.000	0.000	44.896	39.309	93.581	MWD+IFR1+MS
11300.000	74.758	179.676	10893.806	29.371	0.000	39.426	-0.000	26.058	0.000	0.000	45.019	39.398	93.584	MWD+IFR1+MS
11400.000	82.758	179.676	10913.284	28.987	0.000	39.486	-0.000	27.784	0.000	0.000	45.060	39.460	93.440	MWD+IFR1+MS
11490.520	90.000	179.676	10918.997	29.078	0.000	39.514	-0.000	29.078	0.000	0.000	45.063	39.492	93.146	MWD+IFR1+MS
11500.000	90.000	179.676	10918.997	29.099	0.000	39.515	-0.000	29.099	0.000	0.000	45.063	39.493	93.106	MWD+IFR1+MS
11600.000	90.000	179.676	10918.997	29.299	0.000	39.538	-0.000	29.299	0.000	0.000	45.061	39.522	92.696	MWD+IFR1+MS
11700.000	90.000	179.676	10918.997	29.524	0.000	39.580	-0.000	29.524	0.000	0.000	45.061	39.567	92.289	MWD+IFR1+MS
11800.000	90.000	179.676	10918.997	29.767	0.000	39.636	-0.000	29.767	0.000	0.000	45.061	39.627	91.881	MWD+IFR1+MS
11900.000	90.000	179.676	10918.997	30.029	0.000	39.707	-0.000	30.029	0.000	0.000	45.063	39.701	91.469	MWD+IFR1+MS
12000.000	90.000	179.676	10918.997	30.308	0.000	39.792	-0.000	30.308	0.000	0.000	45.066	39.789	91.051	MWD+IFR1+MS
12100.000	90.000	179.676	10918.997	30.606	0.000	39.892	-0.000	30.606	0.000	0.000	45.070	39.891	90.621	MWD+IFR1+MS
12200.000	90.000	179.676	10918.997	30.920	0.000	40.006	-0.000	30.920	0.000	0.000	45.075	40.006	90.178	MWD+IFR1+MS
12300.000	90.000	179.676	10918.997	31.251	0.000	40.135	-0.000	31.251	0.000	0.000	45.081	40.135	89.717	MWD+IFR1+MS
12400.000	90.000	179.676	10918.997	31.598	0.000	40.278	-0.000	31.598	0.000	0.000	45.089	40.278	89.233	MWD+IFR1+MS

12500.000	90.000	179.676	10918.997	31.961	0.000	40.435	-0.000	31.961	0.000	0.000	45.097	40.433	88.720	MWD+IFR1+MS
12600.000	90.000	179.676	10918.997	32.338	0.000	40.605	-0.000	32.338	0.000	0.000	45.107	40.602	88.172	MWD+IFR1+MS
12700.000	90.000	179.676	10918.997	32.730	0.000	40.790	-0.000	32.730	0.000	0.000	45.119	40.783	87.580	MWD+IFR1+MS
12800.000	90.000	179.676	10918.997	33.136	0.000	40.987	-0.000	33.136	0.000	0.000	45.132	40.977	86.935	MWD+IFR1+MS
12900.000	90.000	179.676	10918.997	33.556	0.000	41.198	-0.000	33.556	0.000	0.000	45.147	41.183	86.224	MWD+IFR1+MS
13000.000	90.000	179.676	10918.997	33.988	0.000	41.423	-0.000	33.988	0.000	0.000	45.164	41.401	85.431	MWD+IFR1+MS
13100.000	90.000	179.676	10918.997	34.433	0.000	41.660	-0.000	34.433	0.000	0.000	45.182	41.630	84.535	MWD+IFR1+MS
13200.000	90.000	179.676	10918.997	34.890	0.000	41.909	-0.000	34.890	0.000	0.000	45.204	41.869	83.511	MWD+IFR1+MS
13300.000	90.000	179.676	10918.997	35.358	0.000	42.171	-0.000	35.358	0.000	0.000	45.229	42.118	82.324	MWD+IFR1+MS
13400.000	90.000	179.676	10918.997	35.837	0.000	42.445	-0.000	35.837	0.000	0.000	45.257	42.377	80.925	MWD+IFR1+MS
13500.000	90.000	179.676	10918.997	36.327	0.000	42.732	-0.000	36.327	0.000	0.000	45.290	42.642	79.251	MWD+IFR1+MS
13600.000	90.000	179.676	10918.997	36.828	0.000	43.030	-0.000	36.828	0.000	0.000	45.330	42.914	77.214	MWD+IFR1+MS
13700.000	90.000	179.676	10918.997	37.338	0.000	43.339	-0.000	37.338	0.000	0.000	45.378	43.189	74.697	MWD+IFR1+MS
13800.000	90.000	179.676	10918.997	37.857	0.000	43.660	-0.000	37.857	0.000	0.000	45.437	43.465	71.543	MWD+IFR1+MS
13900.000	90.000	179.676	10918.997	38.385	0.000	43.991	-0.000	38.385	0.000	0.000	45.514	43.735	67.569	MWD+IFR1+MS
14000.000	90.000	179.676	10918.997	38.922	0.000	44.334	-0.000	38.922	0.000	0.000	45.613	43.993	62.603	MWD+IFR1+MS
14100.000	90.000	179.676	10918.997	39.468	0.000	44.686	-0.000	39.468	0.000	0.000	45.745	44.230	56.613	MWD+IFR1+MS
14200.000	90.000	179.676	10918.997	40.021	0.000	45.050	-0.000	40.021	0.000	0.000	45.918	44.437	49.879	MWD+IFR1+MS
14300.000	90.000	179.676	10918.997	40.582	0.000	45.423	-0.000	40.582	0.000	0.000	46.137	44.608	43.034	MWD+IFR1+MS
14400.000	90.000	179.676	10918.997	41.150	0.000	45.806	-0.000	41.150	0.000	0.000	46.402	44.743	36.774	MWD+IFR1+MS
14500.000	90.000	179.676	10918.997	41.726	0.000	46.198	-0.000	41.726	0.000	0.000	46.707	44.849	31.497	MWD+IFR1+MS
14600.000	90.000	179.676	10918.997	42.308	0.000	46.600	-0.000	42.308	0.000	0.000	47.044	44.932	27.250	MWD+IFR1+MS
14700.000	90.000	179.676	10918.997	42.896	0.000	47.010	-0.000	42.896	0.000	0.000	47.406	45.000	23.886	MWD+IFR1+MS
14800.000	90.000	179.676	10918.997	43.491	0.000	47.430	-0.000	43.491	0.000	0.000	47.789	45.056	21.218	MWD+IFR1+MS
14900.000	90.000	179.676	10918.997	44.092	0.000	47.858	-0.000	44.092	0.000	0.000	48.188	45.105	19.081	MWD+IFR1+MS
15000.000	90.000	179.676	10918.997	44.698	0.000	48.294	-0.000	44.698	0.000	0.000	48.602	45.149	17.343	MWD+IFR1+MS
15100.000	90.000	179.676	10918.997	45.310	0.000	48.739	-0.000	45.310	0.000	0.000	49.028	45.189	15.911	MWD+IFR1+MS
15200.000	90.000	179.676	10918.997	45.927	0.000	49.191	-0.000	45.927	0.000	0.000	49.465	45.226	14.713	MWD+IFR1+MS
15300.000	90.000	179.676	10918.997	46.549	0.000	49.651	-0.000	46.549	0.000	0.000	49.912	45.262	13.698	MWD+IFR1+MS
15400.000	90.000	179.676	10918.997	47.176	0.000	50.119	-0.000	47.176	0.000	0.000	50.369	45.296	12.827	MWD+IFR1+MS
15500.000	90.000	179.676	10918.997	47.808	0.000	50.594	-0.000	47.808	0.000	0.000	50.834	45.329	12.072	MWD+IFR1+MS
15600.000	90.000	179.676	10918.997	48.444	0.000	51.076	-0.000	48.444	0.000	0.000	51.308	45.361	11.412	MWD+IFR1+MS
15700.000	90.000	179.676	10918.997	49.084	0.000	51.565	-0.000	49.084	0.000	0.000	51.790	45.393	10.828	MWD+IFR1+MS

15800.000	90.000	179.676	10918.997	49.729	0.000	52.060	-0.000	49.729	0.000	0.000	52.278	45.425	10.310	MWD+IFR1+MS
15900.000	90.000	179.676	10918.997	50.377	0.000	52.562	-0.000	50.377	0.000	0.000	52.775	45.457	9.845	MWD+IFR1+MS
16000.000	90.000	179.676	10918.997	51.030	0.000	53.070	-0.000	51.030	0.000	0.000	53.278	45.489	9.426	MWD+IFR1+MS
16100.000	90.000	179.676	10918.997	51.686	0.000	53.584	-0.000	51.686	0.000	0.000	53.787	45.520	9.046	MWD+IFR1+MS
16200.000	90.000	179.676	10918.997	52.345	0.000	54.105	-0.000	52.345	0.000	0.000	54.303	45.552	8.699	MWD+IFR1+MS
16300.000	90.000	179.676	10918.997	53.008	0.000	54.631	-0.000	53.008	0.000	0.000	54.825	45.584	8.382	MWD+IFR1+MS
16400.000	90.000	179.676	10918.997	53.675	0.000	55.163	-0.000	53.675	0.000	0.000	55.353	45.617	8.090	MWD+IFR1+MS
16500.000	90.000	179.676	10918.997	54.344	0.000	55.700	-0.000	54.344	0.000	0.000	55.887	45.650	7.821	MWD+IFR1+MS
16600.000	90.000	179.676	10918.997	55.017	0.000	56.242	-0.000	55.017	0.000	0.000	56.426	45.683	7.572	MWD+IFR1+MS
16700.000	90.000	179.676	10918.997	55.692	0.000	56.790	-0.000	55.692	0.000	0.000	56.970	45.716	7.340	MWD+IFR1+MS
16800.000	90.000	179.676	10918.997	56.370	0.000	57.342	-0.000	56.370	0.000	0.000	57.520	45.750	7.123	MWD+IFR1+MS
16900.000	90.000	179.676	10918.997	57.051	0.000	57.900	-0.000	57.051	0.000	0.000	58.075	45.784	6.921	MWD+IFR1+MS
17000.000	90.000	179.676	10918.997	57.735	0.000	58.462	-0.000	57.735	0.000	0.000	58.634	45.818	6.731	MWD+IFR1+MS
17100.000	90.000	179.676	10918.997	58.421	0.000	59.028	-0.000	58.421	0.000	0.000	59.198	45.853	6.553	MWD+IFR1+MS
17200.000	90.000	179.676	10918.997	59.110	0.000	59.599	-0.000	59.110	0.000	0.000	59.767	45.889	6.385	MWD+IFR1+MS
17300.000	90.000	179.676	10918.997	59.801	0.000	60.175	-0.000	59.801	0.000	0.000	60.340	45.925	6.226	MWD+IFR1+MS
17400.000	90.000	179.676	10918.997	60.494	0.000	60.755	-0.000	60.494	0.000	0.000	60.918	45.961	6.076	MWD+IFR1+MS
17500.000	90.000	179.676	10918.997	61.190	0.000	61.338	-0.000	61.190	0.000	0.000	61.499	45.998	5.934	MWD+IFR1+MS
17600.000	90.000	179.676	10918.997	61.887	0.000	61.926	-0.000	61.887	0.000	0.000	62.085	46.035	5.799	MWD+IFR1+MS
17700.000	90.000	179.676	10918.997	62.587	0.000	62.518	-0.000	62.587	0.000	0.000	62.675	46.073	5.671	MWD+IFR1+MS
17800.000	90.000	179.676	10918.997	63.289	0.000	63.113	-0.000	63.289	0.000	0.000	63.268	46.111	5.549	MWD+IFR1+MS
17900.000	90.000	179.676	10918.997	63.992	0.000	63.712	-0.000	63.992	0.000	0.000	63.865	46.150	5.432	MWD+IFR1+MS
18000.000	90.000	179.676	10918.997	64.698	0.000	64.314	-0.000	64.698	0.000	0.000	64.466	46.189	5.321	MWD+IFR1+MS
18100.000	90.000	179.676	10918.997	65.405	0.000	64.920	-0.000	65.405	0.000	0.000	65.070	46.229	5.214	MWD+IFR1+MS
18200.000	90.000	179.676	10918.997	66.114	0.000	65.529	-0.000	66.114	0.000	0.000	65.678	46.269	5.112	MWD+IFR1+MS
18300.000	90.000	179.676	10918.997	66.825	0.000	66.142	-0.000	66.825	0.000	0.000	66.289	46.310	5.014	MWD+IFR1+MS
18400.000	90.000	179.676	10918.997	67.537	0.000	66.757	-0.000	67.537	0.000	0.000	66.903	46.351	4.921	MWD+IFR1+MS
18500.000	90.000	179.676	10918.997	68.251	0.000	67.376	-0.000	68.251	0.000	0.000	67.520	46.393	4.831	MWD+IFR1+MS
18600.000	90.000	179.676	10918.997	68.967	0.000	67.998	-0.000	68.967	0.000	0.000	68.140	46.435	4.744	MWD+IFR1+MS
18700.000	90.000	179.676	10918.997	69.684	0.000	68.623	-0.000	69.684	0.000	0.000	68.764	46.478	4.661	MWD+IFR1+MS
18800.000	90.000	179.676	10918.997	70.402	0.000	69.250	-0.000	70.402	0.000	0.000	69.390	46.521	4.580	MWD+IFR1+MS
18900.000	90.000	179.676	10918.997	71.122	0.000	69.880	-0.000	71.122	0.000	0.000	70.019	46.565	4.503	MWD+IFR1+MS
19000.000	90.000	179.676	10918.997	71.843	0.000	70.513	-0.000	71.843	0.000	0.000	70.650	46.609	4.428	MWD+IFR1+MS

19100.000	90.000	179.676	10918.997	72.566	0.000	71.149	-0.000	72.566	0.000	0.000	71.284	46.654	4.356	MWD+IFR1+MS
19200.000	90.000	179.676	10918.997	73.290	0.000	71.787	-0.000	73.290	0.000	0.000	71.921	46.699	4.286	MWD+IFR1+MS
19300.000	90.000	179.676	10918.997	74.015	0.000	72.427	-0.000	74.015	0.000	0.000	72.560	46.745	4.219	MWD+IFR1+MS
19400.000	90.000	179.676	10918.997	74.741	0.000	73.070	-0.000	74.741	0.000	0.000	73.202	46.791	4.153	MWD+IFR1+MS
19500.000	90.000	179.676	10918.997	75.468	0.000	73.715	-0.000	75.468	0.000	0.000	73.846	46.838	4.090	MWD+IFR1+MS
19600.000	90.000	179.676	10918.997	76.197	0.000	74.363	-0.000	76.197	0.000	0.000	74.492	46.885	4.029	MWD+IFR1+MS
19700.000	90.000	179.676	10918.997	76.927	0.000	75.013	-0.000	76.927	0.000	0.000	75.141	46.932	3.970	MWD+IFR1+MS
19800.000	90.000	179.676	10918.997	77.657	0.000	75.664	-0.000	77.657	0.000	0.000	75.792	46.981	3.912	MWD+IFR1+MS
19900.000	90.000	179.676	10918.997	78.389	0.000	76.319	-0.000	78.389	0.000	0.000	76.445	47.029	3.856	MWD+IFR1+MS
20000.000	90.000	179.676	10918.997	79.122	0.000	76.975	-0.000	79.122	0.000	0.000	77.100	47.079	3.802	MWD+IFR1+MS
20100.000	90.000	179.676	10918.997	79.856	0.000	77.633	-0.000	79.856	0.000	0.000	77.757	47.128	3.749	MWD+IFR1+MS
20200.000	90.000	179.676	10918.997	80.591	0.000	78.293	-0.000	80.591	0.000	0.000	78.416	47.179	3.698	MWD+IFR1+MS
20300.000	90.000	179.676	10918.997	81.326	0.000	78.955	-0.000	81.326	0.000	0.000	79.077	47.229	3.648	MWD+IFR1+MS
20400.000	90.000	179.676	10918.997	82.063	0.000	79.619	-0.000	82.063	0.000	0.000	79.740	47.281	3.599	MWD+IFR1+MS
20500.000	90.000	179.676	10918.997	82.800	0.000	80.284	-0.000	82.800	0.000	0.000	80.404	47.332	3.552	MWD+IFR1+MS
20600.000	90.000	179.676	10918.997	83.539	0.000	80.952	-0.000	83.539	0.000	0.000	81.071	47.384	3.506	MWD+IFR1+MS
20700.000	90.000	179.676	10918.997	84.278	0.000	81.621	-0.000	84.278	0.000	0.000	81.739	47.437	3.461	MWD+IFR1+MS
20800.000	90.000	179.676	10918.997	85.018	0.000	82.292	-0.000	85.018	0.000	0.000	82.409	47.490	3.417	MWD+IFR1+MS
20900.000	90.000	179.676	10918.997	85.759	0.000	82.964	-0.000	85.759	0.000	0.000	83.080	47.544	3.375	MWD+IFR1+MS
21000.000	90.000	179.676	10918.997	86.500	0.000	83.638	-0.000	86.500	0.000	0.000	83.753	47.598	3.333	MWD+IFR1+MS
21100.000	90.000	179.676	10918.997	87.243	0.000	84.314	-0.000	87.243	0.000	0.000	84.428	47.653	3.293	MWD+IFR1+MS
21200.000	90.000	179.676	10918.997	87.986	0.000	84.991	-0.000	87.986	0.000	0.000	85.104	47.708	3.253	MWD+IFR1+MS
21300.000	90.000	179.676	10918.997	88.730	0.000	85.669	-0.000	88.730	0.000	0.000	85.782	47.763	3.214	MWD+IFR1+MS
21400.000	90.000	179.676	10918.997	89.474	0.000	86.349	-0.000	89.474	0.000	0.000	86.461	47.820	3.176	MWD+IFR1+MS
21500.000	90.000	179.676	10918.997	90.219	0.000	87.031	-0.000	90.219	0.000	0.000	87.142	47.876	3.139	MWD+IFR1+MS
21600.000	90.000	179.676	10918.997	90.965	0.000	87.714	-0.000	90.965	0.000	0.000	87.824	47.933	3.103	MWD+IFR1+MS
21700.000	90.000	179.676	10918.997	91.712	0.000	88.398	-0.000	91.712	0.000	0.000	88.508	47.991	3.068	MWD+IFR1+MS
21800.000	90.000	179.676	10918.997	92.459	0.000	89.084	-0.000	92.459	0.000	0.000	89.192	48.049	3.034	MWD+IFR1+MS
21900.000	90.000	179.676	10918.997	93.206	0.000	89.771	-0.000	93.206	0.000	0.000	89.878	48.107	3.000	MWD+IFR1+MS
22000.000	90.000	179.676	10918.997	93.955	0.000	90.459	-0.000	93.955	0.000	0.000	90.566	48.166	2.967	MWD+IFR1+MS
22100.000	90.000	179.676	10918.997	94.704	0.000	91.148	-0.000	94.704	0.000	0.000	91.254	48.225	2.934	MWD+IFR1+MS
22200.000	90.000	179.676	10918.997	95.453	0.000	91.839	-0.000	95.453	0.000	0.000	91.944	48.285	2.903	MWD+IFR1+MS
22300.000	90.000	179.676	10918.997	96.203	0.000	92.530	-0.000	96.203	0.000	0.000	92.635	48.346	2.872	MWD+IFR1+MS

22400.000	90.000	179.676	10918.997	96.954	0.000	93.223	-0.000	96.954	0.000	0.000	93.327	48.406	2.841	MWD+IFR1+MS
22500.000	90.000	179.676	10918.997	97.705	0.000	93.917	-0.000	97.705	0.000	0.000	94.021	48.468	2.811	MWD+IFR1+MS
22600.000	90.000	179.676	10918.997	98.457	0.000	94.612	-0.000	98.457	0.000	0.000	94.715	48.529	2.782	MWD+IFR1+MS
22700.000	90.000	179.676	10918.997	99.209	0.000	95.309	-0.000	99.209	0.000	0.000	95.411	48.592	2.753	MWD+IFR1+MS
22800.000	90.000	179.676	10918.997	99.962	0.000	96.006	-0.000	99.962	0.000	0.000	96.107	48.654	2.725	MWD+IFR1+MS
22900.000	90.000	179.676	10918.997	100.715	0.000	96.704	-0.000	100.715	0.000	0.000	96.805	48.717	2.698	MWD+IFR1+MS
23000.000	90.000	179.676	10918.997	101.469	0.000	97.404	-0.000	101.469	0.000	0.000	97.503	48.781	2.671	MWD+IFR1+MS
23100.000	90.000	179.676	10918.997	102.223	0.000	98.104	-0.000	102.223	0.000	0.000	98.203	48.845	2.644	MWD+IFR1+MS
23200.000	90.000	179.676	10918.997	102.977	0.000	98.805	-0.000	102.977	0.000	0.000	98.904	48.909	2.618	MWD+IFR1+MS
23300.000	90.000	179.676	10918.997	103.732	0.000	99.507	-0.000	103.732	0.000	0.000	99.605	48.974	2.593	MWD+IFR1+MS
23400.000	90.000	179.676	10918.997	104.488	0.000	100.211	-0.000	104.488	0.000	0.000	100.308	49.040	2.568	MWD+IFR1+MS
23500.000	90.000	179.676	10918.997	105.244	0.000	100.915	-0.000	105.244	0.000	0.000	101.011	49.105	2.543	MWD+IFR1+MS
23600.000	90.000	179.676	10918.997	106.000	0.000	101.620	-0.000	106.000	0.000	0.000	101.715	49.172	2.519	MWD+IFR1+MS
23700.000	90.000	179.676	10918.997	106.757	0.000	102.325	-0.000	106.757	0.000	0.000	102.421	49.238	2.495	MWD+IFR1+MS
23800.000	90.000	179.676	10918.997	107.514	0.000	103.032	-0.000	107.514	0.000	0.000	103.127	49.305	2.472	MWD+IFR1+MS
23900.000	90.000	179.676	10918.997	108.271	0.000	103.740	-0.000	108.271	0.000	0.000	103.834	49.373	2.449	MWD+IFR1+MS
24000.000	90.000	179.676	10918.997	109.029	0.000	104.448	-0.000	109.029	0.000	0.000	104.541	49.441	2.426	MWD+IFR1+MS
24100.000	90.000	179.676	10918.997	109.788	0.000	105.157	-0.000	109.788	0.000	0.000	105.250	49.509	2.404	MWD+IFR1+MS
24200.000	90.000	179.676	10918.997	110.546	0.000	105.867	-0.000	110.546	0.000	0.000	105.959	49.578	2.382	MWD+IFR1+MS
24300.000	90.000	179.676	10918.997	111.305	0.000	106.578	-0.000	111.305	0.000	0.000	106.669	49.648	2.361	MWD+IFR1+MS
24400.000	90.000	179.676	10918.997	112.065	0.000	107.289	-0.000	112.065	0.000	0.000	107.380	49.717	2.340	MWD+IFR1+MS
24500.000	90.000	179.676	10918.997	112.825	0.000	108.001	-0.000	112.825	0.000	0.000	108.092	49.787	2.319	MWD+IFR1+MS
24600.000	90.000	179.676	10918.997	113.585	0.000	108.714	-0.000	113.585	0.000	0.000	108.804	49.858	2.299	MWD+IFR1+MS
24700.000	90.000	179.676	10918.997	114.345	0.000	109.428	-0.000	114.345	0.000	0.000	109.517	49.929	2.279	MWD+IFR1+MS
24800.000	90.000	179.676	10918.997	115.106	0.000	110.142	-0.000	115.106	0.000	0.000	110.231	50.001	2.259	MWD+IFR1+MS
24900.000	90.000	179.676	10918.997	115.867	0.000	110.857	-0.000	115.867	0.000	0.000	110.946	50.072	2.240	MWD+IFR1+MS
25000.000	90.000	179.676	10918.997	116.628	0.000	111.573	-0.000	116.628	0.000	0.000	111.661	50.145	2.220	MWD+IFR1+MS
25100.000	90.000	179.676	10918.997	117.390	0.000	112.289	-0.000	117.390	0.000	0.000	112.377	50.217	2.202	MWD+IFR1+MS
25200.000	90.000	179.676	10918.997	118.152	0.000	113.006	-0.000	118.152	0.000	0.000	113.093	50.290	2.183	MWD+IFR1+MS
25300.000	90.000	179.676	10918.997	118.914	0.000	113.724	-0.000	118.914	0.000	0.000	113.810	50.364	2.165	MWD+IFR1+MS
25400.000	90.000	179.676	10918.997	119.677	0.000	114.442	-0.000	119.677	0.000	0.000	114.528	50.438	2.147	MWD+IFR1+MS
25500.000	90.000	179.676	10918.997	120.440	0.000	115.161	-0.000	120.440	0.000	0.000	115.246	50.512	2.129	MWD+IFR1+MS
25600.000	90.000	179.676	10918.997	121.203	0.000	115.880	-0.000	121.203	0.000	0.000	115.965	50.587	2.112	MWD+IFR1+MS

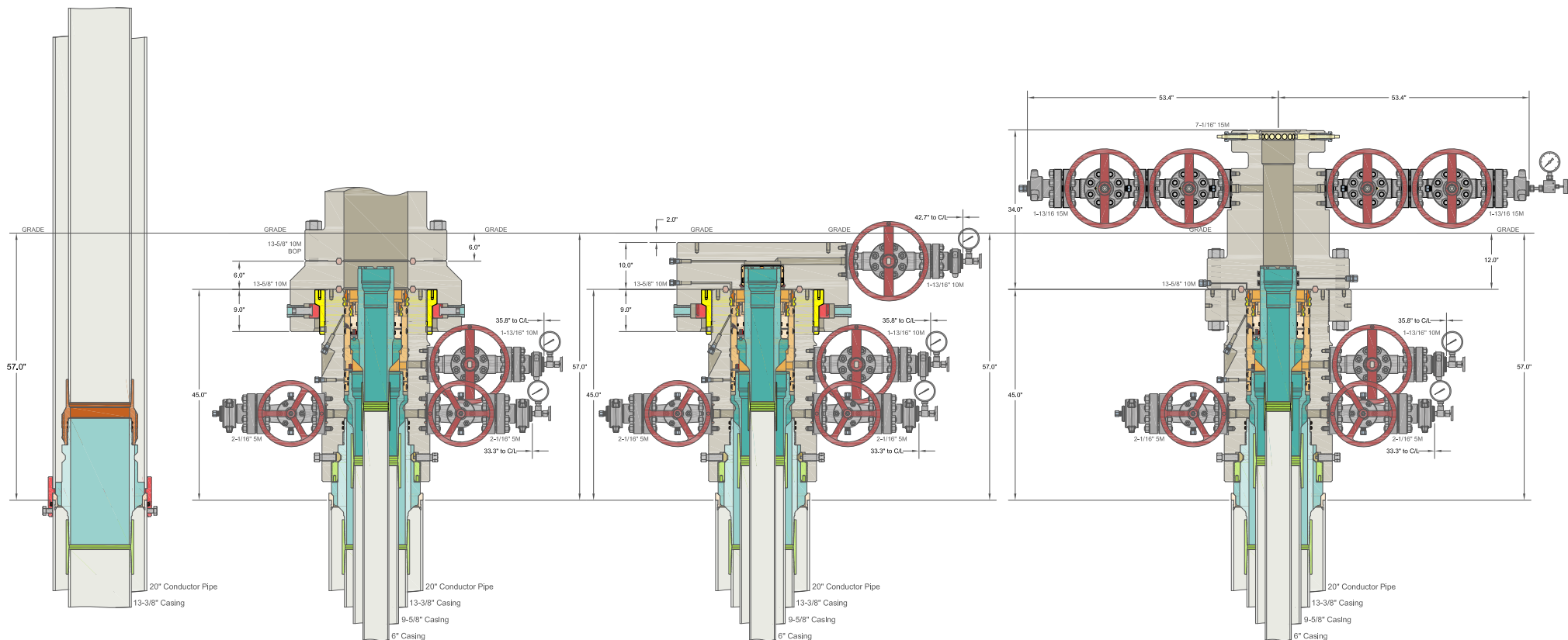
25700.000	90.000	179.676	10918.997	121.966	0.000	116.600	-0.000	121.966	0.000	0.000	116.685	50.662	2.094	MWD+IFR1+MS
25800.000	90.000	179.676	10918.997	122.730	0.000	117.321	-0.000	122.730	0.000	0.000	117.405	50.738	2.077	MWD+IFR1+MS
25900.000	90.000	179.676	10918.997	123.494	0.000	118.042	-0.000	123.494	0.000	0.000	118.125	50.814	2.061	MWD+IFR1+MS
26000.000	90.000	179.676	10918.997	124.258	0.000	118.764	-0.000	124.258	0.000	0.000	118.847	50.890	2.044	MWD+IFR1+MS
26100.000	90.000	179.676	10918.997	125.022	0.000	119.486	-0.000	125.022	0.000	0.000	119.569	50.967	2.028	MWD+IFR1+MS
26200.000	90.000	179.676	10918.997	125.787	0.000	120.209	-0.000	125.787	0.000	0.000	120.291	51.044	2.012	MWD+IFR1+MS
26300.000	90.000	179.676	10918.997	126.552	0.000	120.932	-0.000	126.552	0.000	0.000	121.014	51.122	1.996	MWD+IFR1+MS
26400.000	90.000	179.676	10918.997	127.317	0.000	121.656	-0.000	127.317	0.000	0.000	121.737	51.200	1.981	MWD+IFR1+MS
26500.000	90.000	179.676	10918.997	128.083	0.000	122.381	-0.000	128.083	0.000	0.000	122.461	51.278	1.965	MWD+IFR1+MS
26600.000	90.000	179.676	10918.997	128.848	0.000	123.105	-0.000	128.848	0.000	0.000	123.186	51.357	1.950	MWD+IFR1+MS
26700.000	90.000	179.676	10918.997	129.614	0.000	123.831	-0.000	129.614	0.000	0.000	123.910	51.436	1.935	MWD+IFR1+MS
26800.000	90.000	179.676	10918.997	130.380	0.000	124.557	-0.000	130.380	0.000	0.000	124.636	51.515	1.920	MWD+IFR1+MS
26900.000	90.000	179.676	10918.997	131.147	0.000	125.283	-0.000	131.147	0.000	0.000	125.362	51.595	1.906	MWD+IFR1+MS
27000.000	90.000	179.676	10918.997	131.913	0.000	126.010	-0.000	131.913	0.000	0.000	126.088	51.676	1.892	MWD+IFR1+MS
27100.000	90.000	179.676	10918.997	132.680	0.000	126.737	-0.000	132.680	0.000	0.000	126.815	51.756	1.877	MWD+IFR1+MS
27200.000	90.000	179.676	10918.997	133.447	0.000	127.465	-0.000	133.447	0.000	0.000	127.542	51.837	1.863	MWD+IFR1+MS
27300.000	90.000	179.676	10918.997	134.214	0.000	128.193	-0.000	134.214	0.000	0.000	128.270	51.919	1.850	MWD+IFR1+MS
27400.000	90.000	179.676	10918.997	134.982	0.000	128.921	-0.000	134.982	0.000	0.000	128.998	52.001	1.836	MWD+IFR1+MS
27500.000	90.000	179.676	10918.997	135.749	0.000	129.650	-0.000	135.749	0.000	0.000	129.727	52.083	1.823	MWD+IFR1+MS
27600.000	90.000	179.676	10918.997	136.517	0.000	130.380	-0.000	136.517	0.000	0.000	130.456	52.165	1.809	MWD+IFR1+MS
27700.000	90.000	179.676	10918.997	137.285	0.000	131.110	-0.000	137.285	0.000	0.000	131.185	52.248	1.796	MWD+IFR1+MS
27800.000	90.000	179.676	10918.997	138.053	0.000	131.840	-0.000	138.053	0.000	0.000	131.915	52.331	1.783	MWD+IFR1+MS
27900.000	90.000	179.676	10918.997	138.822	0.000	132.570	-0.000	138.822	0.000	0.000	132.645	52.415	1.771	MWD+IFR1+MS
28000.000	90.000	179.676	10918.997	139.590	0.000	133.301	-0.000	139.590	0.000	0.000	133.376	52.499	1.758	MWD+IFR1+MS
28100.000	90.000	179.676	10918.997	140.359	0.000	134.033	-0.000	140.359	0.000	0.000	134.107	52.584	1.746	MWD+IFR1+MS
28200.000	90.000	179.676	10918.997	141.128	0.000	134.765	-0.000	141.128	0.000	0.000	134.838	52.668	1.733	MWD+IFR1+MS
28300.000	90.000	179.676	10918.997	141.897	0.000	135.497	-0.000	141.897	0.000	0.000	135.570	52.753	1.721	MWD+IFR1+MS
28400.000	90.000	179.676	10918.997	142.666	0.000	136.229	-0.000	142.666	0.000	0.000	136.302	52.839	1.709	MWD+IFR1+MS
28500.000	90.000	179.676	10918.997	143.435	0.000	136.962	-0.000	143.435	0.000	0.000	137.035	52.925	1.697	MWD+IFR1+MS
28600.000	90.000	179.676	10918.997	144.205	0.000	137.695	-0.000	144.205	0.000	0.000	137.768	53.011	1.686	MWD+IFR1+MS
28700.000	90.000	179.676	10918.997	144.975	0.000	138.429	-0.000	144.975	0.000	0.000	138.501	53.098	1.674	MWD+IFR1+MS
28800.000	90.000	179.676	10918.997	145.745	0.000	139.163	-0.000	145.745	0.000	0.000	139.234	53.184	1.663	MWD+IFR1+MS
28900.000	90.000	179.676	10918.997	146.515	0.000	139.897	-0.000	146.515	0.000	0.000	139.968	53.272	1.651	MWD+IFR1+MS

28913.359	90.000	179.676	10918.997	146.617	0.000	139.995	-0.000	146.617	0.000	0.000	140.066	53.283	1.650	MWD+IFR1+MS
29000.000	90.000	179.676	10918.997	147.284	0.000	140.630	-0.000	147.284	0.000	0.000	140.701	53.359	1.640	MWD+IFR1+MS
29012.472	90.000	179.676	10918.997	147.380	0.000	140.722	-0.000	147.380	0.000	0.000	140.793	53.370	1.639	MWD+IFR1+MS

Plan Targets

Poker Lake Unit 20 DTD South 112H

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 2	11220.52	440363.00	630793.10	7666.00	RECTANGLE
SHL 2	12522.39	439500.89	631699.97	7463.23	RECTANGLE
LTP 2	28862.77	422242.00	630894.90	7666.00	RECTANGLE
BHL 2	28962.79	422142.00	630895.40	7666.00	RECTANGLE



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ALL DIMENSIONS APPROXIMATE

CACTUS WELLHEAD LLC		XTO ENERGY INC DELAWARE BASIN	
(20") x 13-3/8" x 9-5/8" x 6" MBU-3T-CFL-R-DBLO-SF Wellhead With 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS-SB Tubing Head And Drilling & Skid Configurations		DRAWN	DLE
		APPRV	04NOV22
		DRAWING NO.	HBE0000833

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 342080

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 342080
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	All original COA's still apply. Additionally, if cement is not circulated to surface during cementing operations, then a CBL is required.	6/6/2024