

Well Name: POKER LAKE 23 DTD FEDERAL COM	Well Location: T24S / R30E / SEC 14 / SESE /	County or Parish/State:
Well Number: 107H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM068905	Unit or CA Name:	Unit or CA Number: NMNM71016X
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: XTO PERMIAN OPERATING LLC

Notice of Intent

Sundry ID: 2764692

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 12/05/2023

Time Sundry Submitted: 06:09

Date proposed operation will begin: 12/12/2023

Procedure Description: XTO Permian Operating, LLC. respectfully requests approval to make the following changes to the approved APD (ID 10400080747): SHL, BHL, FTP, LTP, casing and cement changes. SHL: FROM: 455' FSL & 606' FEL of Section 14-T24S-R30E TO: 845' FSL & 608' FEL of Section 14-T24S-R30E BHL: FROM: 200' FNL & 1430' FEL of Section 2-T24S-R30E TO: 50' FNL & 1200' FEL of Section 2-T24S-R30E FTP: FROM: 100' FSL & 1430' FEL of Section 14-T24S-R30E TO: 500' FNL & 1350' FEL of Section 23-T24S-R30E LTP: FROM: 330' FNL & 1430' FEL of Section 2-T24S-R30E TO: 100' FNL & 1200' FEL of Section 2-T24S-R30E Casing and cement changes are listed on the attached drilling plan. Will be using a 4-string casing program. C-102, Drilling Plan, Directional Plan, Casing Spec Sheet and MultiBowl Schematic attached.

NOI Attachments

Procedure Description

- Proprietary_Connections_Performance_Data_6.0000_26.0000_0.4360__P110_RY_20231205180849.pdf
- 4_String_Slimhole_SDT_3301_1_20231205180833.pdf
- Well_Plan_Report____POKER_LAKE_UNIT_23_DTD_107H_20231205180756.pdf
- Drilling_Plan____PLU_23_DTD_107H_20231205180717.pdf
- POKER_LAKE_UNIT_23_DTD_107H_C_102_Signed_12_4_2023_20231205180700.pdf

Well Name: POKER LAKE 23 DTD FEDERAL COM		Well Location: T24S / R30E / SEC 14 / SESE /	County or Parish/State:
Well Number: 107H	Type of Well: CONVENTIONAL GAS WELL		Allottee or Tribe Name:
Lease Number: NMNM068905	Unit or CA Name:	Unit or CA Number: NMNM71016X	
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: XTO PERMIAN OPERATING LLC	

Conditions of Approval

Additional

Sec_14_24S_30E_NMP_Sundry_2764692_Poker_Lake_23_DTD_Federal_Com_107H_Eng_Worksheet_20231226083325.pdf

Sec_14_24S_30E_NMP_Sundry_2764692_Poker_Lake_23_DTD_Federal_Com_107H_COAs_20231226083325.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: RANELL (RUSTY) KLEIN	Signed on: DEC 05, 2023 06:08 PM
Name: XTO PERMIAN OPERATING LLC	
Title: Regulatory Analyst	
Street Address: 6401 HOLIDAY HILL ROAD BLDG 5	
City: MIDLAND	State: TX
Phone: (432) 620-6700	
Email address: RANELL.KLEIN@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: 12/26/2023
Signature: Chris Walls	

Form 3160-5
(June 2019)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021**SUNDRY NOTICES AND REPORTS ON WELLS**
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.5. Lease Serial No. **NMLC068905**

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other2. Name of Operator **XTO PERMIAN OPERATING LLC**3a. Address **6401 HOLIDAY HILL ROAD BLDG 5, MIDLAND,** 3b. Phone No. (include area code)
(432) 683-22774. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SEC 14/T24S/R30E/NMP7. If Unit of CA/Agreement, Name and/or No.
NMNM71016X8. Well Name and No. **POKER LAKE 23 DTD FEDERAL C**

9. API Well No.

10. Field and Pool or Exploratory Area
PURPLE SAGE/WOLFCAMP (GAS)11. Country or Parish, State
EDDY/NM**12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION				
<input checked="" 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 checked="" 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 recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat 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.)

XTO Permian Operating, LLC. respectfully requests approval to make the following changes to the approved APD (ID 10400080747): SHL, BHL, FTP, LTP, casing and cement changes.

SHL: FROM: 455' FSL & 606' FEL of Section 14-T24S-R30E TO: 845' FSL & 608' FEL of Section 14-T24S-R30E

BHL: FROM: 200' FNL & 1430' FEL of Section 2-T24S-R30E TO: 50' FNL & 1200' FEL of Section 2-T24S-R30E

FTP: FROM: 100' FSL & 1430' FEL of Section 14-T24S-R30E TO: 500' FNL & 1350' FEL of Section 23-T24S-R30E

LTP: FROM: 330' FNL & 1430' FEL of Section 2-T24S-R30E TO: 100' FNL & 1200' FEL of Section 2-T24S-R30E

Casing and cement changes are listed on the attached drilling plan. Will be using a 4-string casing program.

C-102, Drilling Plan, Directional Plan, Casing Spec Sheet and MultiBowl Schematic attached.

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)
RANEL (RUSTY) KLEIN / Ph: (432) 620-6700

Title **Regulatory Analyst**

(Electronic Submission)
Signature

Date **12/05/2023**

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

CHRISTOPHER WALLS / Ph: (575) 234-2234 / Approved

Title **Petroleum Engineer**

Date **12/26/2023**

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office **CARLSBAD**

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

(Instructions on page 2)

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

Location of Well

0. SHL: SESE / 455 FSL / 606 FEL / TWSP: 24S / RANGE: 30E / SECTION: 14 / LAT: 32.21189 / LONG: -103.844923 (TVD: 0 feet, MD: 0 feet)

PPP: SWSE / 100 FSL / 1430 FEL / TWSP: 24S / RANGE: 30E / SECTION: 14 / LAT: 32.210911 / LONG: -103.847591 (TVD: 11320 feet, MD: 11800 feet)

BHL: LOT 2 / 200 FNL / 1430 FEL / TWSP: 24S / RANGE: 30E / SECTION: 2 / LAT: 32.253589 / LONG: -103.847571 (TVD: 11635 feet, MD: 27581 feet)

Sec 14-24S-30E-NMP Sundry 2764692 Poker Lake 23 DTD Federal Com 107H Eng Worksheet

Poker Lake 23 DTD Federal Com 107H

13 3/8	surface csg in a	17 1/2	inch hole.	Design Factors					Surface		
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	54.50	J 55	BTC	18.70	3.02	1.47	837	8	2.78	5.95	45,617
"B"			BTC				0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,500				Tail Cmt	does not	circ to sfc.	Totals:	837			45,617
Comparison of Proposed to Minimum Required Cement Volumes											
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE			Min Dist Hole-Cplg
17 1/2	0.6946	870	1157	581	99	8.60	984	2M			1.56
Site plat (pipe racks S or E) as per O O I DED 41, not found.											

9 5/8	casing inside the	13 3/8	Design Factors						Int 1		
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	40.00	J 55	BTC	3.96	1.38	1.96	3,974	2	3.54	2.61	158,960
"B"							0				0
w/8.4#/g mud, 30min Sfc Csg Test psig:							Totals:	3,974	158,960		
The cement volume(s) are intended to achieve a top of				0	ft from surface or a			837	overlap.		
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg		
12 1/4	0.3132	890	1833	1286	43	9.00	1114	2M	0.81		
Class 'C' tail cmt yld > 1.35											

7 5/8	casing inside the		9 5/8	Design Factors					Int 2		
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	29.70	RY P 110	Flush Joint	4.61	2.66	1.76	4,074	5	2.79	4.80	120,998
"B"	29.70	HCL 80	Flush Joint	∞	2.87	1.28	5,024	3	2.03	5.19	149,213
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,500							Totals:	9,098	270,211		
The cement volume(s) are intended to achieve a top of				3400	ft from surface or a		574			overlap.	
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE			Min Dist Hole-Cplg
8 3/4	0.1005	410	701	577	21	9.50	3396	5M			0.56
Class 'C' tail cmt yld > 1.35											

Tail cmt			Design Factors							Prod 1		
5 1/2	casing inside the	7 5/8										
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight	
"A"	23.00	RY P 110	Semi-Premiur	2.93	2.7	1.86	8,998	2	2.94	4.28	206,954	
"B"	23.00	RY P 110	Semi-Flush	∞	2.06	2.35	18,271	2	3.72	3.27	420,233	
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,980							Totals:	27,269	627,187			
The cement volume(s) are intended to achieve a top of				8500	ft from surface or a		598			overlap.		
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd	Min Dist			
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE	Hole-Cplg			
6 3/4	0.0835	1130	1742	1573	11	11.50			0.43			
Class 'H' tail cmt yld > 1.20												
Capitan Reef est top XXXX.												

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Permian Operating LLC
WELL NAME & NO.:	Poker Lake Unit 23 DTD Federal Com 107H
LOCATION:	Sec 14-24S-30E-NMP
COUNTY:	Eddy County, New Mexico

*Changes approved through engineering via **Sundry 274692** on 12/26/2023. 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 type="radio"/> None	<input checked="" 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 checked="" type="checkbox"/> EchoMeter	<input type="checkbox"/> DV Tool
Special Req	<input checked="" type="checkbox"/> Break Testing	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input 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 837 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.
 - 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

24 hours in the Potash Area 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.

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 of the 1" to get cement to surface, if required. If these quantities are exceeded / procedure needs to be changed, contact the PE on-call line to discuss further remediation options.

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.

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

Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage, contingent upon no returns to surface.

- a. First stage: Operator will cement with intent to reach the top of the **Brushy Canyon at 6298'**
- b. Second stage:
 - Operator will perform bradenhead squeeze and top-out. Cement to tie back at least **500 feet** into previous casing string. Operator should provide method of verification. **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.**

- ❖ In Secretary Potash 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.

Operator has proposed to pump down 9-5/8" X 7-5/8" annulus after primary cementing stage. Operator must run Echo-meter to verify Cement Slurry/Fluid top in the annulus OR operator shall run a CBL from TD of the 7-5/8" casing to surface after the second stage BH to verify TOC. Submit results to the BLM. No displacement fluid/wash out shall be utilized at the top of the cement slurry between second stage BH and top out.

Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.

4. The minimum required fill of cement behind the **5-1/2** inch production casing is:
 - Cement should tie-back at least **500 feet** into previous casing string. Operator shall provide method of verification. **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.**

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)

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.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR 3171 and 3172.
- 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.

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.

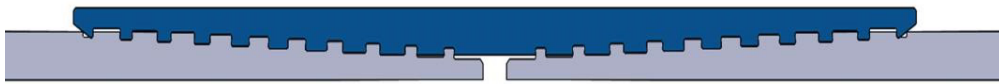
Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.



U. S. Steel Tubular Products

8/27/2021 1:46:58 PM

6.000" 26.00lb/ft (0.436" Wall) P110 RY USS-TALON HTQ™



MECHANICAL PROPERTIES	Pipe	USS-TALON HTQ™		[6]
Minimum Yield Strength	110,000	--	psi	--
Maximum Yield Strength	125,000	--	psi	--
Minimum Tensile Strength	125,000	--	psi	--
DIMENSIONS	Pipe	USS-TALON HTQ™		--
Outside Diameter	6.000	6.875	in.	--
Wall Thickness	0.436	--	in.	--
Inside Diameter	5.128	5.128	in.	--
Standard Drift	5.003	5.003	in.	--
Alternate Drift	--	--	in.	--
Nominal Linear Weight, T&C	26.00	--	lb/ft	--
Plain End Weight	25.93	--	lb/ft	--
SECTION AREA	Pipe	USS-TALON HTQ™		--
Critical Area	7.621	7.621	sq. in.	--
Joint Efficiency	--	100.0	%	[2]
PERFORMANCE	Pipe	USS-TALON HTQ™		--
Minimum Collapse Pressure	13,570	13,570	psi	--
Minimum Internal Yield Pressure	14,010	14,010	psi	--
Minimum Pipe Body Yield Strength	838,000	--	lb	--
Joint Strength	--	838,000	lb	--
Compression Rating	--	838,000	lb	--
Reference Length	--	21,490	ft	[5]
Maximum Uniaxial Bend Rating	--	84.0	deg/100 ft	[3]
MAKE-UP DATA	Pipe	USS-TALON HTQ™		--
Make-Up Loss	--	5.58	in.	--
Minimum Make-Up Torque	--	22,500	ft-lb	[4]
Maximum Make-Up Torque	--	25,500	ft-lb	[4]
Maximum Operating Torque	--	48,900	ft-lb	[4]

UNCONTROLLED

Notes

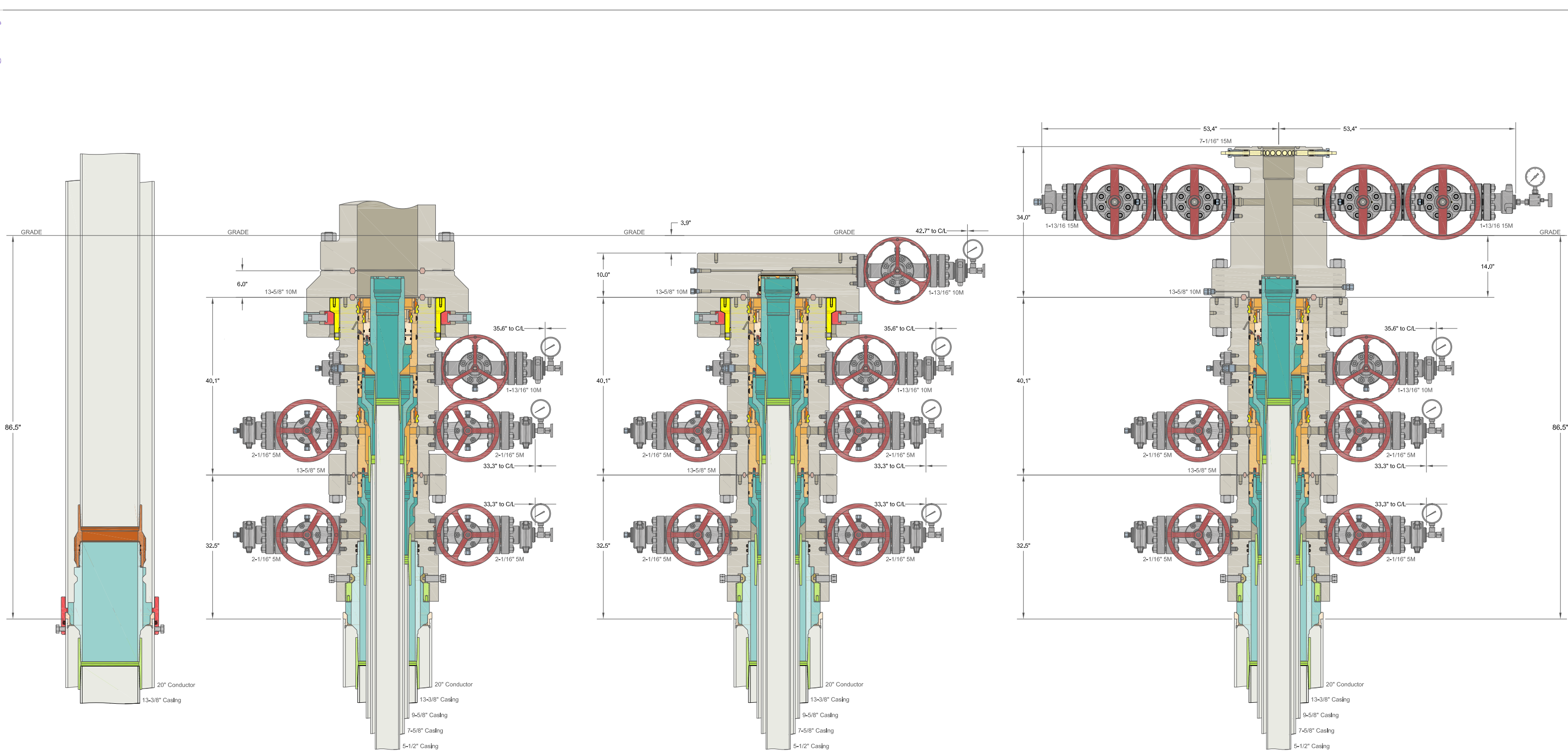
- Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).
- Joint efficiencies are calculated by dividing the connection critical area by the pipe body area.
- Uniaxial bend rating shown is structural only.
- Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
- Reference length is calculated by Joint Strength divided by Nominal Linear Weight, T&C with a 1.5 Safety factor.
- Coupling must meet minimum mechanical properties of the pipe.

Legal Notice

All material contained in this publication is for general information only. This material should not therefore be used or relied upon for any specific application without independent competent professional examination and verification of accuracy, suitability and applicability. Anyone making use of this material does so at their own risk and assumes any and all liability resulting from such use. U. S. Steel disclaims any and all expressed or implied warranties of fitness for any general or particular application.

U. S. Steel Tubular Products
460 Wildwood Forest Drive, Suite 300S
Spring, Texas 77380

1-877-893-9461
connections@uss.com
www.usstubular.com



INFORMATION CONTAINED HEREIN IS THE PROPERTY OF CACTUS WELLHEAD, LLC. REPRODUCTION, DISCLOSURE, OR USE THEREOF IS PERMISSIBLE ONLY AS PROVIDED BY CONTRACT OR AS EXPRESSLY AUTHORIZED BY CACTUS WELLHEAD, LLC.

ALL DIMENSIONS APPROXIMATE			
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			
DRAWN	VJK	31MAR22	
APPRV			
DRAWING NO.		SDT-3301	

Well Plan Report - POKER LAKE UNIT 23 DTD 107H

Measured Depth: 27268.52 ft

TVD RKB: 10014.00 ft

LocationCartographic Reference System: New Mexico East -
NAD 27

Northing: 441493.80 ft

Easting: 651204.60 ft

RKB: 3476.00 ft

Ground Level: 3444.00 ft

North Reference: Grid

Convergence Angle: 0.26 Deg

Site: PLU 23D

Slot: POKER LAKE UNIT 23
DTD 107H**Plan Sections**

POKER LAKE UNIT 23 DTD 107H

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			
2804.92	34.10	199.82	2706.04	-463.36	-166.96	2.00	0.00	2.00			
4964.03	34.10	199.82	4493.96	-1602.12	-577.29	0.00	0.00	0.00			
6668.95	0.00	0.00	6100.00	-2065.49	-744.25	-2.00	0.00	2.00			
9866.75	0.00	0.00	9297.80	-2065.49	-744.25	0.00	0.00	0.00			
10991.75	90.00	0.30	10014.00	-1349.30	-740.50	8.00	0.00	8.00	FTP 9		
27218.67	90.00	0.30	10014.00	14877.40	-655.60	0.00	0.00	0.00	LTP 9		
27268.52	90.00	0.30	10014.00	14927.25	-655.34	0.00	0.00	0.00	BHL 9		

Position Uncertainty

POKER LAKE UNIT 23 DTD 107H

Measured	TVD	Highside	Lateral	Vertical	Magnitude	Semi-major	Semi-minor	Semi-minor	Tool
----------	-----	----------	---------	----------	-----------	------------	------------	------------	------

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	2.310	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	2.326	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	2.347	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	2.375	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	2.407	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	2.445	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	2.487	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	2.533	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	2.583	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	2.636	0.000	0.000	4.752	3.849	128.859	MWD+IFR1+MS
1200.000	2.000	199.815	1199.980	5.013	-0.000	4.284	0.000	2.693	0.000	0.000	5.094	4.191	127.672	MWD+IFR1+MS
1300.000	4.000	199.815	1299.838	5.778	-0.000	4.638	0.000	2.753	0.000	0.000	5.882	4.517	126.021	MWD+IFR1+MS
1400.000	6.000	199.815	1399.452	6.466	-0.000	4.993	0.000	2.819	0.000	0.000	6.595	4.848	125.329	MWD+IFR1+MS
1500.000	8.000	199.815	1498.702	7.098	-0.000	5.350	0.000	2.892	0.000	0.000	7.254	5.183	124.961	MWD+IFR1+MS
1600.000	10.000	199.815	1597.465	7.686	-0.000	5.710	0.000	2.975	0.000	0.000	7.871	5.524	124.748	MWD+IFR1+MS
1700.000	12.000	199.815	1695.623	8.240	-0.000	6.073	0.000	3.070	0.000	0.000	8.455	5.871	124.628	MWD+IFR1+MS
1800.000	14.000	199.815	1793.055	8.764	-0.000	6.442	0.000	3.178	0.000	0.000	9.012	6.224	124.574	MWD+IFR1+MS
1900.000	16.000	199.815	1889.643	9.264	-0.000	6.816	0.000	3.301	0.000	0.000	9.546	6.585	124.572	MWD+IFR1+MS
2000.000	18.000	199.815	1985.268	9.742	-0.000	7.199	0.000	3.441	0.000	0.000	10.062	6.955	124.617	MWD+IFR1+MS
2100.000	20.000	199.815	2079.816	10.202	-0.000	7.590	0.000	3.599	0.000	0.000	10.561	7.335	124.705	MWD+IFR1+MS
2200.000	22.000	199.815	2173.169	10.645	-0.000	7.992	0.000	3.776	0.000	0.000	11.045	7.725	124.839	MWD+IFR1+MS
2300.000	24.000	199.815	2265.215	11.074	-0.000	8.404	0.000	3.972	0.000	0.000	11.517	8.127	125.021	MWD+IFR1+MS
2400.000	26.000	199.815	2355.841	11.490	-0.000	8.829	0.000	4.190	0.000	0.000	11.978	8.541	125.254	MWD+IFR1+MS
2500.000	28.000	199.815	2444.937	11.895	-0.000	9.268	0.000	4.429	0.000	0.000	12.429	8.969	125.548	MWD+IFR1+MS
2600.000	30.000	199.815	2532.394	12.290	-0.000	9.721	0.000	4.689	0.000	0.000	12.871	9.411	125.909	MWD+IFR1+MS
2700.000	32.000	199.815	2618.107	12.676	-0.000	10.189	0.000	4.972	0.000	0.000	13.305	9.868	126.350	MWD+IFR1+MS
2804.918	34.098	199.815	2706.045	13.095	-0.000	10.700	0.000	5.310	0.000	0.000	13.768	10.363	126.917	MWD+IFR1+MS
2900.000	34.098	199.815	2784.780	13.480	-0.000	11.174	0.000	5.530	0.000	0.000	14.091	10.825	127.701	MWD+IFR1+MS
3000.000	34.098	199.815	2867.587	13.827	-0.000	11.681	0.000	5.728	0.000	0.000	14.389	11.324	128.667	MWD+IFR1+MS

3100.000	34.098	199.815	2950.395	14.186	-0.000	12.198	0.000	5.935	0.000	0.000	14.697	11.828	129.790	MWD+IFR1+MS
3200.000	34.098	199.815	3033.203	14.556	-0.000	12.722	0.000	6.152	0.000	0.000	15.017	12.337	131.085	MWD+IFR1+MS
3300.000	34.098	199.815	3116.010	14.936	-0.000	13.253	0.000	6.377	0.000	0.000	15.347	12.849	132.577	MWD+IFR1+MS
3400.000	34.098	199.815	3198.818	15.326	-0.000	13.789	0.000	6.609	0.000	0.000	15.688	13.362	134.300	MWD+IFR1+MS
3500.000	34.098	199.815	3281.625	15.723	-0.000	14.331	0.000	6.848	0.000	0.000	16.041	13.874	-43.716	MWD+IFR1+MS
3600.000	34.098	199.815	3364.433	16.129	-0.000	14.877	0.000	7.092	0.000	0.000	16.406	14.385	-41.437	MWD+IFR1+MS
3700.000	34.098	199.815	3447.241	16.542	-0.000	15.427	0.000	7.342	0.000	0.000	16.785	14.892	-38.839	MWD+IFR1+MS
3800.000	34.098	199.815	3530.048	16.962	-0.000	15.981	0.000	7.597	0.000	0.000	17.177	15.393	-35.909	MWD+IFR1+MS
3900.000	34.098	199.815	3612.856	17.388	-0.000	16.538	0.000	7.857	0.000	0.000	17.586	15.887	-32.662	MWD+IFR1+MS
4000.000	34.098	199.815	3695.664	17.820	-0.000	17.098	0.000	8.120	0.000	0.000	18.010	16.373	-29.149	MWD+IFR1+MS
4100.000	34.098	199.815	3778.471	18.257	-0.000	17.661	0.000	8.387	0.000	0.000	18.452	16.848	-25.460	MWD+IFR1+MS
4200.000	34.098	199.815	3861.279	18.699	-0.000	18.226	0.000	8.658	0.000	0.000	18.911	17.312	-21.715	MWD+IFR1+MS
4300.000	34.098	199.815	3944.086	19.146	-0.000	18.793	0.000	8.931	0.000	0.000	19.388	17.766	-18.048	MWD+IFR1+MS
4400.000	34.098	199.815	4026.894	19.598	-0.000	19.362	0.000	9.208	0.000	0.000	19.880	18.209	-14.573	MWD+IFR1+MS
4500.000	34.098	199.815	4109.702	20.053	-0.000	19.934	0.000	9.487	0.000	0.000	20.386	18.643	-11.373	MWD+IFR1+MS
4600.000	34.098	199.815	4192.509	20.513	-0.000	20.507	0.000	9.768	0.000	0.000	20.905	19.070	-8.490	MWD+IFR1+MS
4700.000	34.098	199.815	4275.317	20.975	-0.000	21.081	0.000	10.052	0.000	0.000	21.434	19.492	-5.933	MWD+IFR1+MS
4800.000	34.098	199.815	4358.125	21.442	-0.000	21.657	0.000	10.338	0.000	0.000	21.972	19.908	-3.685	MWD+IFR1+MS
4900.000	34.098	199.815	4440.932	21.911	-0.000	22.234	0.000	10.626	0.000	0.000	22.518	20.322	-1.718	MWD+IFR1+MS
4964.032	34.098	199.815	4493.955	22.210	-0.000	22.601	0.000	10.810	0.000	0.000	22.865	20.585	-0.559	MWD+IFR1+MS
5000.000	33.379	199.815	4523.866	22.424	-0.000	22.805	0.000	10.913	0.000	0.000	23.059	20.731	0.049	MWD+IFR1+MS
5100.000	31.379	199.815	4608.314	23.048	-0.000	23.367	0.000	11.221	0.000	0.000	23.607	21.167	1.087	MWD+IFR1+MS
5200.000	29.379	199.815	4694.579	23.697	-0.000	23.918	0.000	11.544	0.000	0.000	24.159	21.638	1.367	MWD+IFR1+MS
5300.000	27.379	199.815	4782.557	24.305	-0.000	24.453	0.000	11.840	0.000	0.000	24.696	22.109	1.511	MWD+IFR1+MS
5400.000	25.379	199.815	4872.140	24.870	-0.000	24.971	0.000	12.112	0.000	0.000	25.218	22.577	1.540	MWD+IFR1+MS
5500.000	23.379	199.815	4963.219	25.392	-0.000	25.471	0.000	12.360	0.000	0.000	25.725	23.042	1.468	MWD+IFR1+MS
5600.000	21.379	199.815	5055.683	25.872	-0.000	25.954	0.000	12.586	0.000	0.000	26.214	23.502	1.305	MWD+IFR1+MS
5700.000	19.379	199.815	5149.419	26.307	-0.000	26.417	0.000	12.791	0.000	0.000	26.687	23.955	1.060	MWD+IFR1+MS
5800.000	17.379	199.815	5244.313	26.698	-0.000	26.862	0.000	12.977	0.000	0.000	27.142	24.400	0.741	MWD+IFR1+MS
5900.000	15.379	199.815	5340.250	27.044	-0.000	27.288	0.000	13.144	0.000	0.000	27.579	24.835	0.351	MWD+IFR1+MS
6000.000	13.379	199.815	5437.113	27.346	-0.000	27.695	0.000	13.296	0.000	0.000	27.999	25.260	-0.104	MWD+IFR1+MS
6100.000	11.379	199.815	5534.783	27.602	-0.000	28.083	0.000	13.432	0.000	0.000	28.401	25.673	-0.621	MWD+IFR1+MS
6200.000	9.379	199.815	5633.142	27.814	-0.000	28.452	0.000	13.555	0.000	0.000	28.786	26.074	-1.196	MWD+IFR1+MS

6300.000	7.379	199.815	5732.069	27.981	-0.000	28.802	0.000	13.666	0.000	0.000	29.153	26.461	-1.827	MWD+IFR1+MS
6400.000	5.379	199.815	5831.445	28.104	-0.000	29.133	0.000	13.766	0.000	0.000	29.504	26.833	-2.509	MWD+IFR1+MS
6500.000	3.379	199.815	5931.148	28.183	-0.000	29.446	0.000	13.858	0.000	0.000	29.837	27.190	-3.240	MWD+IFR1+MS
6600.000	1.379	199.815	6031.057	28.219	-0.000	29.741	0.000	13.943	0.000	0.000	30.153	27.532	-4.015	MWD+IFR1+MS
6668.950	0.000	0.000	6100.000	27.721	0.000	30.313	0.000	13.999	0.000	0.000	30.325	27.709	-3.890	MWD+IFR1+MS
6700.000	0.000	0.000	6131.050	27.798	0.000	30.382	0.000	14.024	0.000	0.000	30.394	27.786	-3.860	MWD+IFR1+MS
6800.000	0.000	0.000	6231.050	28.047	0.000	30.609	0.000	14.104	0.000	0.000	30.619	28.035	-3.785	MWD+IFR1+MS
6900.000	0.000	0.000	6331.050	28.301	0.000	30.841	0.000	14.187	0.000	0.000	30.851	28.290	-3.787	MWD+IFR1+MS
7000.000	0.000	0.000	6431.050	28.558	0.000	31.075	0.000	14.273	0.000	0.000	31.086	28.546	-3.790	MWD+IFR1+MS
7100.000	0.000	0.000	6531.050	28.817	0.000	31.312	0.000	14.361	0.000	0.000	31.323	28.805	-3.792	MWD+IFR1+MS
7200.000	0.000	0.000	6631.050	29.078	0.000	31.551	0.000	14.452	0.000	0.000	31.562	29.066	-3.795	MWD+IFR1+MS
7300.000	0.000	0.000	6731.050	29.341	0.000	31.793	0.000	14.545	0.000	0.000	31.803	29.329	-3.797	MWD+IFR1+MS
7400.000	0.000	0.000	6831.050	29.606	0.000	32.037	0.000	14.641	0.000	0.000	32.047	29.594	-3.799	MWD+IFR1+MS
7500.000	0.000	0.000	6931.050	29.873	0.000	32.282	0.000	14.740	0.000	0.000	32.293	29.861	-3.802	MWD+IFR1+MS
7600.000	0.000	0.000	7031.050	30.141	0.000	32.530	0.000	14.842	0.000	0.000	32.540	30.130	-3.804	MWD+IFR1+MS
7700.000	0.000	0.000	7131.050	30.412	0.000	32.780	0.000	14.947	0.000	0.000	32.790	30.401	-3.807	MWD+IFR1+MS
7800.000	0.000	0.000	7231.050	30.685	0.000	33.032	0.000	15.054	0.000	0.000	33.042	30.674	-3.809	MWD+IFR1+MS
7900.000	0.000	0.000	7331.050	30.959	0.000	33.286	0.000	15.165	0.000	0.000	33.296	30.948	-3.812	MWD+IFR1+MS
8000.000	0.000	0.000	7431.050	31.235	0.000	33.542	0.000	15.278	0.000	0.000	33.552	31.224	-3.814	MWD+IFR1+MS
8100.000	0.000	0.000	7531.050	31.512	0.000	33.799	0.000	15.395	0.000	0.000	33.809	31.502	-3.816	MWD+IFR1+MS
8200.000	0.000	0.000	7631.050	31.792	0.000	34.059	0.000	15.514	0.000	0.000	34.069	31.781	-3.819	MWD+IFR1+MS
8300.000	0.000	0.000	7731.050	32.072	0.000	34.320	0.000	15.637	0.000	0.000	34.330	32.062	-3.821	MWD+IFR1+MS
8400.000	0.000	0.000	7831.050	32.355	0.000	34.583	0.000	15.763	0.000	0.000	34.593	32.344	-3.824	MWD+IFR1+MS
8500.000	0.000	0.000	7931.050	32.639	0.000	34.848	0.000	15.892	0.000	0.000	34.857	32.628	-3.826	MWD+IFR1+MS
8600.000	0.000	0.000	8031.050	32.924	0.000	35.114	0.000	16.024	0.000	0.000	35.124	32.914	-3.829	MWD+IFR1+MS
8700.000	0.000	0.000	8131.050	33.211	0.000	35.382	0.000	16.159	0.000	0.000	35.392	33.200	-3.831	MWD+IFR1+MS
8800.000	0.000	0.000	8231.050	33.499	0.000	35.652	0.000	16.298	0.000	0.000	35.661	33.489	-3.834	MWD+IFR1+MS
8900.000	0.000	0.000	8331.050	33.788	0.000	35.923	0.000	16.440	0.000	0.000	35.932	33.778	-3.836	MWD+IFR1+MS
9000.000	0.000	0.000	8431.050	34.079	0.000	36.196	0.000	16.586	0.000	0.000	36.205	34.069	-3.838	MWD+IFR1+MS
9100.000	0.000	0.000	8531.050	34.371	0.000	36.470	0.000	16.734	0.000	0.000	36.479	34.361	-3.841	MWD+IFR1+MS
9200.000	0.000	0.000	8631.050	34.664	0.000	36.745	0.000	16.887	0.000	0.000	36.755	34.654	-3.843	MWD+IFR1+MS
9300.000	0.000	0.000	8731.050	34.959	0.000	37.022	0.000	17.042	0.000	0.000	37.031	34.949	-3.846	MWD+IFR1+MS
9400.000	0.000	0.000	8831.050	35.254	0.000	37.301	0.000	17.201	0.000	0.000	37.310	35.245	-3.848	MWD+IFR1+MS

9500.000	0.000	0.000	8931.050	35.551	0.000	37.581	0.000	17.364	0.000	0.000	37.590	35.542	-3.851	MWD+IFR1+MS
9600.000	0.000	0.000	9031.050	35.849	0.000	37.862	0.000	17.530	0.000	0.000	37.871	35.840	-3.853	MWD+IFR1+MS
9700.000	0.000	0.000	9131.050	36.148	0.000	38.144	0.000	17.699	0.000	0.000	38.153	36.139	-3.856	MWD+IFR1+MS
9800.000	0.000	0.000	9231.050	36.448	0.000	38.428	0.000	17.872	0.000	0.000	38.436	36.439	-3.858	MWD+IFR1+MS
9866.753	0.000	0.000	9297.803	36.647	0.000	38.616	0.000	17.990	0.000	0.000	38.625	36.638	-3.811	MWD+IFR1+MS
9900.000	2.660	0.300	9331.038	36.315	0.000	38.707	0.000	18.048	0.000	0.000	38.717	36.739	-3.787	MWD+IFR1+MS
10000.000	10.660	0.300	9430.283	35.443	0.000	38.970	0.000	18.241	0.000	0.000	38.988	37.493	-5.977	MWD+IFR1+MS
10100.000	18.660	0.300	9526.949	34.753	0.000	39.212	0.000	18.557	0.000	0.000	39.300	38.686	-22.098	MWD+IFR1+MS
10200.000	26.660	0.300	9619.155	33.672	0.000	39.427	0.000	19.068	0.000	0.000	39.983	39.302	115.593	MWD+IFR1+MS
10300.000	34.660	0.300	9705.106	32.326	0.000	39.616	0.000	19.829	0.000	0.000	40.824	39.539	104.369	MWD+IFR1+MS
10400.000	42.660	0.300	9783.129	30.878	0.000	39.779	0.000	20.860	0.000	0.000	41.506	39.711	101.340	MWD+IFR1+MS
10500.000	50.660	0.300	9851.707	29.522	0.000	39.917	0.000	22.150	0.000	0.000	42.008	39.851	100.246	MWD+IFR1+MS
10600.000	58.660	0.300	9909.503	28.479	0.000	40.032	0.000	23.658	0.000	0.000	42.342	39.963	99.946	MWD+IFR1+MS
10700.000	66.660	0.300	9955.393	27.965	0.000	40.125	0.000	25.328	0.000	0.000	42.533	40.051	100.092	MWD+IFR1+MS
10800.000	74.660	0.300	9988.483	28.141	0.000	40.198	0.000	27.096	0.000	0.000	42.618	40.117	100.519	MWD+IFR1+MS
10900.000	82.660	0.300	10008.131	29.065	0.000	40.250	0.000	28.897	0.000	0.000	42.637	40.161	101.090	MWD+IFR1+MS
10991.753	90.000	0.300	10014.000	30.322	-0.000	40.279	0.000	30.322	0.000	0.000	42.635	40.183	101.565	MWD+IFR1+MS
11000.000	90.000	0.300	10014.000	30.351	-0.000	40.280	0.000	30.351	0.000	0.000	42.636	40.183	101.597	MWD+IFR1+MS
11100.000	90.000	0.300	10014.000	30.690	-0.000	40.312	0.000	30.690	0.000	0.000	42.640	40.207	102.085	MWD+IFR1+MS
11200.000	90.000	0.300	10014.000	31.050	-0.000	40.366	0.000	31.050	0.000	0.000	42.646	40.252	102.687	MWD+IFR1+MS
11300.000	90.000	0.300	10014.000	31.426	-0.000	40.439	0.000	31.426	0.000	0.000	42.653	40.315	103.405	MWD+IFR1+MS
11400.000	90.000	0.300	10014.000	31.816	-0.000	40.531	0.000	31.816	0.000	0.000	42.663	40.395	104.263	MWD+IFR1+MS
11500.000	90.000	0.300	10014.000	32.221	-0.000	40.642	0.000	32.221	0.000	0.000	42.676	40.492	105.291	MWD+IFR1+MS
11600.000	90.000	0.300	10014.000	32.640	-0.000	40.772	0.000	32.640	0.000	0.000	42.692	40.605	106.529	MWD+IFR1+MS
11700.000	90.000	0.300	10014.000	33.071	-0.000	40.920	0.000	33.071	0.000	0.000	42.712	40.732	108.031	MWD+IFR1+MS
11800.000	90.000	0.300	10014.000	33.516	-0.000	41.087	0.000	33.516	0.000	0.000	42.738	40.873	109.866	MWD+IFR1+MS
11900.000	90.000	0.300	10014.000	33.973	-0.000	41.271	0.000	33.973	0.000	0.000	42.771	41.026	112.128	MWD+IFR1+MS
12000.000	90.000	0.300	10014.000	34.442	-0.000	41.474	0.000	34.442	0.000	0.000	42.813	41.187	114.929	MWD+IFR1+MS
12100.000	90.000	0.300	10014.000	34.922	-0.000	41.694	0.000	34.922	0.000	0.000	42.869	41.354	118.399	MWD+IFR1+MS
12200.000	90.000	0.300	10014.000	35.413	-0.000	41.932	0.000	35.413	0.000	0.000	42.942	41.520	122.651	MWD+IFR1+MS
12300.000	90.000	0.300	10014.000	35.915	-0.000	42.187	0.000	35.915	0.000	0.000	43.039	41.680	127.711	MWD+IFR1+MS
12400.000	90.000	0.300	10014.000	36.426	-0.000	42.459	0.000	36.426	0.000	0.000	43.167	41.827	133.421	MWD+IFR1+MS
12500.000	90.000	0.300	10014.000	36.948	-0.000	42.747	0.000	36.948	0.000	0.000	43.331	41.955	-40.605	MWD+IFR1+MS

12600.000	90.000	0.300	10014.000	37.478	-0.000	43.051	0.000	37.478	0.000	0.000	43.534	42.061	-34.871	MWD+IFR1+MS
12700.000	90.000	0.300	10014.000	38.017	-0.000	43.371	0.000	38.017	0.000	0.000	43.774	42.146	-29.772	MWD+IFR1+MS
12800.000	90.000	0.300	10014.000	38.564	-0.000	43.706	0.000	38.564	0.000	0.000	44.047	42.213	-25.474	MWD+IFR1+MS
12900.000	90.000	0.300	10014.000	39.120	-0.000	44.056	0.000	39.120	0.000	0.000	44.349	42.267	-21.956	MWD+IFR1+MS
13000.000	90.000	0.300	10014.000	39.683	-0.000	44.421	0.000	39.683	0.000	0.000	44.676	42.311	-19.106	MWD+IFR1+MS
13100.000	90.000	0.300	10014.000	40.254	-0.000	44.801	0.000	40.254	0.000	0.000	45.026	42.348	-16.796	MWD+IFR1+MS
13200.000	90.000	0.300	10014.000	40.832	-0.000	45.194	0.000	40.832	0.000	0.000	45.395	42.379	-14.909	MWD+IFR1+MS
13300.000	90.000	0.300	10014.000	41.417	-0.000	45.601	0.000	41.417	0.000	0.000	45.783	42.407	-13.353	MWD+IFR1+MS
13400.000	90.000	0.300	10014.000	42.008	-0.000	46.022	0.000	42.008	0.000	0.000	46.187	42.432	-12.056	MWD+IFR1+MS
13500.000	90.000	0.300	10014.000	42.606	-0.000	46.455	0.000	42.606	0.000	0.000	46.607	42.455	-10.963	MWD+IFR1+MS
13600.000	90.000	0.300	10014.000	43.209	-0.000	46.901	0.000	43.209	0.000	0.000	47.041	42.476	-10.033	MWD+IFR1+MS
13700.000	90.000	0.300	10014.000	43.818	-0.000	47.359	0.000	43.818	0.000	0.000	47.489	42.496	-9.233	MWD+IFR1+MS
13800.000	90.000	0.300	10014.000	44.433	-0.000	47.829	0.000	44.433	0.000	0.000	47.950	42.515	-8.539	MWD+IFR1+MS
13900.000	90.000	0.300	10014.000	45.053	-0.000	48.310	0.000	45.053	0.000	0.000	48.424	42.534	-7.933	MWD+IFR1+MS
14000.000	90.000	0.300	10014.000	45.678	-0.000	48.803	0.000	45.678	0.000	0.000	48.909	42.553	-7.400	MWD+IFR1+MS
14100.000	90.000	0.300	10014.000	46.308	-0.000	49.306	0.000	46.308	0.000	0.000	49.407	42.571	-6.927	MWD+IFR1+MS
14200.000	90.000	0.300	10014.000	46.943	-0.000	49.820	0.000	46.943	0.000	0.000	49.915	42.589	-6.505	MWD+IFR1+MS
14300.000	90.000	0.300	10014.000	47.582	-0.000	50.344	0.000	47.582	0.000	0.000	50.434	42.607	-6.127	MWD+IFR1+MS
14400.000	90.000	0.300	10014.000	48.225	-0.000	50.878	0.000	48.225	0.000	0.000	50.964	42.625	-5.787	MWD+IFR1+MS
14500.000	90.000	0.300	10014.000	48.872	-0.000	51.421	0.000	48.872	0.000	0.000	51.503	42.644	-5.479	MWD+IFR1+MS
14600.000	90.000	0.300	10014.000	49.524	-0.000	51.974	0.000	49.524	0.000	0.000	52.053	42.662	-5.199	MWD+IFR1+MS
14700.000	90.000	0.300	10014.000	50.179	-0.000	52.536	0.000	50.179	0.000	0.000	52.611	42.681	-4.943	MWD+IFR1+MS
14800.000	90.000	0.300	10014.000	50.838	-0.000	53.106	0.000	50.838	0.000	0.000	53.178	42.700	-4.709	MWD+IFR1+MS
14900.000	90.000	0.300	10014.000	51.501	-0.000	53.685	0.000	51.501	0.000	0.000	53.754	42.719	-4.494	MWD+IFR1+MS
15000.000	90.000	0.300	10014.000	52.167	-0.000	54.272	0.000	52.167	0.000	0.000	54.338	42.739	-4.295	MWD+IFR1+MS
15100.000	90.000	0.300	10014.000	52.836	-0.000	54.867	0.000	52.836	0.000	0.000	54.931	42.759	-4.112	MWD+IFR1+MS
15200.000	90.000	0.300	10014.000	53.508	-0.000	55.469	0.000	53.508	0.000	0.000	55.531	42.779	-3.942	MWD+IFR1+MS
15300.000	90.000	0.300	10014.000	54.183	-0.000	56.079	0.000	54.183	0.000	0.000	56.138	42.800	-3.784	MWD+IFR1+MS
15400.000	90.000	0.300	10014.000	54.862	-0.000	56.696	0.000	54.862	0.000	0.000	56.753	42.821	-3.636	MWD+IFR1+MS
15500.000	90.000	0.300	10014.000	55.543	-0.000	57.319	0.000	55.543	0.000	0.000	57.375	42.843	-3.499	MWD+IFR1+MS
15600.000	90.000	0.300	10014.000	56.226	-0.000	57.950	0.000	56.226	0.000	0.000	58.004	42.865	-3.370	MWD+IFR1+MS
15700.000	90.000	0.300	10014.000	56.913	-0.000	58.587	0.000	56.913	0.000	0.000	58.639	42.887	-3.250	MWD+IFR1+MS
15800.000	90.000	0.300	10014.000	57.602	-0.000	59.230	0.000	57.602	0.000	0.000	59.281	42.910	-3.136	MWD+IFR1+MS

15900.000	90.000	0.300	10014.000	58.293	-0.000	59.879	0.000	58.293	0.000	0.000	59.929	42.933	-3.030	MWD+IFR1+MS
16000.000	90.000	0.300	10014.000	58.987	-0.000	60.535	0.000	58.987	0.000	0.000	60.582	42.956	-2.929	MWD+IFR1+MS
16100.000	90.000	0.300	10014.000	59.682	-0.000	61.195	0.000	59.682	0.000	0.000	61.242	42.981	-2.835	MWD+IFR1+MS
16200.000	90.000	0.300	10014.000	60.380	-0.000	61.862	0.000	60.380	0.000	0.000	61.907	43.005	-2.745	MWD+IFR1+MS
16300.000	90.000	0.300	10014.000	61.081	-0.000	62.533	0.000	61.081	0.000	0.000	62.577	43.030	-2.660	MWD+IFR1+MS
16400.000	90.000	0.300	10014.000	61.783	-0.000	63.210	0.000	61.783	0.000	0.000	63.253	43.055	-2.580	MWD+IFR1+MS
16500.000	90.000	0.300	10014.000	62.487	-0.000	63.892	0.000	62.487	0.000	0.000	63.934	43.081	-2.503	MWD+IFR1+MS
16600.000	90.000	0.300	10014.000	63.193	-0.000	64.578	0.000	63.193	0.000	0.000	64.619	43.108	-2.431	MWD+IFR1+MS
16700.000	90.000	0.300	10014.000	63.901	-0.000	65.270	0.000	63.901	0.000	0.000	65.309	43.134	-2.362	MWD+IFR1+MS
16800.000	90.000	0.300	10014.000	64.611	-0.000	65.966	0.000	64.611	0.000	0.000	66.004	43.162	-2.296	MWD+IFR1+MS
16900.000	90.000	0.300	10014.000	65.322	-0.000	66.666	0.000	65.322	0.000	0.000	66.704	43.189	-2.233	MWD+IFR1+MS
17000.000	90.000	0.300	10014.000	66.035	-0.000	67.370	0.000	66.035	0.000	0.000	67.407	43.217	-2.173	MWD+IFR1+MS
17100.000	90.000	0.300	10014.000	66.750	-0.000	68.079	0.000	66.750	0.000	0.000	68.115	43.246	-2.116	MWD+IFR1+MS
17200.000	90.000	0.300	10014.000	67.466	-0.000	68.791	0.000	67.466	0.000	0.000	68.827	43.275	-2.061	MWD+IFR1+MS
17300.000	90.000	0.300	10014.000	68.184	-0.000	69.508	0.000	68.184	0.000	0.000	69.542	43.305	-2.009	MWD+IFR1+MS
17400.000	90.000	0.300	10014.000	68.903	-0.000	70.228	0.000	68.903	0.000	0.000	70.262	43.335	-1.959	MWD+IFR1+MS
17500.000	90.000	0.300	10014.000	69.624	-0.000	70.951	0.000	69.624	0.000	0.000	70.985	43.365	-1.911	MWD+IFR1+MS
17600.000	90.000	0.300	10014.000	70.346	-0.000	71.679	0.000	70.346	0.000	0.000	71.711	43.396	-1.865	MWD+IFR1+MS
17700.000	90.000	0.300	10014.000	71.069	-0.000	72.410	0.000	71.069	0.000	0.000	72.441	43.428	-1.820	MWD+IFR1+MS
17800.000	90.000	0.300	10014.000	71.794	-0.000	73.144	0.000	71.794	0.000	0.000	73.175	43.460	-1.777	MWD+IFR1+MS
17900.000	90.000	0.300	10014.000	72.519	-0.000	73.881	0.000	72.519	0.000	0.000	73.911	43.492	-1.736	MWD+IFR1+MS
18000.000	90.000	0.300	10014.000	73.247	-0.000	74.621	0.000	73.247	0.000	0.000	74.651	43.525	-1.697	MWD+IFR1+MS
18100.000	90.000	0.300	10014.000	73.975	-0.000	75.365	0.000	73.975	0.000	0.000	75.394	43.559	-1.659	MWD+IFR1+MS
18200.000	90.000	0.300	10014.000	74.704	-0.000	76.111	0.000	74.704	0.000	0.000	76.140	43.592	-1.622	MWD+IFR1+MS
18300.000	90.000	0.300	10014.000	75.435	-0.000	76.860	0.000	75.435	0.000	0.000	76.888	43.627	-1.587	MWD+IFR1+MS
18400.000	90.000	0.300	10014.000	76.166	-0.000	77.612	0.000	76.166	0.000	0.000	77.640	43.662	-1.553	MWD+IFR1+MS
18500.000	90.000	0.300	10014.000	76.899	-0.000	78.367	0.000	76.899	0.000	0.000	78.394	43.697	-1.520	MWD+IFR1+MS
18600.000	90.000	0.300	10014.000	77.633	-0.000	79.124	0.000	77.633	0.000	0.000	79.151	43.733	-1.488	MWD+IFR1+MS
18700.000	90.000	0.300	10014.000	78.367	-0.000	79.884	0.000	78.367	0.000	0.000	79.910	43.769	-1.457	MWD+IFR1+MS
18800.000	90.000	0.300	10014.000	79.103	-0.000	80.646	0.000	79.103	0.000	0.000	80.672	43.806	-1.428	MWD+IFR1+MS
18900.000	90.000	0.300	10014.000	79.839	-0.000	81.411	0.000	79.839	0.000	0.000	81.436	43.843	-1.399	MWD+IFR1+MS
19000.000	90.000	0.300	10014.000	80.577	-0.000	82.178	0.000	80.577	0.000	0.000	82.203	43.880	-1.371	MWD+IFR1+MS
19100.000	90.000	0.300	10014.000	81.315	-0.000	82.947	0.000	81.315	0.000	0.000	82.972	43.918	-1.344	MWD+IFR1+MS

19200.000	90.000	0.300	10014.000	82.055	-0.000	83.719	0.000	82.055	0.000	0.000	83.743	43.957	-1.318	MWD+IFR1+MS
19300.000	90.000	0.300	10014.000	82.795	-0.000	84.492	0.000	82.795	0.000	0.000	84.516	43.996	-1.292	MWD+IFR1+MS
19400.000	90.000	0.300	10014.000	83.535	-0.000	85.268	0.000	83.535	0.000	0.000	85.291	44.035	-1.268	MWD+IFR1+MS
19500.000	90.000	0.300	10014.000	84.277	-0.000	86.046	0.000	84.277	0.000	0.000	86.069	44.075	-1.244	MWD+IFR1+MS
19600.000	90.000	0.300	10014.000	85.020	-0.000	86.825	0.000	85.020	0.000	0.000	86.848	44.116	-1.221	MWD+IFR1+MS
19700.000	90.000	0.300	10014.000	85.763	-0.000	87.607	0.000	85.763	0.000	0.000	87.629	44.157	-1.198	MWD+IFR1+MS
19800.000	90.000	0.300	10014.000	86.507	-0.000	88.391	0.000	86.507	0.000	0.000	88.413	44.198	-1.176	MWD+IFR1+MS
19900.000	90.000	0.300	10014.000	87.251	-0.000	89.176	0.000	87.251	0.000	0.000	89.198	44.240	-1.155	MWD+IFR1+MS
20000.000	90.000	0.300	10014.000	87.997	-0.000	89.963	0.000	87.997	0.000	0.000	89.984	44.282	-1.134	MWD+IFR1+MS
20100.000	90.000	0.300	10014.000	88.743	-0.000	90.752	0.000	88.743	0.000	0.000	90.773	44.325	-1.114	MWD+IFR1+MS
20200.000	90.000	0.300	10014.000	89.489	-0.000	91.542	0.000	89.489	0.000	0.000	91.563	44.368	-1.095	MWD+IFR1+MS
20300.000	90.000	0.300	10014.000	90.237	-0.000	92.335	0.000	90.237	0.000	0.000	92.355	44.412	-1.076	MWD+IFR1+MS
20400.000	90.000	0.300	10014.000	90.985	-0.000	93.128	0.000	90.985	0.000	0.000	93.149	44.456	-1.057	MWD+IFR1+MS
20500.000	90.000	0.300	10014.000	91.733	-0.000	93.924	0.000	91.733	0.000	0.000	93.944	44.500	-1.039	MWD+IFR1+MS
20600.000	90.000	0.300	10014.000	92.482	-0.000	94.721	0.000	92.482	0.000	0.000	94.740	44.545	-1.021	MWD+IFR1+MS
20700.000	90.000	0.300	10014.000	93.232	-0.000	95.519	0.000	93.232	0.000	0.000	95.538	44.591	-1.004	MWD+IFR1+MS
20800.000	90.000	0.300	10014.000	93.983	-0.000	96.319	0.000	93.983	0.000	0.000	96.338	44.637	-0.988	MWD+IFR1+MS
20900.000	90.000	0.300	10014.000	94.733	-0.000	97.120	0.000	94.733	0.000	0.000	97.139	44.683	-0.971	MWD+IFR1+MS
21000.000	90.000	0.300	10014.000	95.485	-0.000	97.922	0.000	95.485	0.000	0.000	97.941	44.730	-0.955	MWD+IFR1+MS
21100.000	90.000	0.300	10014.000	96.237	-0.000	98.726	0.000	96.237	0.000	0.000	98.745	44.777	-0.940	MWD+IFR1+MS
21200.000	90.000	0.300	10014.000	96.989	-0.000	99.531	0.000	96.989	0.000	0.000	99.550	44.825	-0.925	MWD+IFR1+MS
21300.000	90.000	0.300	10014.000	97.742	-0.000	100.338	0.000	97.742	0.000	0.000	100.356	44.873	-0.910	MWD+IFR1+MS
21400.000	90.000	0.300	10014.000	98.496	-0.000	101.146	0.000	98.496	0.000	0.000	101.163	44.922	-0.895	MWD+IFR1+MS
21500.000	90.000	0.300	10014.000	99.250	-0.000	101.955	0.000	99.250	0.000	0.000	101.972	44.971	-0.881	MWD+IFR1+MS
21600.000	90.000	0.300	10014.000	100.004	-0.000	102.765	0.000	100.004	0.000	0.000	102.782	45.020	-0.868	MWD+IFR1+MS
21700.000	90.000	0.300	10014.000	100.759	-0.000	103.576	0.000	100.759	0.000	0.000	103.593	45.070	-0.854	MWD+IFR1+MS
21800.000	90.000	0.300	10014.000	101.515	-0.000	104.388	0.000	101.515	0.000	0.000	104.405	45.121	-0.841	MWD+IFR1+MS
21900.000	90.000	0.300	10014.000	102.270	-0.000	105.202	0.000	102.270	0.000	0.000	105.219	45.171	-0.828	MWD+IFR1+MS
22000.000	90.000	0.300	10014.000	103.027	-0.000	106.017	0.000	103.027	0.000	0.000	106.033	45.223	-0.815	MWD+IFR1+MS
22100.000	90.000	0.300	10014.000	103.783	-0.000	106.832	0.000	103.783	0.000	0.000	106.849	45.274	-0.803	MWD+IFR1+MS
22200.000	90.000	0.300	10014.000	104.540	-0.000	107.649	0.000	104.540	0.000	0.000	107.665	45.326	-0.791	MWD+IFR1+MS
22300.000	90.000	0.300	10014.000	105.298	-0.000	108.467	0.000	105.298	0.000	0.000	108.483	45.379	-0.779	MWD+IFR1+MS
22400.000	90.000	0.300	10014.000	106.056	-0.000	109.285	0.000	106.056	0.000	0.000	109.301	45.432	-0.768	MWD+IFR1+MS

22500.000	90.000	0.300	10014.000	106.814	-0.000	110.105	0.000	106.814	0.000	0.000	110.121	45.485	-0.756	MWD+IFR1+MS
22600.000	90.000	0.300	10014.000	107.573	-0.000	110.926	0.000	107.573	0.000	0.000	110.941	45.539	-0.745	MWD+IFR1+MS
22700.000	90.000	0.300	10014.000	108.332	-0.000	111.747	0.000	108.332	0.000	0.000	111.762	45.594	-0.734	MWD+IFR1+MS
22800.000	90.000	0.300	10014.000	109.091	-0.000	112.570	0.000	109.091	0.000	0.000	112.585	45.648	-0.724	MWD+IFR1+MS
22900.000	90.000	0.300	10014.000	109.851	-0.000	113.393	0.000	109.851	0.000	0.000	113.408	45.703	-0.713	MWD+IFR1+MS
23000.000	90.000	0.300	10014.000	110.611	-0.000	114.217	0.000	110.611	0.000	0.000	114.232	45.759	-0.703	MWD+IFR1+MS
23100.000	90.000	0.300	10014.000	111.371	-0.000	115.042	0.000	111.371	0.000	0.000	115.057	45.815	-0.693	MWD+IFR1+MS
23200.000	90.000	0.300	10014.000	112.132	-0.000	115.868	0.000	112.132	0.000	0.000	115.882	45.871	-0.683	MWD+IFR1+MS
23300.000	90.000	0.300	10014.000	112.893	-0.000	116.695	0.000	112.893	0.000	0.000	116.709	45.928	-0.674	MWD+IFR1+MS
23400.000	90.000	0.300	10014.000	113.655	-0.000	117.522	0.000	113.655	0.000	0.000	117.536	45.985	-0.664	MWD+IFR1+MS
23500.000	90.000	0.300	10014.000	114.416	-0.000	118.350	0.000	114.416	0.000	0.000	118.364	46.043	-0.655	MWD+IFR1+MS
23600.000	90.000	0.300	10014.000	115.179	-0.000	119.179	0.000	115.179	0.000	0.000	119.193	46.101	-0.646	MWD+IFR1+MS
23700.000	90.000	0.300	10014.000	115.941	-0.000	120.009	0.000	115.941	0.000	0.000	120.023	46.159	-0.637	MWD+IFR1+MS
23800.000	90.000	0.300	10014.000	116.704	-0.000	120.839	0.000	116.704	0.000	0.000	120.853	46.218	-0.628	MWD+IFR1+MS
23900.000	90.000	0.300	10014.000	117.466	-0.000	121.671	0.000	117.466	0.000	0.000	121.684	46.277	-0.619	MWD+IFR1+MS
24000.000	90.000	0.300	10014.000	118.230	-0.000	122.502	0.000	118.230	0.000	0.000	122.516	46.337	-0.611	MWD+IFR1+MS
24100.000	90.000	0.300	10014.000	118.993	-0.000	123.335	0.000	118.993	0.000	0.000	123.348	46.397	-0.603	MWD+IFR1+MS
24200.000	90.000	0.300	10014.000	119.757	-0.000	124.168	0.000	119.757	0.000	0.000	124.181	46.458	-0.595	MWD+IFR1+MS
24300.000	90.000	0.300	10014.000	120.521	-0.000	125.002	0.000	120.521	0.000	0.000	125.015	46.519	-0.586	MWD+IFR1+MS
24400.000	90.000	0.300	10014.000	121.285	-0.000	125.837	0.000	121.285	0.000	0.000	125.849	46.580	-0.579	MWD+IFR1+MS
24500.000	90.000	0.300	10014.000	122.050	-0.000	126.672	0.000	122.050	0.000	0.000	126.684	46.642	-0.571	MWD+IFR1+MS
24600.000	90.000	0.300	10014.000	122.815	-0.000	127.507	0.000	122.815	0.000	0.000	127.520	46.704	-0.563	MWD+IFR1+MS
24700.000	90.000	0.300	10014.000	123.580	-0.000	128.344	0.000	123.580	0.000	0.000	128.356	46.766	-0.556	MWD+IFR1+MS
24800.000	90.000	0.300	10014.000	124.345	-0.000	129.181	0.000	124.345	0.000	0.000	129.193	46.829	-0.548	MWD+IFR1+MS
24900.000	90.000	0.300	10014.000	125.111	-0.000	130.018	0.000	125.111	0.000	0.000	130.031	46.892	-0.541	MWD+IFR1+MS
25000.000	90.000	0.300	10014.000	125.877	-0.000	130.857	0.000	125.877	0.000	0.000	130.869	46.956	-0.534	MWD+IFR1+MS
25100.000	90.000	0.300	10014.000	126.643	-0.000	131.695	0.000	126.643	0.000	0.000	131.707	47.020	-0.527	MWD+IFR1+MS
25200.000	90.000	0.300	10014.000	127.409	-0.000	132.534	0.000	127.409	0.000	0.000	132.546	47.084	-0.520	MWD+IFR1+MS
25300.000	90.000	0.300	10014.000	128.175	-0.000	133.374	0.000	128.175	0.000	0.000	133.386	47.149	-0.514	MWD+IFR1+MS
25400.000	90.000	0.300	10014.000	128.942	-0.000	134.215	0.000	128.942	0.000	0.000	134.226	47.214	-0.507	MWD+IFR1+MS
25500.000	90.000	0.300	10014.000	129.709	-0.000	135.055	0.000	129.709	0.000	0.000	135.067	47.280	-0.500	MWD+IFR1+MS
25600.000	90.000	0.300	10014.000	130.476	-0.000	135.897	0.000	130.476	0.000	0.000	135.908	47.346	-0.494	MWD+IFR1+MS
25700.000	90.000	0.300	10014.000	131.244	-0.000	136.739	0.000	131.244	0.000	0.000	136.750	47.412	-0.488	MWD+IFR1+MS

25800.000	90.000	0.300	10014.000	132.011	-0.000	137.581	0.000	132.011	0.000	0.000	137.592	47.479	-0.481	MWD+IFR1+MS
25900.000	90.000	0.300	10014.000	132.779	-0.000	138.424	0.000	132.779	0.000	0.000	138.435	47.546	-0.475	MWD+IFR1+MS
26000.000	90.000	0.300	10014.000	133.547	-0.000	139.267	0.000	133.547	0.000	0.000	139.278	47.614	-0.469	MWD+IFR1+MS
26100.000	90.000	0.300	10014.000	134.315	-0.000	140.111	0.000	134.315	0.000	0.000	140.122	47.682	-0.463	MWD+IFR1+MS
26200.000	90.000	0.300	10014.000	135.083	-0.000	140.955	0.000	135.083	0.000	0.000	140.966	47.750	-0.457	MWD+IFR1+MS
26300.000	90.000	0.300	10014.000	135.852	-0.000	141.800	0.000	135.852	0.000	0.000	141.810	47.818	-0.452	MWD+IFR1+MS
26400.000	90.000	0.300	10014.000	136.621	-0.000	142.645	0.000	136.621	0.000	0.000	142.655	47.887	-0.446	MWD+IFR1+MS
26500.000	90.000	0.300	10014.000	137.389	-0.000	143.490	0.000	137.389	0.000	0.000	143.501	47.957	-0.440	MWD+IFR1+MS
26600.000	90.000	0.300	10014.000	138.159	-0.000	144.336	0.000	138.159	0.000	0.000	144.347	48.026	-0.435	MWD+IFR1+MS
26700.000	90.000	0.300	10014.000	138.928	-0.000	145.183	0.000	138.928	0.000	0.000	145.193	48.097	-0.429	MWD+IFR1+MS
26800.000	90.000	0.300	10014.000	139.697	-0.000	146.029	0.000	139.697	0.000	0.000	146.040	48.167	-0.424	MWD+IFR1+MS
26900.000	90.000	0.300	10014.000	140.467	-0.000	146.877	0.000	140.467	0.000	0.000	146.887	48.238	-0.419	MWD+IFR1+MS
27000.000	90.000	0.300	10014.000	141.237	-0.000	147.724	0.000	141.237	0.000	0.000	147.734	48.309	-0.413	MWD+IFR1+MS
27100.000	90.000	0.300	10014.000	142.006	-0.000	148.572	0.000	142.006	0.000	0.000	148.582	48.381	-0.408	MWD+IFR1+MS
27200.000	90.000	0.300	10014.000	142.777	-0.000	149.421	0.000	142.777	0.000	0.000	149.431	48.452	-0.403	MWD+IFR1+MS
27218.675	90.000	0.300	10014.000	142.920	-0.000	149.579	0.000	142.920	0.000	0.000	149.589	48.466	-0.402	MWD+IFR1+MS
27268.524	90.000	0.300	10014.000	143.304	-0.000	150.001	0.000	143.304	0.000	0.000	150.011	48.502	-0.400	MWD+IFR1+MS

Plan Targets

POKER LAKE UNIT 23 DTD 107H

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 9	10991.69	440144.50	650464.10	6538.00	RECTANGLE
LTP 9	27218.67	456371.20	650549.00	6538.00	RECTANGLE
BHL 9	27268.68	456421.20	650549.30	6538.00	RECTANGLE

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

XTO Energy Inc.
POKER LAKE UNIT 23 DTD 107H
Projected TD: 27269' MD / 10014' TVD
SHL: 845' FSL & 608' FEL , Section 14, T24S, R30E
BHL: 50' FNL & 1200' FEL , Section 2, T24S, 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	554'	Water
Top of Salt	862'	Water
Base of Salt	3874'	Water
Delaware	4083'	Water
Brushy Canyon	6298'	Water/Oil/Gas
Bone Spring	7955'	Water
1st Bone Spring Ss	8922'	Water/Oil/Gas
2nd Bone Spring Ss	9708'	Water/Oil/Gas
Target/Land Curve	10014'	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 @ 837' (25' above the salt) and circulating cement back to surface. The salt will be isolated by setting 9.625 inch casing at 3974' 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 9098' and cementing to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 27269 MD/TD and 5.5 inch production casing will be set at TD and cemented back up to 2nd intermediate (estimated TOC 8798 feet) per Potash regulations.

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 837'	13.375	54.5	J-55	BTC	New	3.11	3.21	19.93
12.25	0' – 3974'	9.625	40	J-55	BTC	New	1.75	3.06	3.96
8.75	0' – 4074'	7.625	29.7	RY P-110	Flush Joint	New	2.68	2.81	2.07
8.75	4074' – 9098'	7.625	29.7	HC L-80	Flush Joint	New	1.95	3.52	2.72
6.75	0' – 8998'	5.5	23	RY P-110	Semi-Premium	New	1.21	2.83	1.90
6.75	8998' - 27269'	5.5	23	RY P-110	Semi-Flush	New	1.21	2.54	4.00

· Production casing meets the clearance requirements 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

· 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 +/- 837'

Optional Lead: 560 sxs EconoCem-HLTRRC (mixed at 12.8 ppg, 1.33 ft³/sx, 10.13 gal/sx water)
 Tail: 310 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.33 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 of the 1" to get cement to surface, if required.

1st Intermediate Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 3974'

Lead: 830 sxs Class C (mixed at 14.8 ppg, 2.06 ft³/sx, 10.13 gal/sx water)
 Tail: 60 sxs Class C + 2% CaCl (mixed at 15.6 ppg, 2.06 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 +/- 9098'

1st Stage

Optional Lead: 120 sxs Class C (mixed at 10.5 ppg, 2.77 ft³/sx, 15.59 gal/sx water)
 TOC: 3674
 Tail: 290 sxs Class C (mixed at 14.8 ppg, 1.27 ft³/sx, 6.39 gal/sx water)
 TOC: Brushy Canyon @ 6298
 Compressives: 12-hr = 900 psi 24 hr = 1150 psi

2nd Stage - bradenhead contingency

Tail: 130 sxs Class C (mixed at 14.8 ppg, 2.77 ft³/sx, 6.39 gal/sx water)
 Top of Cement: 3674
 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 (6298') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface.

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 wellhead provider 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, 23 New Semi-Flush, RY P-110 casing to be set at +/- 27269'

Lead: 30 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft³/sx, 15.00 gal/sx water) Top of Cement: 8798 feet
 Tail: 1100 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft³/sx, 8.38 gal/sx water) Top of Cement: 9867 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 Hydriil and a 13-5/8" minimum 5M Double Ram BOP. MASP should not exceed 3525 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 conducted to at least 50% of the rated 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 7.625, the BOP will be tested to a minimum of 5000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 5M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each day.

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

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

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

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' - 837'	17.5	FW/Native	8.1-8.6	35-40	NC
837' - 3974'	12.25	Brine	8.5-9	30-32	NC
3974' to 9098'	8.75	BDE/OBM or FW/Brine	9-9.5	30-32	NC
9098' to 27269'	6.75	OBM	11-11.5	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 10.0 ppg -10.5 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 where necessary. Otherwise, gamma ray will be utilized while actively drilling.

Open hole logging will not be done on this well.

9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 165 to 185 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 5728 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.

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

☒ AMENDED REPORT¹⁰ Surface Location¹¹ Bottom Hole Location If Different From Surface

B - Y =	437,996.8 N	A - X =	649,141.1 E
B - Y =	440,636.8 N	B - X =	649,135.0 D
C - Y =	443,273.6 N	C - X =	649,132.9 E
D - Y =	445,923.7 N	D - X =	650,468.7 E
E - Y =	448,558.1 N	E - X =	650,449.9 E
F - Y =	451,192.2 N	F - X =	650,430.8 E
G - Y =	453,832.6 N	G - X =	650,421.1 E
H - Y =	456,470.0 N	H - X =	650,411.3 E
I - Y =	458,004.2 N	I - X =	650,479.3 E
J - Y =	460,646.6 N	J - X =	650,474.1 E
K - Y =	443,282.4 N	K - X =	650,471.5 E
L - Y =	445,937.4 N	L - X =	651,806.7 E
M - Y =	448,569.4 N	M - X =	651,766.9 E
N - Y =	451,208.7 N	N - X =	651,766.7 E
O - Y =	453,846.1 N	O - X =	651,757.9 E
P - Y =	456,481.0 N	P - X =	651,749.1 E

DB/KC/RP 618.013003.09-16

Intent ☒ As Drilled ☐

API # 30015		
Operator Name: XTO PERMIAN OPERATING, LLC	Property Name: Poker Lake Unit 23 DTD	Well Number 107H

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 B	Section 23	Township 24S	Range 30E	Lot	Feet 500	From N/S North	Feet 1,350	From E/W East	County Eddy
Latitude 32.209262					Longitude 103.84734				NAD 83

Last Take Point (LTP)

UL 1	Section 2	Township 24S	Range 30E	Lot	Feet 100	From N/S North	Feet 1,200	From E/W East	County Eddy
Latitude 32.253866					Longitude 103.846828				NAD 83

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

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 298275

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 298275
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	All original COA's still apply.	12/29/2023