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

Sundry Print Report
04/21/2025

Well Name: STACK CATS 25-36 FEDERAL COM

Well Location: T22S / R32E / SEC 25 / NWNE / 32.3694995 / -103.6253628

County or Parish/State: LEA / NM

Well Number: 3H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM2379

Unit or CA Name:

Unit or CA Number:

US Well Number:

Operator: OXY USA INCORPORATED

Notice of Intent

Sundry ID: 2839333

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 02/28/2025

Time Sundry Submitted: 12:37

Date proposed operation will begin: 04/04/2025

Procedure Description: OXY USA Inc., respectfully requests to amend the subject AAPD to revise the SHL, BHL, HSU, Pool, TVD, Target Formation and Drill Plan. Old SHL: 210' FNL 1719' FEL New SHL: 210' FNL 1599' FEL Old BHL: 20' FSL 1800' FEL New BHL: 20' FNL 2350' FEL Old HSU: 320 acres New HSU: 1280 acres Old Pool: RED TANK, BONE SPRING New Pool: WC-025 G-09 S223332A, UPR WOLFCAMP Old TVD: 10105' New TVD: 12061' Old Target Formation: BONE SPRING New Target Formation: WOLFCAMP *THERE IS NO ADDITIONAL SURFACE DISTURBANCE RELATED TO THIS SUNDRY" Attached is the updated C102, drill plan, directional, Blanket Design, NSHSU order and APD Change Worksheet.

NOI Attachments

Procedure Description

TunaNut24_13FedCom_NSHSU_Order_20250228123614.pdf

Blanket_Design_B___OXY___4S_Slim_Contingency__non_KPLA__v3.2_20250228123600.pdf

Blanket_Design_B_Pad_Document_REDTNK_T22SR32E_25_04_20250228123542.pdf

TunaNut24_13FedCom612H_VAM_SPRINT_SF_5.5in_20ppf_P110RY_20250228123525.pdf

TunaNut24_13FedCom612H_API_BTC_SC_10.750in_45.50ppf_L80IC_20250228123517.pdf

TunaNut24_13FedCom612H_5MAnnBOPVariance_20250228123506.pdf

TunaNut24_13FedCom612H_DirectPlan_20250228123452.pdf

TunaNut24_13FedCom612H_DrillPlan_20250228123435.pdf

Well Name: STACK CAT 25-36 FEDERAL COM	**Well Location:** T22S / R32E / SEC 25 / NWNE / 32.3694995 / -103.6253628	**County or Parish/State:** LEA / NM
Well Number: 3H	**Type of Well:** OIL WELL	**Allottee or Tribe Name:**
Lease Number: NMNM2379	**Unit or CA Name:**	**Unit or CA Number:**
US Well Number:	**Operator:** OXY USA INCORPORATED	

TunaNut24_13FedCom612H_C102_20250228123423.pdf

TunaNut24_13FedCom612H_APDCHGSUNDRYWORKSHEET_20250228123409.pdf

Conditions of Approval

Additional

TUNA_NUT_24_13_FED_COM_612H___SUNDRY_COA_20250414112457.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: MELISSA GUIDRY

Signed on: MAR 03, 2025 09:54 AM

Name: OXY USA INCORPORATED

Title: Advisor Regulatory Sr.

Street Address: 5 GREENWAY PLAZA SUITE 110

City: HOUSTON **State:** TX

Phone: (713) 497-2481

Email address: MELISSA_GUIDRY@OXY.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: 04/18/2025

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

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE *- Other instructions on page 2*

5. Lease Serial No. NMNM2379

6. If Indian, Allottee or Tribe Name

7. If Unit of CA/Agreement, Name and/or No.

1. Type of Well
☑ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
STACK CATS 25-36 FEDERAL COM/3H

2. Name of Operator OXY USA INCORPORATED

9. API Well No.

3a. Address P.O. BOX 1002, TUPMAN, CA 93276-1002

3b. Phone No. *(include area code)* (661) 763-6046

10. Field and Pool or Exploratory Area
RED TANK/Bone Spring

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*
SEC 25/T22S/R32E/NMP

11. Country or Parish, State
LEA/NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☑ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ 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 recomplete 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.)

OXY USA Inc., respectfully requests to amend the subject AAPD to revise the SHL, BHL, HSU, Pool, TVD, Target Formation and Drill Plan.

Old SHL: 210' FNL 1719' FEL
New SHL: 210' FNL 1599' FEL

Old BHL: 20' FSL 1800' FEL
New BHL: 20' FNL 2350' FEL

Old HSU: 320 acres
New HSU: 1280 acres

Old Pool: RED TANK, BONE SPRING

Continued on page 3 additional information

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*
MELISSA GUIDRY / Ph: (713) 497-2481

Title Advisor Regulatory Sr.

Signature (Electronic Submission)

Date 03/03/2025

THE SPACE FOR FEDERAL OR STATE OFICE USE

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

Title Petroleum Engineer

Date 04/18/2025

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 ofthis form to U.S. Department ofthe Interior, Bureau ofLand 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

New Pool: WC-025 G-09 S223332A, UPR WOLFCAMP

Old TVD: 10105'

New TVD: 12061'

Old Target Formation: BONE SPRING

New Target Formation: WOLFCAMP

*THERE IS NO ADDITIONAL SURFACE DISTURBANCE RELATED TO THIS SUNDRY"

Attached is the updated C102, drill plan, directional, Blanket Design, NSHSU order and APD Change Worksheet.

Location of Well

0. SHL: NWNE / 210 FNL / 1719 FEL / TWSP: 22S / RANGE: 32E / SECTION: 25 / LAT: 32.3694995 / LONG: -103.6253628 (TVD: 0 feet, MD: 0 feet)

PPP: NWNE / 100 FNL / 1800 FEL / TWSP: 22S / RANGE: 32E / SECTION: 25 / LAT: 32.3698008 / LONG: -103.6256239 (TVD: 10105 feet, MD: 10471 feet)

PPP: SWSE / 0 FSL / 1800 FEL / TWSP: 22S / RANGE: 32E / SECTION: 25 / LAT: 32.3555587 / LONG: -103.6256142 (TVD: 10105 feet, MD: 15428 feet)

BHL: SWSE / 20 FSL / 1800 FEL / TWSP: 22S / RANGE: 32E / SECTION: 36 / LAT: 32.3411022 / LONG: -103.6256024 (TVD: 10105 feet, MD: 20688 feet)

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	OXY USA INCORPORATED
WELL NAME & NO.:	TUNA NUT 24 13 FED COM 612H
LOCATION:	Section 24, T.22 S., R.32 E.
COUNTY:	Lea County, New Mexico

ALL PREVIOUS COAs STILL APPLY

COA

H2S	(•) Yes	( ) No	
Potash	(•) None	( ) Secretary	( ) R-111-P
Cave/Karst Potential	(•) Low	( ) Medium	( ) High
Cave/Karst Potential	( ) Critical		
Variance	( ) None	(•) Flex Hose	( ) Other
Wellhead	( ) Conventional	(•) Multibowl	( ) Both
Wellhead Variance	( ) Diverter		
Other	[ ] 4 String	[ ] Capitan Reef	[ ] WIPP
Other	[ ] Fluid Filled	[ ] Pilot Hole	[ ] Open Annulus
Cementing	[ ] Contingency Cement Squeeze	[ ] EchoMeter	[x] Primary Cement Squeeze
Special Requirements	[ ] Water Disposal	[x] COM	[ ] Unit
Special Requirements	[ ] Batch Sundry		
Special Requirements Variance	[x] Break Testing	[x] Offline Cementing	[ ] Casing Clearance

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated AT SPUD. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

NOTE: WELL APPROVED FOR DESIGNS A1, A2 AND B. REVIEW CEMENT VOLUMES TO ACHIEVE TIE BACKS LISTED BELOW.

A1:

1. The **10-3/4** inch surface casing shall be set at approximately **1093** feet **TVD** (a minimum of 25 feet (Lea 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.

2. The **7-5/8** inch intermediate casing shall be set at approximately **11,491** feet. **KEEP CASING 1/2 FULL FOR COLLAPSE SF. PRESSURE TEST NEEDS EXTERNAL PRESSURE REVIEW AS WELL.** The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:

Option 1 (Single Stage):

- Cement to surface. If cement does not circulate see B.1.a, c-d above.

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**

b. Second stage:

- Operator will perform bradenhead squeeze and top-out. Cement to surface. If cement does not reach surface, the appropriate BLM office shall be notified

❖ 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 10-3/4" X 7-5/8" annulus. Operator must top out cement after the bradenhead squeeze and verify cement to surface. Operator can also check TOC with Echo-meter. CBL must be run from TD of the 7-5/8"

casing to surface if confidence is lacking on the quality of the bradenhead squeeze cement job. Submit results to 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.

Bradenhead squeeze in the production interval is only as an edge case remediation measure and is NOT approved in this COA. If production cement job experiences losses and a bradenhead squeeze is needed for tie-back, BLM Engineering should be notified prior to job with volumes and planned wellbore schematic. CBL will be needed when this occurs.

3. The **5-1/2** inch production casing shall be set at approximately **22,375** feet. The minimum required fill of cement behind the **5-1/2** inch production casing is:

   Option 1 (Single Stage):

   - Cement should tie-back at least **500 feet** into previous casing string. Operator shall provide method of verification.

A2:

1. The **13-3/8** inch surface casing shall be set at approximately **1093** feet **TVD** (a minimum of 25 feet (Lea County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.

   e. 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.
   f. 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)
   g. 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.
   h. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The **7-5/8** inch intermediate casing shall be set at approximately **11,491** feet. **KEEP CASING 1/2 FULL FOR COLLAPSE SF. PRESSURE TEST NEEDS EXTERNAL PRESSURE REVIEW AS WELL.** The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:

Option 1 (Single Stage):

- Cement to surface. If cement does not circulate see B.1.a, c-d above.

Option 2 (Bradenhead):

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.

c. First stage: Operator will cement with intent to reach the top of the **Brushy Canyon**

d. Second stage:

- Operator will perform bradenhead squeeze and top-out. Cement to surface. If cement does not reach surface, the appropriate BLM office shall be notified

3. The **5-1/2** inch production casing shall be set at approximately **22,375** feet. The minimum required fill of cement behind the **5-1/2** inch production casing is:

Option 1 (Single Stage):

- Cement should tie-back at least **500 feet** into previous casing string. Operator shall provide method of verification.

B (Contingency:)

1. The **13-3/8** inch surface casing shall be set at approximately **1093** feet **TVD** (a minimum of 25 feet (Lea County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.

i. 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.

j. 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)

k. 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.

l. If cement falls back, remedial cementing will be done prior to drilling out that

string.

2. The **10-3/4** inch intermediate casing shall be set at approximately **4966** feet **TVD**. **KEEP CASING 1/2 FULL FOR COLLAPSE SF. PRESSURE TEST NEEDS EXTERNAL PRESSURE REVIEW AS WELL.** The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:

   Option 1 (Single Stage):

   - Cement to surface. If cement does not circulate see B.1.a, c-d above.

3. The **7-5/8** inch intermediate casing shall be set at approximately **11,491** feet. **KEEP CASING 1/2 FULL FOR COLLAPSE SF. PRESSURE TEST NEEDS EXTERNAL PRESSURE REVIEW AS WELL.** The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:

   Option 1 (Single Stage):

   - Cement to surface. If cement does not circulate see B.1.a, c-d above.

   Option 2 (Bradenhead):

   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.

   e. First stage: Operator will cement with intent to reach the top of the **Brushy Canyon**

   f. Second stage:

   - Operator will perform bradenhead squeeze and top-out. Cement to surface. If cement does not reach surface, the appropriate BLM office shall be notified

4. The **5-1/2** inch production casing shall be set at approximately **22,375** feet. The minimum required fill of cement behind the **5-1/2** inch production casing is:

   Option 1 (Single Stage):

   - Cement should tie-back at least **500 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

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

2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi and the intermediate casing shoe shall be **10,000 (10M)** psi. **Variance is approved to use a 5000 (5M) Annular which shall be tested to 3500 (70% Working Pressure) psi.**

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

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in Onshore Order 1 and 2.
- 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.

(Note: For a minimum 5M BOPE or less (Utilizing a 10M BOPE system)

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

Offline cementing OK for surface and intermediate intervals. Notify 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)

Contact Eddy County Petroleum Engineering Inspection Staff:

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

Contact Lea County Petroleum Engineering Inspection Staff:

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

i. Notify the BLM when moving in and removing the Spudder Rig.

ii. 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.

iii. BOP/BOPE test to be conducted per **43 CFR 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. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

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 of both lead and tail cement, 2) until cement has been in place at least 8 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-Q 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 3172**.

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:

i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.

ii. 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.

iii. Manufacturer representative shall install the test plug for the initial BOP test.

iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.

v. 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.

i. 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).

ii. 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.)

iii. 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 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 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

iv. 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.

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

vi. 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.

vii. 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.

viii. 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 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.

KPI 4/14/2025

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF APPLICATION FOR COMPULSORY POOLING AND APPROVAL OF NON-STANDARD SPACING UNIT SUBMITTED BY OXY USA INC

CASE NO. 24875
ORDER NO. R-23633

ORDER

The Director of the New Mexico Oil Conservation Division ("OCD"), having heard this matter through a Hearing Examiner on October 31, 2024, and after considering the testimony, evidence, and recommendation of the Hearing Examiner, issues the following Order.

FINDINGS OF FACT

1. Oxy USA Inc ("Operator") submitted an application ("Application") to compulsory pool the uncommitted oil and gas interests within the spacing unit ("Unit") described in Exhibit A.

2. The Application also seeks approval of a Non-Standard horizontal spacing unit for production from all Division-designated pools underlying the Unit.

3. Operator seeks to be designated the operator of the Unit.

4. Operator will dedicate the well(s) described in Exhibit A ("Well(s)") to the Unit.

5. Operator proposes the supervision and risk charges for the Well(s) described in Exhibit A.

6. Operator identified the owners of uncommitted interests in oil and gas minerals in the Unit and provided evidence that notice was given.

7. Operator identified the owners of interest in the offset oil and gas minerals from the Unit and provided evidence that notice was given.

8. The Application was heard by the Hearing Examiner on the date specified above, during which Operator presented evidence through affidavits in support of the Application. No other party presented evidence at the hearing.

CONCLUSIONS OF LAW

9. OCD has jurisdiction to issue this Order pursuant to NMSA 1978, Section 70-2-17.

10. Operator is the owner of an oil and gas working interest within the Unit.

11. Operator satisfied the notice requirements for the Application and the hearing as required by 19.15.4.12 NMAC.

12. Operator has met the notice requirements for approval of non-standard horizontal spacing units in accordance with 19.15.16.15(B)(5) NMAC.

13. OCD satisfied the notice requirements for the hearing as required by 19.15.4.9 NMAC.

14. Operator has the right to drill the Well(s) to a common source of supply at the depth(s) and location(s) in the Unit described in Exhibit A.

15. OCD's rules allow the approval of a non-standard horizontal spacing unit, after notice and opportunity for hearing, "if necessary to prevent waste or protect correlative rights" 19.15.16.15(B)(5)(a) NMAC.

16. While the OCD is authorized to approve a non-standard spacing unit, Rutter & Wilbanks Corp. v. Oil Conservation Comm'n, 1975-NMSC-006, OCD lacks the authority to approve unitization and will disapprove an application if it determines that it is actually unitization. Order R-13554 (May 18, 2012) (disapproving application for a non-standard spacing unit consisting of 16 standard spacing units).

17. Approval of the Non-Standard Spacing Unit promotes effective well spacing and allows the Operator to therefore prevent waste and protect correlative rights.

18. The Unit contains separately owned uncommitted interests in oil and gas minerals.

19. Some of the owners of the uncommitted interests have not agreed to commit their interests to the Unit.

20. The pooling of uncommitted interests in the Unit will prevent waste and protect correlative rights, including the drilling of unnecessary wells.

21. This Order affords to the owner of an uncommitted interest the opportunity to produce his just and equitable share of the oil or gas in the pool.

ORDER

22. The Unit is approved as a non-standard horizontal spacing unit.

23. Operator shall file Forms C-102 reflecting the correct acreage dedicated for each of the Wells.

24. The uncommitted interests in the Unit are pooled as set forth in Exhibit A.

25. The Unit shall be dedicated to the Well(s) set forth in Exhibit A.

26. Operator is designated as operator of the Unit and the Well(s).

27. If the location of a well will be unorthodox under the spacing rules in effect at the time of completion, Operator shall obtain the OCD's approval for a non-standard location in accordance with 19.15.16.15(C) NMAC.

28. The Operator shall commence drilling the Well(s) within one year after the date of this Order, and complete each Well no later than one (1) year after the commencement of drilling the Well.

29. This Order shall terminate automatically if the Operator fails to comply with the preceding paragraph unless the Operator obtains an extension by amending this Order for good cause shown.

30. The infill well requirements in 19.15.13.9 NMAC through 19.15.13.12 NMAC shall be applicable.

31. Operator shall submit each owner of an uncommitted working interest in the pool ("Pooled Working Interest") an itemized schedule of estimated costs to drill, complete, and equip the well ("Estimated Well Costs").

32. No later than thirty (30) days after Operator submits the Estimated Well Costs, the owner of a Pooled Working Interest shall elect whether to pay its share of the Estimated Well Costs or its share of the actual costs to drill, complete and equip the well ("Actual Well Costs") out of production from the well. An owner of a Pooled Working Interest who elects to pay its share of the Estimated Well Costs shall render payment to Operator no later than thirty (30) days after the expiration of the election period, and shall be liable for operating costs, but not risk charges, for the well. An owner of a Pooled Working Interest who fails to pay its share of the Estimated Well Costs or who elects to pay its share of the Actual Well Costs out of production from the well shall be considered to be a "Non-Consenting Pooled Working Interest."

33. No later than one hundred eighty (180) days after Operator submits a Form C-105 for a well, Operator shall submit to each owner of a Pooled Working Interest an itemized schedule of the Actual Well Costs. The Actual Well Costs shall be considered to be the Reasonable Well Costs unless an owner of a Pooled Working Interest files a written objection no later than forty-five (45) days after receipt of the schedule. If an owner of a Pooled Working Interest files a timely written objection, OCD shall determine the Reasonable Well Costs after public notice and hearing.

34. No later than sixty (60) days after the expiration of the period to file a written objection to the Actual Well Costs or OCD's order determining the Reasonable Well Costs, whichever is later, each owner of a Pooled Working Interest who paid its share of the Estimated Well Costs shall pay to Operator its share of the

Reasonable Well Costs that exceed the Estimated Well Costs, or Operator shall pay to each owner of a Pooled Working Interest who paid its share of the Estimated Well Costs its share of the Estimated Well Costs that exceed the Reasonable Well Costs.

35. The reasonable charges for supervision to drill and produce a well ("Supervision Charges") shall not exceed the rates specified in Exhibit A, provided however that the rates shall be adjusted annually pursuant to the COPAS form entitled "Accounting Procedure-Joint Operations."

36. No later than within ninety (90) days after Operator submits a Form C-105 for a well, Operator shall submit to each owner of a Pooled Working Interest an itemized schedule of the reasonable charges for operating and maintaining the well ("Operating Charges"), provided however that Operating Charges shall not include the Reasonable Well Costs or Supervision Charges. The Operating Charges shall be considered final unless an owner of a Pooled Working Interest files a written objection no later than forty-five (45) days after receipt of the schedule. If an owner of a Pooled Working Interest files a timely written objection, OCD shall determine the Operating Charges after public notice and hearing.

37. Operator may withhold the following costs and charges from the share of production due to each owner of a Pooled Working Interest who paid its share of the Estimated Well Costs: (a) the proportionate share of the Supervision Charges; and (b) the proportionate share of the Operating Charges.

38. Operator may withhold the following costs and charges from the share of production due to each owner of a Non-Consenting Pooled Working Interest: (a) the proportionate share of the Reasonable Well Costs; (b) the proportionate share of the Supervision and Operating Charges; and (c) the percentage of the Reasonable Well Costs specified as the charge for risk described in Exhibit A.

39. Operator shall distribute a proportionate share of the costs and charges withheld pursuant to the preceding paragraph to each Pooled Working Interest that paid its share of the Estimated Well Costs.

40. Each year on the anniversary of this Order, and no later than ninety (90) days after each payout, Operator shall provide to each owner of a Non-Consenting Pooled Working Interest a schedule of the revenue attributable to a well and the Supervision and Operating Costs charged against that revenue.

41. Any cost or charge that is paid out of production shall be withheld only from the share due to an owner of a Pooled Working Interest. No cost or charge shall be withheld from the share due to an owner of a royalty interests. For the purpose of this Order, an unleased mineral interest shall consist of a seven-eighths (7/8) working interest and a one-eighth (1/8) royalty interest.

42. Except as provided above, Operator shall hold the revenue attributable to a well that is not disbursed for any reason for the account of the person(s) entitled to the revenue as provided in the Oil and Gas Proceeds Payment Act, NMSA 1978, Sections 70-10-1 *et seq.*, and relinquish such revenue as provided in the Uniform Unclaimed Property Act, NMSA 1978, Sections 7-8A-1 *et seq.*

43. The Unit shall terminate if (a) the owners of all Pooled Working Interests reach a voluntary agreement; or (b) the well(s) drilled on the Unit are plugged and abandoned in accordance with the applicable rules. Operator shall inform OCD no later than thirty (30) days after such occurrence.

44. OCD retains jurisdiction of this matter for the entry of such orders as may be deemed necessary.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Date: 1/14/2025

GERASIMOS RAZATOS
DIRECTOR (Acting)
GR/jag

Exhibit A

COMPULSORY POOLING APPLICATION CHECKLIST	
ALL INFORMATION IN THE APPLICATION MUST BE SUPPORTED BY SIGNED AFFIDAVITS	
Case: 24875	**APPLICANT'S RESPONSE**
Date	**October 31, 2024**
Applicant	**OXY USA Inc.**
Designated Operator & OGRID (affiliation if applicable)	**OXY USA Inc. (OGRID No. 24875)**
Applicant's Counsel:	**Holland & Hart LLP**
Case Title:	**APPLICATION OF OXY USA INC. FOR APPROVAL OF A NON-STANDARD HORIZONTAL WELL SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.**
Entries of Appearance/Intervenors:	**N/a**
Well Family	**Tuna Nut**
Formation/Pool	
Formation Name(s) or Vertical Extent:	**Wolfcamp**
Primary Product (Oil or Gas):	**Oil**
Pooling this vertical extent:	**N/a**
Pool Name and Pool Code (Only if NSP is requested):	**WC-025 G-09 S223332A; UPR Wolfcamp [98177]**
Well Location Setback Rules (Only if NSP is Requested):	**Statewide oil pool**
Spacing Unit	
Type (Horizontal/Vertical)	**Horizontal**
Size (Acres)	**1,280**
Building Blocks:	**40 acres**
Orientation:	**South-North / Stand-up**
Description: TRS/County	**Sections 13 and 24, Township 22 South, Range 32 East, NMPM, Lea County, New Mexico**
Standard Horizontal Well Spacing Unit (Y/N), If No, describe and is approval of non-standard unit requested in this application?	**Oxy is seeking approval of a non-standard horizontal spacing unit.**
Other Situations	
Depth Severance: Y/N. If yes, description	**No**
Proximity Tracts: If yes, description	**No**
Proximity Defining Well: if yes, description	**N/a**
Applicant's Ownership in Each Tract	**See Exhibit C-3**
Well(s)	
Name & API (if assigned), surface and bottom hole location, footages, completion target, orientation, completion status (standard or non-standard)	Add wells as needed
Well #1	**Tuna Nut 24-13 Fed Com 61H well:** **API: 30-025-PENDING** **SHL: 275' FSL, 1,335' FWL (Unit N), Section 24** **BHL: 20' FNL, 430' FWL (Unit D), Section 13** **Target: Wolfcamp** **Orientation: South-North** **Completion: Standard Location**

BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Exhibit No. A
Submitted by: OXY USA INC.
Hearing Date: October 31, 2024
Case No. 24875

Well #2	**Tuna Nut 24-13 Fed Com 62H well:** **API: 30-025-PENDING** **SHL: 275' FSL, 1,395' FWL (Unit N), Section 24** **BHL: 20' FNL, 1,670' FWL (Unit C), Section 13** **Target: Wolfcamp** **Orientation: South-North** **Completion: Standard Location**
Well #3	**Tuna Nut 24-13 Fed Com 63H well:** **API: 30-025-PENDING** **SHL: 275' FSL, 1,425' FWL (Unit N), Section 24** **BHL: 20' FNL, 2,260' FWL (Unit C), Section 13** **Target: Wolfcamp** **Orientation: South-North** **Completion: Standard Location**
Well #4	**Tuna Nut 24-13 Fed Com 64H well:** **API: 30-025-PENDING** **SHL: 210' FNL, 1,569' FEL (Unit B), Section 25** **BHL: 20' FNL, 1,580' FEL (Unit B), Section 13** **Target: Wolfcamp** **Orientation: South-North** **Completion: Standard Location**
Well #5	**Tuna Nut 24-13 Fed Com 65H well:** **API: 30-025-PENDING** **SHL: 210' FNL, 1,509' FEL (Unit B), Section 25** **BHL: 20' FNL, 330' FEL (Unit A), Section 13** **Target: Wolfcamp** **Orientation: South-North** **Completion: Standard Location**
Well #6	**Tuna Nut 24-13 Fed Com 611H well:** **API: 30-025-PENDING** **SHL: 275' FSL, 1,365' FWL (Unit N), Section 24** **BHL: 20' FNL, 1,000' FWL (Unit D), Section 13** **Target: Wolfcamp** **Orientation: South-North** **Completion: Standard Location**
Well #7	**Tuna Nut 24-13 Fed Com 612H well:** **API: 30-025-PENDING** **SHL: 210' FNL, 1,600' FEL (Unit B), Section 25** **BHL: 20' FNL, 2,350' FEL (Unit B), Section 13** **Target: Wolfcamp** **Orientation: South-North** **Completion: Standard Location**
Well #8	**Tuna Nut 24-13 Fed Com 613H well:** **API: 30-025-PENDING** **SHL: 210' FNL, 1,540' FEL (Unit B), Section 25** **BHL: 20' FNL, 810' FEL (Unit A), Section 13** **Target: Wolfcamp** **Orientation: South-North** **Completion: Standard Location**
Horizontal Well First and Last Take Points	**Exhibit C-2**
Completion Target (Formation, TVD and MD)	**Exhibit C-4**
AFE Capex and Operating Costs	
Drilling Supervision/Month $	**$12,000**
Production Supervision/Month $	**$1,200**
Justification for Supervision Costs	**Exhibit C**
Requested Risk Charge	**200%**
Notice of Hearing	
Proposed Hearing	**Exhibit B**

Proof of Mailed Notice of Hearing (20 days before hearing)	**Exhibit E**
Proof of Published Notice of Hearing (10 days before hearing)	**Exhibit F**
Ownership Determination	
Land Ownership Schematic of the Spacing Unit	**Exhibit C-3**
Tract List (including lease numbers and owners)	**Exhibit C-3**
If approval of Non-Standard Spacing Unit is requested, Tract List (including lease numbers and owners) of Tracts subject to notice requirements.	**Exhibit C-3**
Pooled Parties (including ownership type)	**Exhibit C-3**
Unlocatable Parties to be Pooled	**N/a**
Ownership Depth Severance (including percentage above & below)	**N/a**
Joinder	
Sample Copy of Proposal Letter	**Exhibit C-4**
List of Interest Owners (ie Exhibit A of JOA)	**Exhibit C-3**
Chronology of Contact with Non-Joined Working Interests	**Exhibit C-5**
Overhead Rates In Proposal Letter	**Exhibit C-4**
Cost Estimate to Drill and Complete	**Exhibit C-4**
Cost Estimate to Equip Well	**Exhibit C-4**
Cost Estimate for Production Facilities	**Exhibit C-4**
Geology	
Summary (including special considerations)	**Exhibit D**
Spacing Unit Schematic	**Exhibit D-1**
Gunbarrel/Lateral Trajectory Schematic	**Exhibit D-1**
Well Orientation (with rationale)	**Exhibit D**
Target Formation	**Exhibit D; D-3; D-4**
HSU Cross Section	**Exhibit D-3; D-4**
Depth Severance Discussion	**N/a**
Forms, Figures and Tables	
C-102	**Exhibit C-2**
Tracts	**Exhibit C-3**
Summary of Interests, Unit Recapitulation (Tracts)	**Exhibit C-3**
General Location Map (including basin)	**Exhibit D-1**
Well Bore Location Map	**Exhibit D-1**
Structure Contour Map - Subsea Depth	**Exhibit D-2**
Cross Section Location Map (including wells)	**Exhibit D-2**
Cross Section (including Landing Zone)	**Exhibit D-3; D-4**
Additional Information	
Special Provisions/Stipulations	**N/a**
CERTIFICATION: I hereby certify that the information provided in this checklist is complete and accurate.	
Printed Name (Attorney or Party Representative):	**Paula M. Vance**
Signed Name (Attorney or Party Representative):	
Date:	**10/24/2024**

Oxy Blanket Design - Casing Design "B"

1. Casing Program

The designs and associated details listed in this document are the "worst case scenario" boundaries for design safety factors.

Location and lithology have NOT been accounted for in these designs; however, the designs are NOT valid for wells within KPLA Boundaries or Capitan Reef areas. The specific well details will be based on the APD/Sundry package and the information listed in the COA.

The mud program listed below will remain the same between each design variation.

Hole will be full during casing run for well control and tensile SF.

Casing will be kept at least half full during run for these designs to meet BLM collapse SF requirement.

		MD		TVD					
Section	Hole Size (in)	From (ft)	To (ft)	From (ft)	To (ft)	Csg. OD (in)	Csg Wt. (ppf)	Grade	Conn.
Surface	17.5	0	1200	0	1200	13.375	54.5	J-55	BTC
Intermediate 1	12.25†	0	4832	0	4832	10.75	45.5	L-80 HC	BTC-SC
Intermediate 2	9.875	0	13111*	0	12775*	7.625	26.4	L-80 HC	BTC Axis-HT
Production	6.75	0	23361	0	12775	5.5	20	P-110	Wedge 461 Sprint SF DWC/C-HT-IS

*Curve could be in intermediate or production section

†Oxy requests the option to set intermediate 1 casing shallower, yet still below the salts, if required due to losses or hole conditions. Cement volumes may be adjusted if casing is set shallower and a DV tool may be run incase hole conditions merit pumping a second stage cement job to comply with the permitted top of cement. If cement is circulated to surface during first stage, Oxy will drop a cancelation cone and not pump the second stage. Well specific depths for the pad will be included with the casing setting depths information submitted for review.

All casing strings will be tested in accordance with 43 CFR part 3170 Subpart 3172.

All Casing SF Values will meet or exceed those below			
SF Collapse	SF Burst	Body SF Tension	Joint SF Tension
1.00	1.100	1.4	1.4

§Annular Clearance Variance Request

As per the agreement reached in the Oxy/BLM face-to-face meeting on Feb 22, 2018, Oxy requests permission to allow deviation from the 0.422" annular clearance requirement. Please see Annular Clearance Variance attachment for further details.

§Annular Clearance Variance Request may not apply to all connections used or presented.

Oxy Blanket Design - Casing Design "B"

2. Trajectory / Boundary Conditions

Section	MD		TVD		Max. Angle	Max. Planned DLS
	Deepest KOP (ft)	End Build (ft)	Deepest KOP (ft)	End Build (ft)		
Surface	0	1200	0	1200	5°	1°/100 ft
Salt	0	4832	0	4832	5°	1°/100 ft
Intermediate	5000 (inside Cherry Canyon)	6500	4980	6390	20°	2°/100 ft
	12211	13111	12202	12775	92° ‡	12°/100 ft ‡
Production	12211 (~100' MD past ICP)	13111	12202	12775	92° ‡	12°/100 ft ‡

‡ Applies only when intermediate casing depth is deepened to landing point to match TVD of production in some areas where required to accommodate higher MWs in depleted areas.

Oxy has reviewed casing burst, collapse, and axial loadcases in Landmark StressCheck with the boundary conditions in the table above which satisfies Oxy and BLM minimum design criteria. Triaxial plots for each casing string is shown in Section 7 and intermediate load case inputs are shown in Section 8.

3. Cementing Program

NOTE: Blanket design is for technical review only. The cement volumes will be adjusted to ensure cement tops meet BLM requirements.

Section	Stage	Slurry:	Sacks	Yield (ft^3/ft)	Density (lb/gal)	Excess:	TOC	Placement	Description
Surface	1	Surface - Tail	1253	1.33	14.8	100%	-	Circulate	Class C+Accel.
Int.1	1	Intermediate - Tail	85	1.33	14.8	20%	4,332	Circulate	Class C+Accel.
Int.1	1	Intermediate - Lead	676	1.73	12.9	50%	-	Circulate	Class Pozz+Ret.
Int. 2	1	Intermediate 1S - Tail	793	1.68	13.2	5%	7,206	Circulate	Class C+Ret., Disper.
Int. 2	2	Intermediate 2S - Tail BH	1002	1.71	13.3	25%	-	Bradenhead	Class C+Accel.
Prod.	1	Production - Tail	609	1.84	13.3	25%	12,611	Circulate	Class C+Ret.
Prod.	2*	Production - Tail	TBD	1.84	13.3	50%	500' inside prev csg	Circulate	Class C+Ret.

**Only applies in scenario where planned single stage job TOC is not 500' above previous shoe as designed/programmed requiring bradenhead 2nd stage to meet requirements*

As Reviewed and Approved by BLM on Feb 8, 2024: Oxy uses a Class C / Pozzolan mix on its production cement slurry, which has the same fluid properties as Class H, and has been pilot and field blend tested to have as good or better compressive strength development at our target densities.

Offline Cementing Request

Oxy requests a variance to cement the 9.625" and/or 7.625" intermediate casing strings offline in accordance to the approved variance, EC Tran 461365. Please see Offline Cementing Variance attachment for further details.

Oxy Blanket Design - Casing Design "B"

Bradenhead CBL Request

Oxy requests permission to adjust the CBL requirement after bradenhead cement jobs, on 7-5/8" intermediate casings, as per the agreement reached in the OXY/BLM meeting on September 5, 2019. Please see Bradenhead CBL Variance attachment for further details.

4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	✓	Tested to:	TVD Depth (ft) per Section:
12.25" Hole	13-5/8"	5M	Annular	✓	70% of working pressure	4832
		5M	Blind Ram	✓	250 psi / 5000 psi	
			Pipe Ram			
			Double Ram	✓		
			Other*			
9.875" Hole	13-5/8"	5M	Annular	✓	70% of working pressure	12102
		5M	Blind Ram	✓	250 psi / 5000 psi	
			Pipe Ram			
			Double Ram	✓		
			Other*			
6.75" Hole	13-5/8"	5M	Annular	✓	100% of working pressure	12775
		10M	Blind Ram	✓	250 psi / 10000 psi	
			Pipe Ram			
			Double Ram	✓		
			Other*			

*Specify if additional ram is utilized
**Curve could be in intermediate or production section

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per 43 CFR part 3170 Subpart 3172 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

5M Annular BOP Request

Per BLM's Memorandum No. NM-2017-008: *Decision and Rationale for a Variance Allowing the Use of a 5M Annular Preventer with a 10M BOP Stack*, Oxy requests to employ a 5M annular with a 10M BOPE stack in the pilot and lateral sections of the well and will ensure that two barriers to flow are

Oxy Blanket Design - Casing Design "B"

Formation integrity test will be performed per 43 CFR part 3170 Subpart 3172.
On Exploratory wells or 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. Will be tested in accordance with 43 CFR part 3170 Subpart 3172.

A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. Coflex hoses are in compliance with API 16C and meets inspection and testing requirements. See attached for specs and hydrostatic test chart.	
Y	Are anchors required by manufacturer?

A multibowl or a unionized multibowl wellhead system will be employed. The wellhead and connection to the BOPE will meet all API 6A requirements. The BOP will be tested per 43 CFR part 3170 Subpart 3172 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested. We will test the flange connection of the wellhead with a test port that is directly in the flange. We are proposing that we will run the wellhead through the rotary prior to cementing surface casing as discussed with the BLM on October 8, 2015.

See attached Schematics.

BOP Break Testing Request

Oxy requests permission to adjust the BOP break testing requirements as per the agreement reached in the OXY/BLM meeting on September 5, 2019. Please see BOP Break Testing Variance attachment for further details.

Hammer Union Variance

Oxy requests permission for hammer unions behind the choke to be routed to the gas buster. The hammer unions will not be subject to wellbore pressure in compliance with API STD 53.

Oxy will use Cameron ADAPT wellhead system that uses an OEC top flange connection. This connection has been fully vetted and verified by API to Spec 6A and carries an API monogram.

Oxy Blanket Design - Casing Design "B"

5. Mud Program & Drilling Conditions

Section	Depth - MD		Depth - TVD		Type	Weight (ppg)	Viscosity	Water Loss
	From (ft)	To (ft)	From (ft)	To (ft)				
Surface	0	1200	0	1200	Water-Based Mud	8.6 - 8.8	40-60	N/C
Intermediate 1	1200	4832	1200	4832	Saturated Brine-Based or Oil-Based Mud	8.0 – 10.0	35-45	N/C
Intermediate 2	1200	13111*	1200	12775*	Saturated Brine-Based or Oil-Based Mud	8.0 - 10.0	35-45	N/C
Production	13111	23361	12775	12775	Water-Based or Oil-Based Mud	9.5 - 13.5	38-50	N/C

Curve could be in intermediate or production section

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times. The following is a general list of products: Barite, Bentonite, Gypsum, Lime, Soda Ash, Caustic Soda, Nut Plug, Cedar Fiber, Cotton Seed Hulls, Drilling Paper, Salt Water Clay, CACL2. Oxy will use a closed mud system.

Drilling Blind Request

In the event total losses are encountered in the intermediate section, Oxy requests permission to drill blind due to depleted formations where risk of hydrocarbon kicks are unlikely.

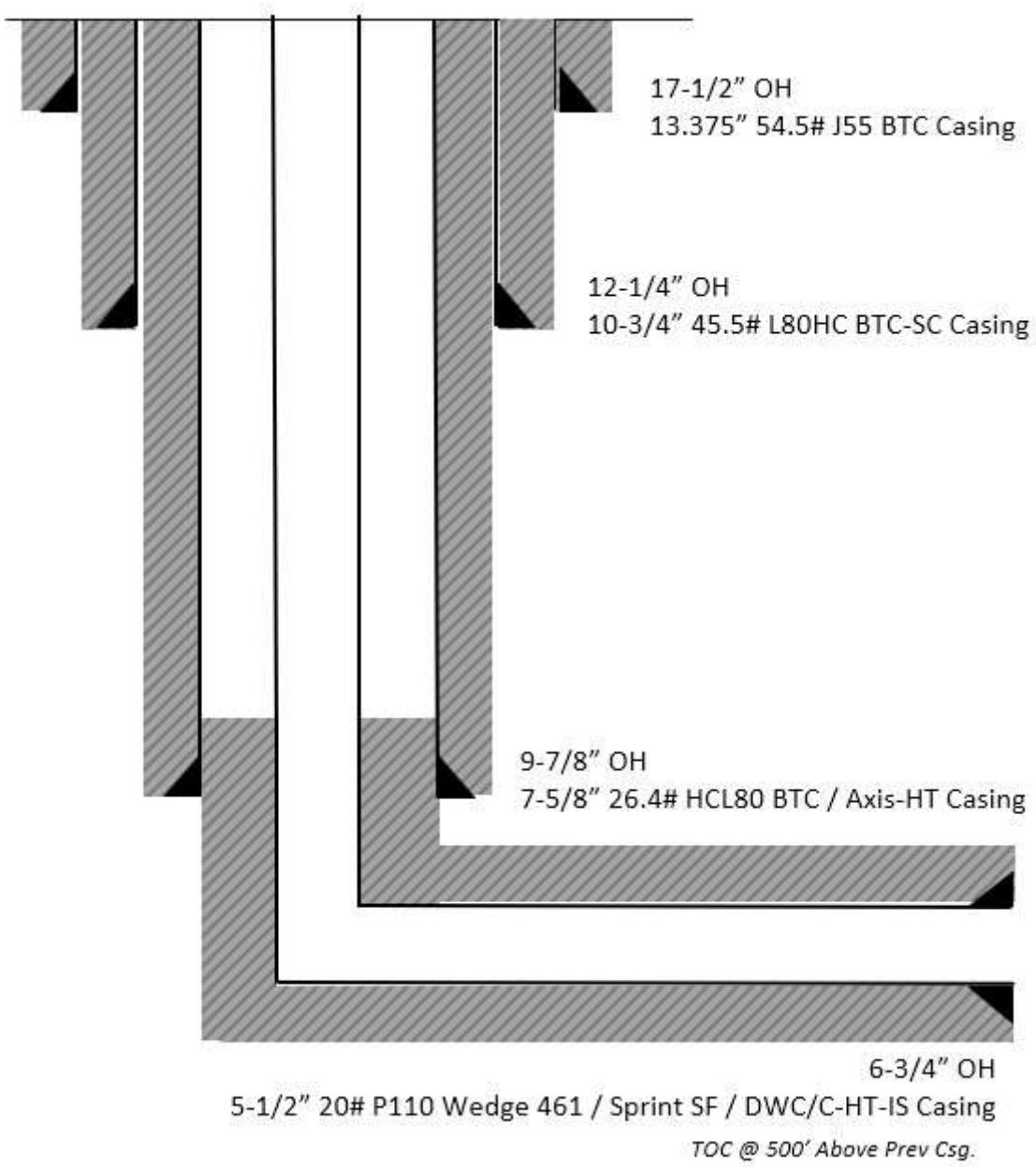
- Oxy will first attempt to cure losses before proceeding with drilling blind
- Drilling blind will only be allowed in the Castille and formations below
- While drilling blind, will monitor backside by filling-up on connections and utilizing gas monitors
- Depths at which losses occurred and attempt to cure losses with relevant details (LCM sweep info, etc.) will be documented in the drillers log and Subsequent Reports to the BLM.
- If a well control event (hydrocarbon kick) occurs while drilling blind, the BLM will be notified after the well is secured and returned to static.

What will be used to monitor the loss or gain of fluid?	PVT/MD Totco/Visual Monitoring

Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times. Appropriately weighted mud will be used to isolate potential gas, oil, and water zones until such time as casing can be cemented into place for zonal isolation.

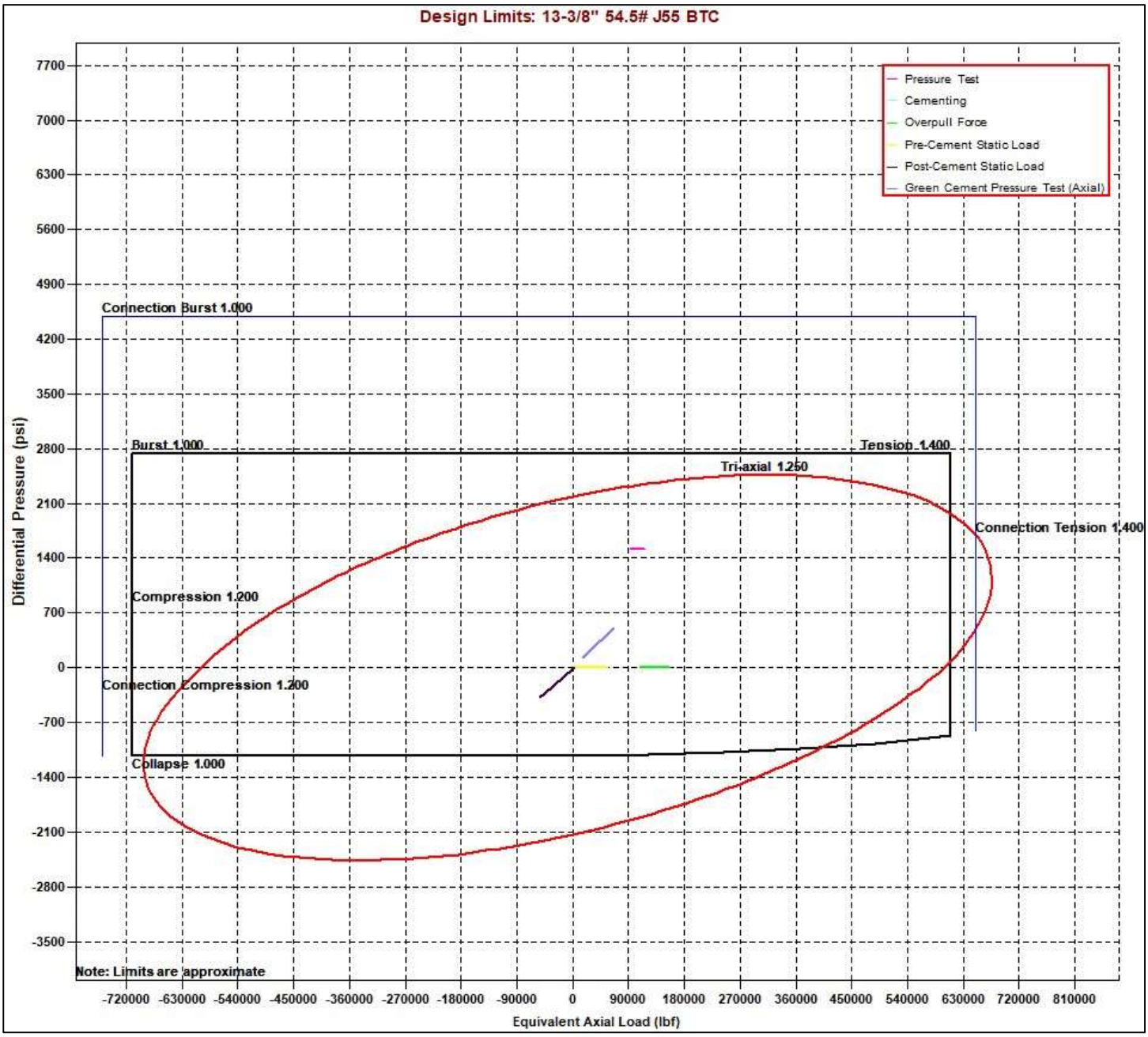
Oxy Blanket Design - Casing Design “B”

6. Wellbore Diagram

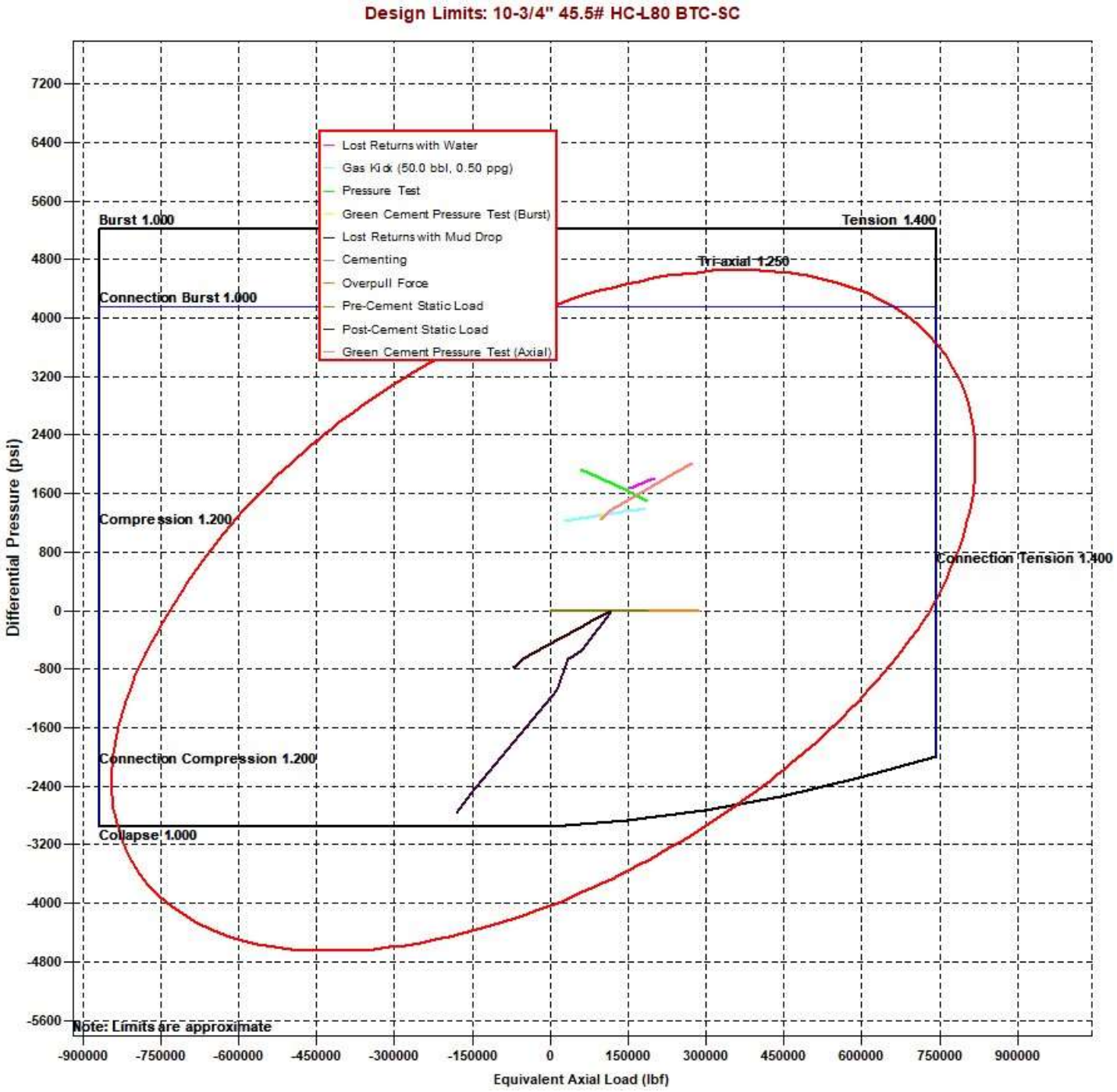


Oxy Blanket Design - Casing Design "B"

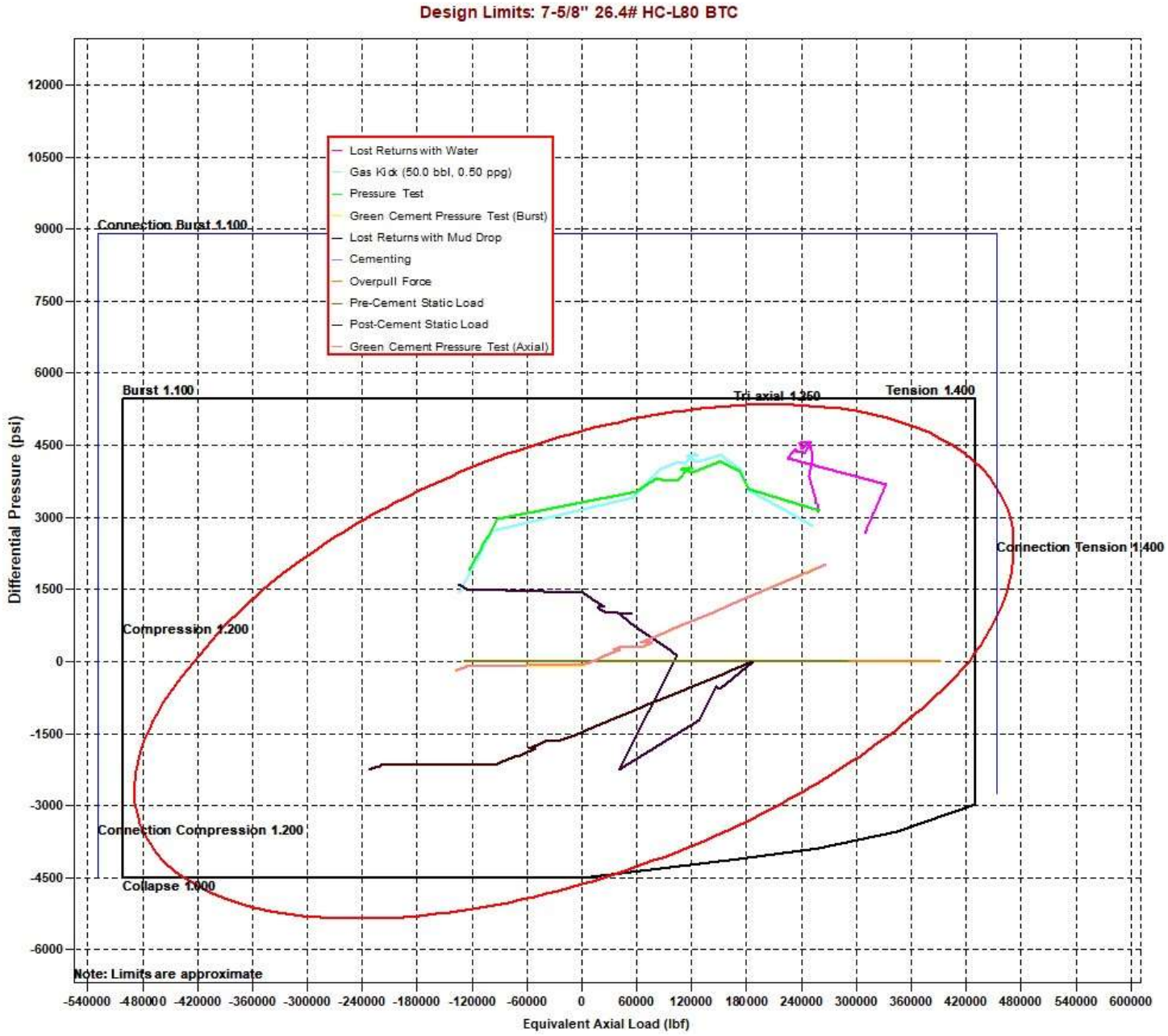
7. Landmark StressCheck Screenshots – Triaxial Output



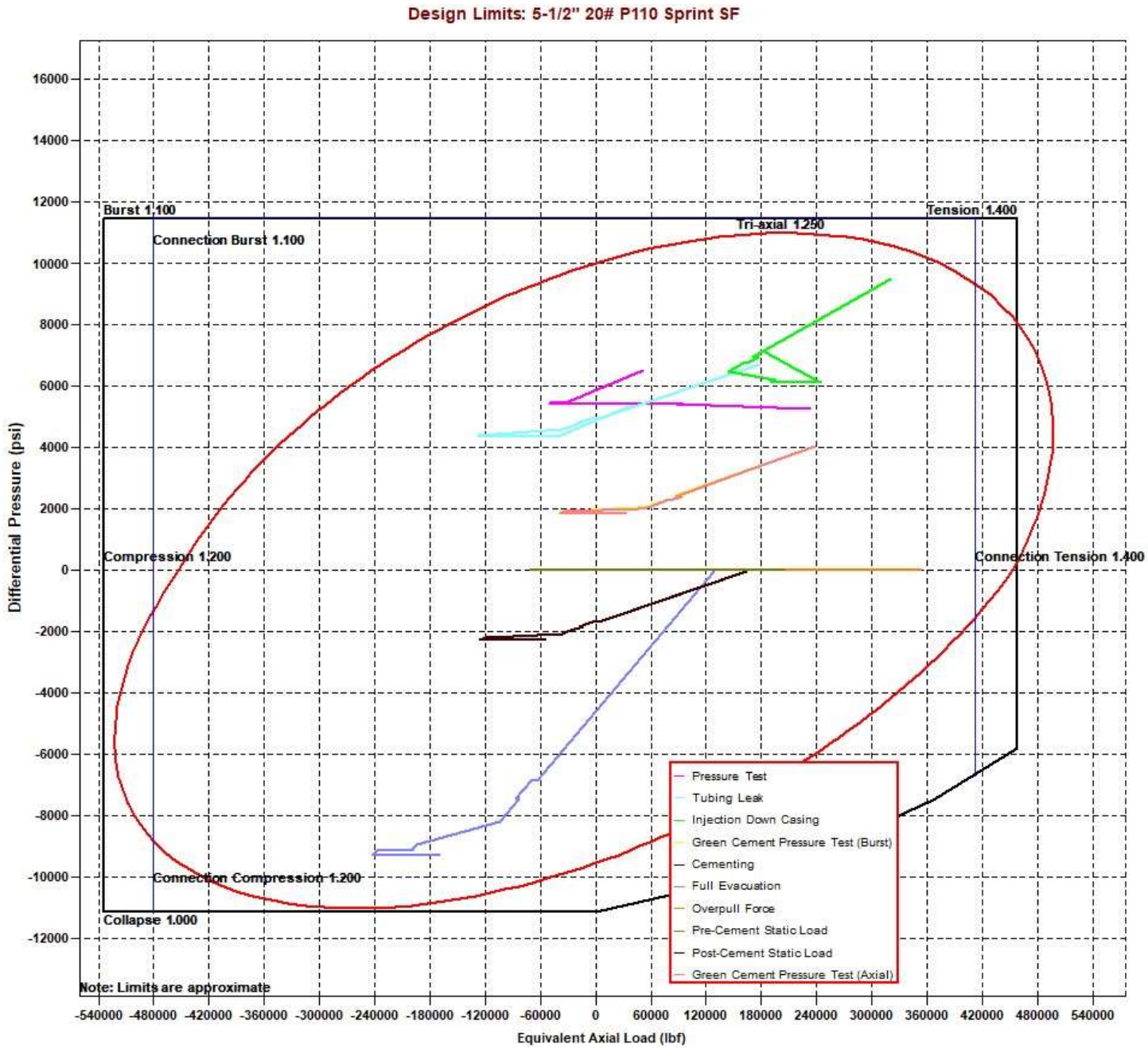
Oxy Blanket Design - Casing Design "B"



Oxy Blanket Design - Casing Design "B"



Oxy Blanket Design - Casing Design "B"



Oxy Blanket Design - Casing Design "B"

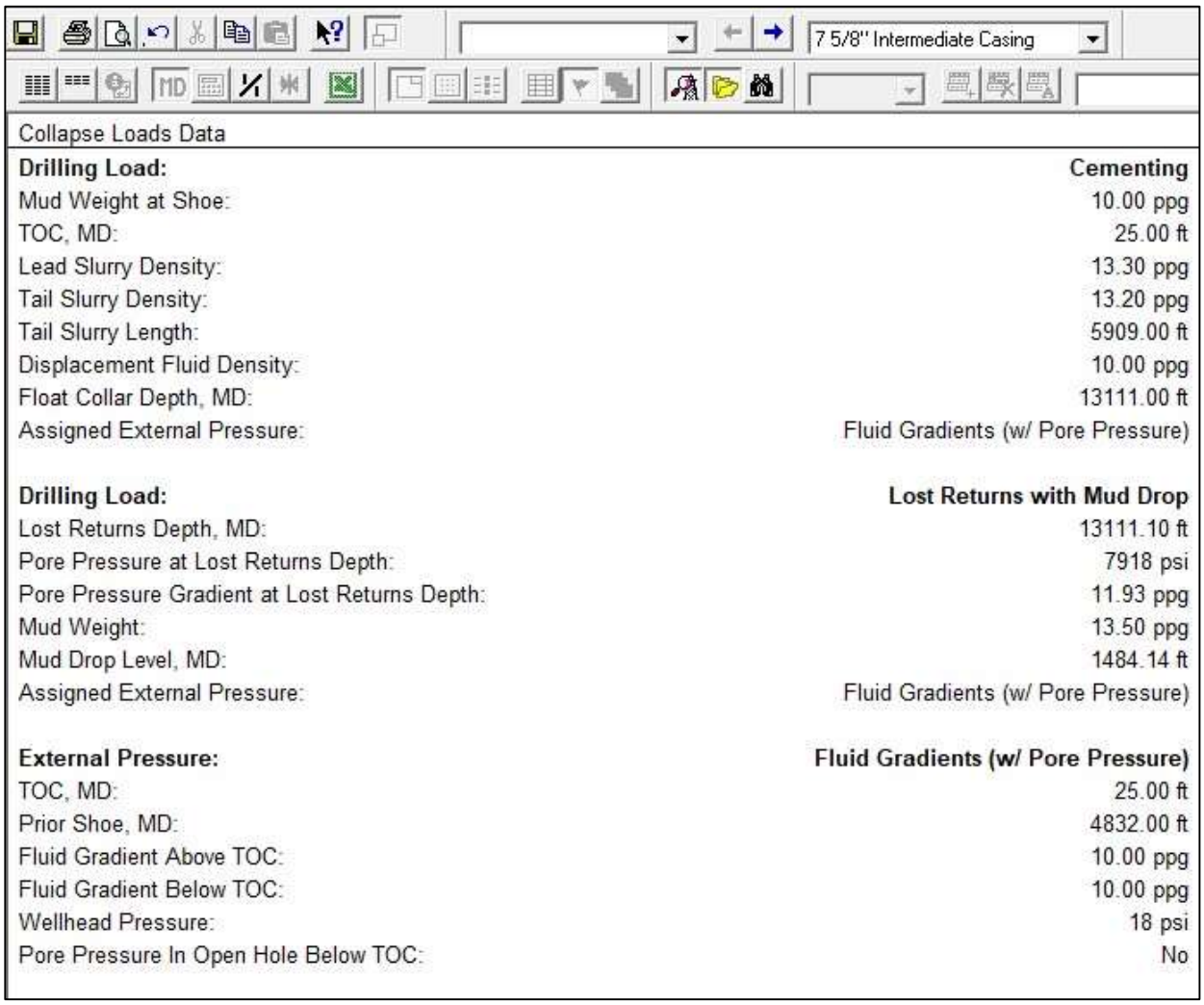
8. Landmark StressCheck Screenshots – Inputs for Intermediate 2 CSG Load Cases

Burst Load Cases

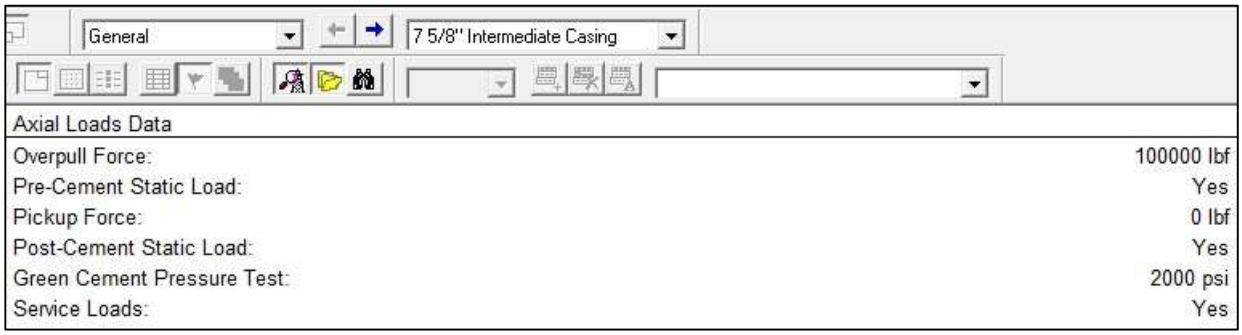
Drilling Load:	**Lost Returns with Water**
Fracture at Shoe (MD= 13111.00 ft):	10591 psi
Mud/Water Interface, MD:	0.00 ft
Mud Weight	11.28 ppg
Assigned External Pressure:	Fluid Gradients (w/ Pore Pressure)
Drilling Load:	**Gas Kick Profile**
Influx Depth, MD:	23361.00 ft
Kick Volume:	50.0 bbl
Kick Intensity	0.50 ppg
Maximum Mud Weight:	13.50 ppg
Kick Gas Gravity:	0.55 (0.1159 psi/ft @ 182 °F & 9291 psi)
Fracture at Shoe (MD= 13111.00 ft):	10591 psi
Drill Pipe OD:	5.000 in
Collar OD:	5.500 in
Collar Length:	200.00 ft
Assigned External Pressure:	Fluid Gradients (w/ Pore Pressure)
Drilling Load:	**Pressure Test**
Test Pressure:	3120 psi
Mud Weight:	10.00 ppg
Assigned External Pressure:	Fluid Gradients (w/ Pore Pressure)
Drilling Load:	**Green Cement Pressure Test**
Test Pressure:	4000 psi
Mud Weight at Shoe:	10.00 ppg
TOC, MD:	25.00 ft
Lead Slurry Density:	13.30 ppg
Tail Slurry Density:	13.20 ppg
Tail Slurry Length:	5909.00 ft
Displacement Fluid Density:	10.00 ppg
Float Collar Depth, MD:	13111.00 ft
External Pressure:	**Fluid Gradients (w/ Pore Pressure)**
TOC, MD:	25.00 ft
Prior Shoe, MD:	4832.00 ft
Mud Weight Above TOC:	10.00 ppg
Fluid Gradient Below TOC:	8.33 ppg
Wellhead Pressure:	18 psi
Pore Pressure In Open Hole:	Yes

Oxy Blanket Design - Casing Design "B"

Collapse Load Cases



Axial Load Cases



Oxy Blanket Design - Casing Design "B"

9. Landmark StressCheck Screenshot – Int. Casing Triaxial Results Table (Pressure Test)

StressCheck - [Triaxial Results - Blanket Design B *]

File Edit Wellbore Tubular View Composer Tools Window Help

7 5/8" Intermediate Casing

Pressure Test

Triaxial Results

	Depth (MD) (ft)	Axial Force (lbf)		Equivalent Axial Load (lbf)	Bending Stress at OD (psi)	Absolute Safety Factor				Temperature (°F)	Pressure (psi)		Addt'l Pickup To Prevent Buck. (lbf)	Buckled Length (ft)
		Apparent (w/Bending)	Actual (w/o Bending)			Triaxial	Burst	Collapse (V)	Axial		Internal	External		
29	12400	-149056	-24069	-99987	16622.5	1.88	2.25	N/A	(3.90)	179	9555	6970		
30	12500	-155877	-30890	-105328	16622.5	1.96	2.42	N/A	(3.73)	180	9603	7193		
31	12500	-155878	-30891	-105329	16622.5	1.96	2.42	N/A	(3.73)	180	9603	7193		
32	12550	-159065	-34078	-107825	16622.5	2.00	2.50	N/A	(3.66)	180	9625	7298		
33	12550	-159066	-34079	-107826	16622.5	2.00	2.50	N/A	(3.66)	180	9625	7298		
34	12600	-162071	-37084	-110180	16622.5	2.03	2.59	N/A	(3.59)	180	9646	7396		
35	12600	-162072	-37085	-110181	16622.5	2.03	2.59	N/A	(3.59)	180	9646	7396		
36	12650	-164872	-39885	-112376	16622.5	2.07	2.67	N/A	(3.53)	181	9665	7488		
37	12650	-164873	-39886	-112377	16622.5	2.07	2.67	N/A	(3.53)	181	9665	7488		
38	12700	-167448	-42461	-114394	16622.5	2.10	2.76	N/A	(3.47)	181	9683	7573		
39	12700	-167449	-42462	-114395	16622.5	2.10	2.76	N/A	(3.47)	181	9683	7573		
40	12750	-169778	-44791	-116221	16622.5	2.14	2.84	N/A	(3.43)	181	9699	7649		
41	12750	-169779	-44792	-116221	16622.5	2.14	2.84	N/A	(3.43)	181	9699	7649		
42	12800	-171844	-46858	-117841	16622.5	2.17	2.91	N/A	(3.38)	181	9714	7717		
43	12800	-171845	-46858	-117842	16622.5	2.17	2.91	N/A	(3.38)	181	9714	7717		
44	12850	-173632	-48645	-119243	16622.5	2.19	2.98	N/A	(3.35)	182	9726	7775		
45	12850	-173633	-48646	-119243	16622.5	2.19	2.98	N/A	(3.35)	182	9726	7775		
46	12900	-175127	-50141	-120416	16622.5	2.21	3.04	N/A	(3.32)	182	9736	7824		
47	12900	-175128	-50141	-120416	16622.5	2.21	3.04	N/A	(3.32)	182	9736	7824		
48	12950	-176319	-51332	-121350	16622.5	2.23	3.09	N/A	(3.30)	182	9745	7863		
49	13000	-177197	-52210	-122039	16622.5	2.24	3.13	N/A	(3.28)	182	9751	7892		
50	13050	-177755	-52769	-122477	16622.5	2.25	3.15	N/A	(3.27)	182	9755	7910		
51	13050	-177756	-52769	-122477	16622.5	2.25	3.15	N/A	(3.27)	182	9755	7910		
52	13111	-177998	-53011	-122667	16622.5	2.25	3.16	N/A	(3.27)	182	9756	7918		
53														
54	( ) Compression													
55	(V) Vector Collapse Safety Factor													
56														

Work Csg_Scheme PP_FG Wellpath Diagram String_Conn Design Burst Collapse Axi

Internal Pressure = Surface Pressure + Hydrostatic = 9756 psi

External Pressure = Fluid Gradient w/ Pore Pressure = 7918 psi

Burst SF = 3.16

NOTE: *Specific load case inputs for the pressure test can be seen in **Section 8** above. The test pressure does not exceed 70% of the minimum internal yield.*

Oxy Blanket Design - Casing Design “B”

10. Intermediate Non-API Casing Spec Sheet

Printed on: 06/19/2023

Tenaris

API BTC -Special Clearance

Coupling	Pipe Body
Grade: J55 (Casing)	Grade: J55 (Casing)
Body: Bright Green	1st Band: Bright Green
1st Band: White	2nd Band: -
2nd Band: -	3rd Band: -
3rd Band: -	4th Band: -

Outside Diameter	10.750 in.	Wall Thickness	0.400 in.	Grade	J55 (Casing)
Min. Wall Thickness	87.50 %	Pipe Body Drift	Alternative Drift	Type	Casing
Connection OD Option	Special Clearance				

Pipe Body Data

Geometry				Performance	
Nominal OD	10.750 in.	Drift	9.875 in.	SMYS	55,000 psi
Wall Thickness	0.400 in.	Plain End Weight	44.26 lb/ft	Min UTS	75,000 psi
Nominal Weight	45.500 lb/ft	OD Tolerance	API	Body Yield Strength	715 x1000 lb
Nominal ID	9.950 in.			Min. Internal Yield Pressure	3580 psi
				Collapse Pressure	2090 psi
				Max. Allowed Bending	23 °/100 ft

Connection Data

Geometry		Performance	
Thread per In	5	Joint Strength	796 x1000 lb
Connection OD	11.250 in.	Coupling Face Load	329 x1000 lb
Hand Tight Stand Off	1 in.	Internal Pressure Capacity	3290 psi

Notes

For products according to API Standards 5CT & 5B; Performance calculated considering API Technical Report 5C3 (Sections 9 & 10) equations.
For geometrical and steel grades combinations not considered in the API Standards 5CT and/or 5B; Performance calculations indirectly derived from API Technical Report 5C3 (Sections 9 & 10) equations.
Couplings OD are shown according to current API 5CT 10th Edition.

Oxy Blanket Design - Casing Design "B"

AXIS PIPE AND TUBE

Technical Data Sheet

7 5/8" 26.40 lbs/ft. L80HC - Axis HT

Mechanical Properties		
Minimum Yield Strength	psi.	80,000
Maximum Yield Strength	psi.	95,000
Minimum Tensile Strength	psi.	95,000

Dimensions		Pipe	AXIS HT
Outside Diameter	in.	7.625	8.500
Wall Thickness	in.	0.328	-
Inside Diameter	in.	6.969	-
Standard Drift	in.	6.844	6.844
Alternate Drift	in.	-	-
Plain End Weight	lbs/ft.	-	-
Nominal Linear Weight	lbs/ft.	26.40	-

Performance		Pipe	AXIS HT
Minimum Collapse Pressure	psi.	4,320	-
Minimum Internal Yield Pressure	psi.	6,020	6,020
Minimum Pipe Body Yield Strength	lbs.	602 x 1,000	-
Joint Strength	lbs.	-	635 x 1,000

Make-Up Torques		Pipe	AXIS HT
Optimum Make-Up Torque	ft/lbs.	-	8,000
Maximum Operational Torque	ft/lbs.	-	25,000

11. Production Non-API Casing Spec Sheets

Oxy Blanket Design - Casing Design “B”

Printed on: 11/09/2021

Tenaris

TenarisHydril Wedge 461 ® MS

Coupling	Pipe Body
Grade: P110-ICY	Grade: P110-ICY
Body: White	1st Band: White
1st Band: Pale Green	2nd Band: Pale Green
2nd Band: -	3rd Band: Pale Green
3rd Band: -	4th Band: -
	5th Band: -
	6th Band: -

Outside Diameter	5.500 in.	Wall Thickness	0.361 in.	Grade	P110-ICY
Min. Wall Thickness	87.50 %	Pipe Body Drift	API Standard	Type	Casing
Connection OD Option	MS				

Pipe Body Data

Geometry				Performance	
Nominal OD	5.500 in.	Wall Thickness	0.361 in.	Body Yield Strength	729 x1000 lb
Nominal Weight	20 lb/ft	Plain End Weight	19.83 lb/ft	Min. Internal Yield Pressure	14,360 psi
Drift	4.653 in.	OD Tolerance	API	SMYS	125,000 psi
Nominal ID	4.778 in.			Collapse Pressure	12,300 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	6.050 in.	Tension Efficiency	100 %	Minimum	17,000 ft-lb
Coupling Length	7.714 in.	Joint Yield Strength	729 x1000 lb	Optimum	18,000 ft-lb
Connection ID	4.778 in.	Internal Pressure Capacity	14,360 psi	Maximum	21,600 ft-lb
Make-up Loss	3.775 in.	Compression Efficiency	100 %		
Threads per inch	3.40	Compression Strength	729 x1000 lb	Operation Limit Torques	
Connection OD Option	Ms	Max. Allowable Bending	104 °/100 ft	Operating Torque	43,000 ft-lb
		External Pressure Capacity	12,300 psi	Yield Torque	51,000 ft-lb
		Coupling Face Load	273,000 lb		
				Buck-On	
				Minimum	21,600 ft-lb
				Maximum	23,100 ft-lb

Notes

This connection is fully interchangeable with:
Wedge 441® - 5.5 in. - 0.304 / 0.361 in.
Wedge 461® - 5.5 in. - 0.304 / 0.415 / 0.476 in.
Connections with Dopeless® Technology are fully compatible with the same connection in its Standard version
In October 2019, TenarisHydril Wedge XP® 2.0 was renamed TenarisHydril Wedge 461™. Product dimensions and properties remain identical and both connections are fully interchangeable

For the lastest performance data, always visit our website: www.tenaris.com

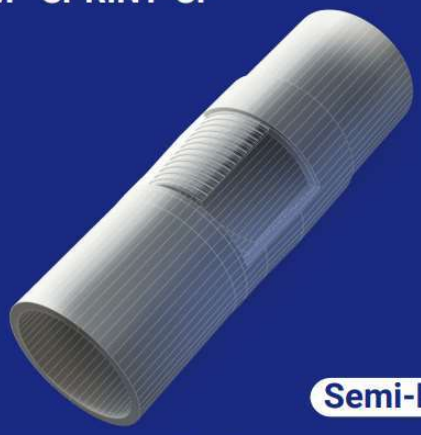
Oxy Blanket Design - Casing Design “B”

Generated on May 21, 2024

CONNECTION DATA SHEET

OD: **5.500 in.** Grade: **P110**
Weight: **20.00 lb/ft** Drift: **4.653 in. (API)**
Wall Th.: **0.361 in.**

VAM® SPRINT-SF



Semi-Flush

Field Torque Values

Make-up Torque (ft-lb)
20,000 **MIN**
22,500 **OPTI**
25,000 **MAX**

Torque with Sealability (ft-lb)
36,000 **MTS**

Locked Flank Torque (ft-lb)
4,500 **MIN**
15,750 **MAX**

(2) MTS: Maximum Torque with Sealability.

PIPE BODY PROPERTIES

Nominal OD	5.500	*in.*
Nominal ID	4.778	*in.*
Nominal Wall Thickness	0.361	*in.*
Minimum Wall Thickness	87.5	*%*
Nominal Weight (API)	20.00	*lb/ft*
Plain End Weight	19.83	*lb/ft*
Drift	4.653	*in.*
Grade Type	API 5CT	
Minimum Yield Strength	110	*ksi*
Maximum Yield Strength	140	*ksi*
Minimum Ultimate Tensile Strength	125	*ksi*
Pipe Body Yield Strength	641	*klb*
Internal Yield Pressure	12,640	*psi*
Collapse Pressure	11,100	*psi*

CONNECTION PROPERTIES

Connection Type	Semi-Premium Integral Semi-Flu	
Nominal Connection OD	5.783	*in.*
Nominal Connection ID	4.718	*in.*
Make-up Loss	5.965	*in.*
Tension Efficiency	90	*% Pipe Body*
Compression Efficiency	90	*% Pipe Body*
Internal Pressure Efficiency	100	*% Pipe Body*
External Pressure Efficiency	100	*% Pipe Body*

JOINT PERFORMANCES

Tension Strength	577	*klb*
Compression Strength	577	*klb*
Internal Pressure Resistance	12,640	*psi*
External Pressure Resistance	11,100	*psi*
Maximum Bending, Structural	78	*°/100 ft*
Maximum Bending, with Sealability(1)	30	*°/100 ft*

(1) Sealability rating demonstrated as per API RP 5C5 / ISO 13679

Oxy Blanket Design - Casing Design "B"

DWC/C-HT-IS

Connection Data Sheet

OD (in.)	WEIGHT (lbs./ft.)	WALL (in.)	GRADE	API DRIFT (in.)	RBW%	CONNECTION
5.500	Nominal: 20.00 Plain End: 19.83	0.361	‡VST P110MY	4.653	87.5	DWC/C-HT-IS

PIPE PROPERTIES		
Nominal OD	5.500	in.
Nominal ID	4.778	in.
Nominal Area	5.828	sq.in.
Grade Type		API 5CT
Min. Yield Strength	125	ksi
Max. Yield Strength	140	ksi
Min. Tensile Strength	135	ksi
Yield Strength	729	klb
Ultimate Strength	787	klb
Min. Internal Yield Pressure	14,360	psi
Collapse Pressure	12,090	psi

CONNECTION PROPERTIES		
Connection Type	Semi-Premium T&C	
Connection OD (nom)	6.050	in.
Connection ID (nom)	4.778	in.
Make-Up Loss	4.125	in.
Coupling Length	9.250	in.
Critical Cross Section	5.828	sq.in.
Tension Efficiency	89.1%	of pipe
Compression Efficiency	88.0%	of pipe
Internal Pressure Efficiency	86.1%	of pipe
External Pressure Efficiency	100.0%	of pipe

CONNECTION PERFORMANCES		
Yield Strength	649	klb
Parting Load	729	klb
Compression Rating	641	klb
Min. Internal Yield Pressure	12,360	psi
External Pressure Resistance	12,090	psi
Maximum Uniaxial Bend Rating	91.7	°/100 ft
Reference String Length w 1.4 Design Factor	22,890	ft.

FIELD TORQUE VALUES		
Min. Make-up torque	16,600	ft.lb
Opti. Make-up torque	17,950	ft.lb
Max. Make-up torque	19,300	ft.lb
Min. Shoulder Torque	1,660	ft.lb
Max. Shoulder Torque	13,280	ft.lb
Max. Delta Turn	0.200	Turns
†Maximum Operational Torque	23,800	ft.lb
†Maximum Torsional Value (MTV)	26,180	ft.lb

† Maximum Operational Torque and Maximum Torsional Value only valid with Vallourec P110MY Material.
‡ P110MY - Coupling Min Yield Strength is 110ksi and Coupling Max Yield is 125ksi.

"VST = Vallourec Star as the mill source for the pipe, "P110EC" is the grade name"

Need Help? Contact: tech.support@vam-usa.com

For detailed information on performance properties, refer to DWC Connection Data Notes on following page(s).

03/04/2024 08:36:50 PM

VAM USA

Oxy Blanket Design - Casing Design “B”

VAM USA
2107 CityWest Boulevard Suite 1300
Houston, TX 77042
Phone: 713-479-3200
Fax: 713-479-3234
VAM® USA Sales E-mail: VAMUSAsales@vam-usa.com
Tech Support Email: tech.support@vam-usa.com

DWC Connection Data Sheet Notes:

1. DWC connections are available with a seal ring (SR) option.
2. All standard DWC/C connections are interchangeable for a given pipe OD. DWC connections are interchangeable with DWC/C-SR connections of the same OD and wall.
3. Connection performance properties are based on nominal pipe body and connection dimensions.
4. DWC connection internal and external pressure resistance is calculated using the API rating for buttress connections. API Internal pressure resistance is calculated from formulas 31, 32, and 35 in the API Bulletin 5C3.
5. DWC joint strength is the minimum pipe body yield strength multiplied by the connection critical area.
6. API joint strength is for reference only. It is calculated from formulas 42 and 43 in the API Bulletin 5C3.
7. Bending efficiency is equal to the compression efficiency.
8. The torque values listed are recommended. The actual torque required may be affected by field conditions such as temperature, thread compound, speed of make-up, weather conditions, etc.
9. Connection yield torque is not to be exceeded.
10. Reference string length is calculated by dividing the joint strength by both the nominal weight in air and a design factor (DF) of 1.4. These values are offered for reference only and do not include load factors such as bending, buoyancy, temperature, load dynamics, etc.
11. DWC connections will accommodate API standard drift diameters.
12. DWC/C family of connections are compatible with API Buttress BTC connections. Please contact tech.support@vam-usa.com for details on connection ratings and make-up.

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Oxy USA Inc. - Blanket Design Pad Document

OXY - Blanket Design B

Pad Name: REDTNK_T22SR32E_25_04

SHL: 210' FNL 1539' FEL, Sec 25, T22S-R32E

Oxy requests for the bellow wells to be approved for the two designs listed in the Blanket Design document **(Blanket Design B –OXY –4S Slim v3.2.)** The MDs and TVDs for all intervals are within the boundary conditions. The max inclination and DLS are also within the boundary conditions (directional plans attached separately for review.)

1. Blanket Design - Wells

Well Name	APD #	Surface		Salt		Intermediate		Production	
		MD	TVD	MD	TVD	MD	TVD	MD	TVD
Tuna Nut 24_13 Fed Com 613H	10400097829	1089	1089	4956	4956	11491	11433	22372	12061
Tuna Nut 24_13 Fed Com 64H	10400097805	1083	1083	4966	4966	11529	11529	22708	12202
Tuna Nut 24_13 Fed Com 612H	10400097736	1078	1078	4957	4957	11491	11431	22375	12061
Tuna Nut 24_13 Fed Com 65H	10400097962	1093	1093	4955	4955	11668	11565	22568	12203

2. Review Criteria Table

		MD		TVD					
Section	Hole Size (in)	From (ft)	To (ft)	From (ft)	To (ft)	Csg. OD (in)	Csg Wt. (ppf)	Grade	Conn.
Surface	17.5	0	1089	0	1089	13.375	54.5	J-55	BTC
Salt	12.25	0	4956	0	4956	10.75	45.5	L-80 HC	BTC-SC
Intermediate	9.875	0	11491	0	11433	7.625	26.4	L-80 HC	BTC
Production	6.75	0	22372	0	12061	5.5	20	P-110	Sprint-SF

3. Geologic Formations

Formation	MD-RKB (ft)	TVD-RKB (ft)	Expected Fluids
Rustler	1029	1029	
Salado	1715	1715	Salt
Castile	3310	3310	Salt
Delaware	4956	4956	Oil/Gas/Brine
Bell Canyon	5017	5017	Oil/Gas/Brine
Cherry Canyon	5820	5820	Oil/Gas/Brine
Brushy Canyon	7144	7144	Losses
Bone Spring	8787	8771	Oil/Gas
Bone Spring 1st	9908	9875	Oil/Gas
Bone Spring 2nd	10603	10560	Oil/Gas
Bone Spring 3rd	11765	11700	Oil/Gas
Wolfcamp	12161	11989	Oil/Gas
Penn			Oil/Gas
Strawn			Oil/Gas

4. Cementing Program

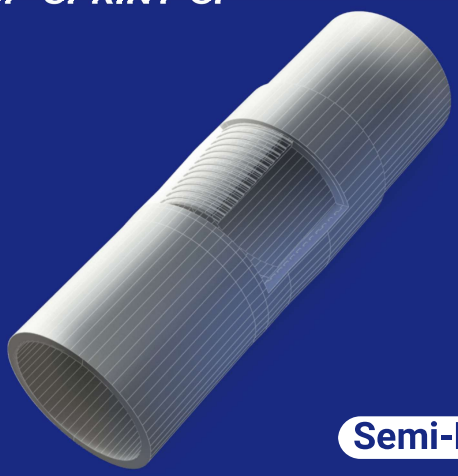
Section	Stage	Slurry:	Sacks	Yield (ft^3/ft)	Density (lb/gal)	Excess:	TOC	Placement	Description
Surface	1	Surface - Tail	1138	1.33	14.8	100%	-	Circulate	Class C+Accel.
Int.1	1	Intermediate - Tail	85	1.33	14.8	20%	4,456	Circulate	Class C+Accel.
Int.1	1	Intermediate - Lead	699	1.73	12.9	50%	-	Circulate	Class Pozz+Ret.
Int. 2	1	Intermediate 1S - Tail	550	1.68	13.2	5%	7,394	Circulate	Class C+Ret., Disper.
Int. 2	2	Intermediate 2S - Tail BH	1029	1.71	13.3	25%	-	Bradenhead	Class C+Accel.
Prod.	1	Production - Tail	645	1.84	13.3	25%	10,991	Circulate	Class C+Ret.

Generated on April 25, 2024

CONNECTION DATA SHEET

OD: **5.500 in.**
Weight: **20.00 lb/ft**
Wall Th.: **0.361 in.**
Grade: **P110 RY**
Drift: **4.653 in. (API)**

VAM® SPRINT-SF



Semi-Flush

Field Torque Values

Make-up Torque (ft-lb)
- 20,000 **MIN**
- 22,500 **OPTI**
- 25,000 **MAX**

Torque with Sealability (ft-lb)
- 36,000 **MTS**

Locked Flank Torque (ft-lb)
- 4,500 **MIN**
- 15,750 **MAX**

(2) MTS: Maximum Torque with Sealability.

PIPE BODY PROPERTIES

Nominal OD	5.500	*in.*
Nominal ID	4.778	*in.*
Nominal Wall Thickness	0.361	*in.*
Minimum Wall Thickness	87.5	*%*
Nominal Weight (API)	20.00	*lb/ft*
Plain End Weight	19.83	*lb/ft*
Drift	4.653	*in.*
Grade Type	Controlled Yield	
Minimum Yield Strength	110	*ksi*
Maximum Yield Strength	125	*ksi*
Minimum Ultimate Tensile Strength	140	*ksi*
Pipe Body Yield Strength	641	*klb*
Internal Yield Pressure	12,640	*psi*
Collapse Pressure	11,110	*psi*

CONNECTION PROPERTIES

Connection Type	Semi-Premium Integral Semi-Flu	
Nominal Connection OD	5.783	*in.*
Nominal Connection ID	4.718	*in.*
Make-up Loss	5.965	*in.*
Tension Efficiency	90	*% Pipe Body*
Compression Efficiency	90	*% Pipe Body*
Internal Pressure Efficiency	100	*% Pipe Body*
External Pressure Efficiency	100	*% Pipe Body*

JOINT PERFORMANCES

Tension Strength	577	*klb*
Compression Strength	577	*klb*
Internal Pressure Resistance	12,640	*psi*
External Pressure Resistance	11,110	*psi*
Maximum Bending, Structural	78	*°/100 ft*
Maximum Bending, with Sealability(1)	30	*°/100 ft*

(1) Sealability rating demonstrated as per API RP 5C5 / ISO 13679

Tenaris

API BTC -Special Clearance

Coupling	Pipe Body
Grade: **L80-IC**	Grade: **L80-IC**
Body: **Red**	1st Band: **Red**
1st Band: **Brown**	2nd Band: **Brown**
2nd Band: **-**	3rd Band: **Pale Green**
3rd Band: **-**	4th Band: **-**

Outside Diameter	10.750 in.	**Wall Thickness**	0.400 in.	**Grade**	L80-IC
Min. Wall Thickness	87.50 %	**Pipe Body Drift**	Alternative Drift	**Type**	Casing
Connection OD Option	Special Clearance				

Pipe Body Data

Geometry				Performance	
Nominal OD	10.750 in.	**Drift**	9.875 in.	**SMYS**	80,000 psi
Wall Thickness	0.400 in.	**Plain End Weight**	44.26 lb/ft	**Min UTS**	95,000 psi
Nominal Weight	45.500 lb/ft	**OD Tolerance**	API	**Body Yield Strength**	1040 x1000 lb
Nominal ID	9.950 in.			**Min. Internal Yield Pressure**	5210 psi
				Collapse Pressure	2950 psi
				Max. Allowed Bending	34 °/100 ft

Connection Data

Geometry		Performance	
Thread per In	5	**Joint Strength**	1041 x1000 lb
Connection OD	11.250 in.	**Coupling Face Load**	478 x1000 lb
Hand Tight Stand Off	1 in.	**Internal Pressure Capacity**	4150 psi

Notes

For products according to API Standards 5CT & 5B; Performance calculated considering API Technical Report 5C3 (Sections 9 & 10) equations.
For geometrical and steel grades combinations not considered in the API Standards 5CT and/or 5B; Performance calculations indirectly derived from API Technical Report 5C3 (Sections 9 & 10) equations.
Couplings OD are shown according to current API 5CT 10th Edition.

5M Annluar BOP Variance Request

Per BLM's Memorandum No. NM-2017-008: *Decision and Rationale for a Variance Allowing the Use of a 5M Annular Preventer with a 10M BOP Stack*, Oxy requests to employ a 5M annular with a 10M BOPE stack in the pilot and lateral sections of the well and will ensure that two barriers to flow are maintained at all times. Please see Well Control Plan below.

Oxy Well Control Plan

A. Component and Preventer Compatibility Table

The table below, which covers the drilling and casing of the >5M MASP portion of the well, outlines the tubulars and the compatible preventers in use. This table, combined with the mud program, documents that two barriers to flow can be maintained at all times, independent of the rating of the annular preventer.

Pilot hole and Lateral sections, 10M requirement

Component	OD	Preventer	RWP
Drillpipe	4-1/2"-5"	Lower 3-1/2 - 5-1/2" VBR Upper 3-1/2 - 5-1/2" VBR	10M
HWDP	4-1/2"-5"	Lower 3-1/2 - 5-1/2" VBR Upper 3-1/2 - 5-1/2" VBR	10M
Drill collars and MWD tools	4-3/4" – 5-1/2"	Lower 3-1/2 - 5-1/2" VBR Upper 3-1/2 - 5-1/2" VBR	10M
Mud Motor	4-3/4"	Lower 3-1/2 - 5-1/2" VBR Upper 3-1/2 - 5-1/2" VBR	10M
Production casing	5-1/2"	Lower 3-1/2 - 5-1/2" VBR Upper 3-1/2 - 5-1/2" VBR	10M
ALL	0" - 13-5/8"	Annular	5M
Open-hole	6-3/4"	Blind Rams	10M

VBR = Variable Bore Ram. Compatible range listed in chart.
HWDP = Heavy Weight Drill Pipe
MWD = Measurement While Drilling

B. Well Control Procedures

Well control procedures are specific to the rig equipment and the operation at the time the kick occurs. Below are the minimal high-level tasks prescribed to assure a proper shut-in while drilling, tripping, running casing, pipe out of the hole (open hole), and moving the Bottom Hole Assembly (BHA) through the Blowout Preventers (BOP). The pressure at which control is swapped from the annular to another compatible ram will occur when the anticipated pressure is approaching or envisioned to exceed 70% of the 5M annular Rated Working Pressure (RWP) or 3500 PSI.

General Procedure While Drilling

1. Sound alarm (alert crew)
2. Space out drill string
3. Shut down pumps (stop pumps and rotary)
4. Shut-in Well (uppermost applicable BOP, typically annular preventer first. The Hydraulic Control Remote (HCR) valve and choke will already be in the closed position).
5. Confirm shut-in
6. Notify tool pusher/company representative
7. Read and record the following:
    a. SIDPP and SICP
    b. Pit gain
    c. Time
8. Regroup and identify forward plan
9. If pressure has built or expected to reach 70% of the annular RWP during kill operations, crew will reconfirm spacing and swap to the upper pipe ram

General Procedure While Tripping

1. Sound alarm (alert crew)
2. Stab full opening safety valve and close
3. Space out drill string
4. Shut-in (uppermost applicable BOP, typically annular preventer first. The HCR and choke will already be in the closed position)
5. Confirm shut-in
6. Notify tool pusher/company representative
7. Read and record the following
    a. SIDPP and SICP
    b. Pit gain
    c. Time
    d. Regroup and identify forward plan
    e. If pressure has built or is anticipated during the kill to reach the RWP of the annular preventer, confirm spacing and swap to the upper pipe ram

General Procedure While Running Casing

1. Sound alarm (alert crew)
2. Stab crossover and full opening safety valve and close
3. Space out string
4. Shut-in (uppermost applicable BOP, typically annular preventer first. The HCR and choke will already be in the closed position).
5. Confirm shut-in
6. Notify tool pusher/company representative
7. Read and record the following:
    a. SIDPP and SICP
    b. Pit gain
    c. Time
    d. Regroup and identify forward plan.
    e. If pressure has built or is anticipated during the kill to reach the RWP of the annular preventer, confirm spacing and swap to compatible pipe ram.

General Procedure With No Pipe In Hole (Open Hole)

1. Sound alarm (alert crew)
2. Shut-in with blind rams or BSR. (The HCR and choke will already be in the closed position)
3. Confirm shut-in
4. Notify tool pusher/company representative
5. Read and record the following:
    a. SICP
    b. Pit gain
    c. Time
6. Regroup and identify forward plan

General Procedures While Pulling BHA thru Stack

1. PRIOR to pulling last joint of drill pipe thru the stack.
    a. Perform flow check, if flowing:
    b. Sound alarm (alert crew)
    c. Stab full opening safety valve and close
    d. Space out drill string with tool joint just beneath the upper pipe ram
    e. Shut-in using upper pipe ram. (The HCR and choke will already be in the closed position)
    f. Confirm shut-in
    g. Notify tool pusher/company representative
    h. Read and record the following:
        i. SIDPP and SICP
        ii. Pit gain
        iii. Time
        iv. Regroup and identify forward plan

2. With BHA in the stack and compatible ram preventer and pipe combo immediately available.
    a. Sound alarm (alert crew)
    b. Stab crossover and full opening safety valve and close
    c. Space out drill string with upset just beneath the compatible pipe ram
    d. Shut-in using compatible pipe ram. (The HCR and choke will already be in the closed position.)
    e. Confirm shut-in
    f. Notify tool pusher/company representative
    g. Read and record the following:
        i. SIDPP and SICP
        ii. Pit gain
        iii. Time
        iv. Regroup and identify forward plan

3. With BHA in the stack and NO compatible ram preventer and pipe combo immediately available.

a. Sound alarm (alert crew)
b. If possible to pick up high enough, pull string clear of the stack and follow “Open Hole” scenario
c. If impossible to pick up high enough to pull the string clear of the stack
d. Stab crossover, make up one joint/stand of drill pipe, and full opening safety valve and close
e. Space out drill string with tool joint just beneath the upper pipe ram
f. Shut-in using upper pipe ram. (The HCR and choke will already be in the closed position)
g. Confirm shut-in
h. Notify tool pusher/company representative
i. Read and record the following:
    i. SIDPP and SICP
    ii. Pit gain
    iii. Time

j. Regroup and identify forward plan

OXY

PRD NM DIRECTIONAL PLANS (NAD 1983)
Tuna Nut 24_13 Fed Com
Tuna Nut 24_13 Fed Com 612H

Wellbore #1

Plan: Permitting Plan

Standard Planning Report

18 February, 2025

OXY
Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Tuna Nut 24_13 Fed Com 612H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=25' @ 3776.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=25' @ 3776.00ft
Site:	Tuna Nut 24_13 Fed Com	**North Reference:**	Grid
Well:	Tuna Nut 24_13 Fed Com 612H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Project PRD NM DIRECTIONAL PLANS (NAD 1983)

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		Using geodetic scale factor

Site Tuna Nut 24_13 Fed Com

Site Position:		**Northing:**	497,414.86 usft	**Latitude:**	32.365515
From:	Map	**Easting:**	757,769.29 usft	**Longitude:**	-103.632352
Position Uncertainty:	1.79 ft	**Slot Radius:**	13.200 in		

Well Tuna Nut 24_13 Fed Com 612H

Well Position	**+N/-S**	0.00 ft	**Northing:**	498,879.77 usf	**Latitude:**	32.369501
	+E/-W	0.00 ft	**Easting:**	760,037.47 usf	**Longitude:**	-103.624975
Position Uncertainty		2.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	3,751.00 ft
Grid Convergence:		0.38 °				

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM_FILE	2/18/2025	6.15	59.90	47,408.10000000

Design Permitting Plan

Audit Notes:

Version:	**Phase:**	PROTOTYPE	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	355.59

Plan Survey Tool Program **Date** 2/18/2025

	Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	22,374.81	Permitting Plan (Wellbore #1)	B005Mc_MWD+HRGM+SA MWD+HRGM+Sag+MSA	

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6,995.00	0.00	0.00	6,995.00	0.00	0.00	0.00	0.00	0.00	0.00	
7,995.46	10.00	290.84	7,990.38	31.00	-81.42	1.00	1.00	0.00	290.84	
11,590.99	10.00	290.84	11,531.24	253.23	-665.20	0.00	0.00	0.00	0.00	
12,454.88	90.00	359.59	12,061.00	824.40	-756.43	10.00	9.26	7.96	69.04	
22,374.88	90.00	359.59	12,061.00	10,744.14	-828.28	0.00	0.00	0.00	0.00	PBHL (Tuna Nut

OXY
Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Tuna Nut 24_13 Fed Com 612H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=25' @ 3776.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=25' @ 3776.00ft
Site:	Tuna Nut 24_13 Fed Com	**North Reference:**	Grid
Well:	Tuna Nut 24_13 Fed Com 612H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00

OXY

Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Tuna Nut 24_13 Fed Com 612H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=25' @ 3776.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=25' @ 3776.00ft
Site:	Tuna Nut 24_13 Fed Com	**North Reference:**	Grid
Well:	Tuna Nut 24_13 Fed Com 612H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,995.00	0.00	0.00	6,995.00	0.00	0.00	0.00	0.00	0.00	0.00
Build 1°/100'									
7,000.00	0.05	290.84	7,000.00	0.00	0.00	0.00	1.00	1.00	0.00
7,100.00	1.05	290.84	7,099.99	0.34	-0.90	0.41	1.00	1.00	0.00
7,200.00	2.05	290.84	7,199.96	1.30	-3.43	1.56	1.00	1.00	0.00
7,300.00	3.05	290.84	7,299.86	2.89	-7.59	3.46	1.00	1.00	0.00
7,400.00	4.05	290.84	7,399.66	5.09	-13.37	6.10	1.00	1.00	0.00
7,500.00	5.05	290.84	7,499.35	7.91	-20.79	9.49	1.00	1.00	0.00
7,600.00	6.05	290.84	7,598.88	11.35	-29.82	13.61	1.00	1.00	0.00
7,700.00	7.05	290.84	7,698.22	15.41	-40.48	18.48	1.00	1.00	0.00
7,800.00	8.05	290.84	7,797.35	20.09	-52.76	24.08	1.00	1.00	0.00
7,900.00	9.05	290.84	7,896.24	25.38	-66.66	30.42	1.00	1.00	0.00
7,995.46	10.00	290.84	7,990.38	31.00	-81.42	37.16	1.00	1.00	0.00
Hold 10° Tangent									
8,000.00	10.00	290.84	7,994.85	31.28	-82.16	37.50	0.00	0.00	0.00
8,100.00	10.00	290.84	8,093.33	37.46	-98.40	44.91	0.00	0.00	0.00
8,200.00	10.00	290.84	8,191.81	43.64	-114.63	52.32	0.00	0.00	0.00
8,300.00	10.00	290.84	8,290.29	49.82	-130.87	59.73	0.00	0.00	0.00
8,400.00	10.00	290.84	8,388.77	56.00	-147.11	67.14	0.00	0.00	0.00
8,500.00	10.00	290.84	8,487.25	62.18	-163.34	74.55	0.00	0.00	0.00
8,600.00	10.00	290.84	8,585.73	68.36	-179.58	81.96	0.00	0.00	0.00
8,700.00	10.00	290.84	8,684.21	74.54	-195.81	89.37	0.00	0.00	0.00
8,800.00	10.00	290.84	8,782.69	80.72	-212.05	96.78	0.00	0.00	0.00
8,900.00	10.00	290.84	8,881.17	86.90	-228.29	104.19	0.00	0.00	0.00
9,000.00	10.00	290.84	8,979.65	93.08	-244.52	111.60	0.00	0.00	0.00
9,100.00	10.00	290.84	9,078.13	99.26	-260.76	119.01	0.00	0.00	0.00
9,200.00	10.00	290.84	9,176.61	105.45	-276.99	126.42	0.00	0.00	0.00
9,300.00	10.00	290.84	9,275.09	111.63	-293.23	133.83	0.00	0.00	0.00
9,400.00	10.00	290.84	9,373.57	117.81	-309.47	141.25	0.00	0.00	0.00
9,500.00	10.00	290.84	9,472.05	123.99	-325.70	148.66	0.00	0.00	0.00
9,600.00	10.00	290.84	9,570.53	130.17	-341.94	156.07	0.00	0.00	0.00
9,700.00	10.00	290.84	9,669.00	136.35	-358.17	163.48	0.00	0.00	0.00
9,800.00	10.00	290.84	9,767.48	142.53	-374.41	170.89	0.00	0.00	0.00
9,900.00	10.00	290.84	9,865.96	148.71	-390.65	178.30	0.00	0.00	0.00
10,000.00	10.00	290.84	9,964.44	154.89	-406.88	185.71	0.00	0.00	0.00
10,100.00	10.00	290.84	10,062.92	161.07	-423.12	193.12	0.00	0.00	0.00
10,200.00	10.00	290.84	10,161.40	167.25	-439.35	200.53	0.00	0.00	0.00
10,300.00	10.00	290.84	10,259.88	173.43	-455.59	207.94	0.00	0.00	0.00
10,400.00	10.00	290.84	10,358.36	179.61	-471.83	215.35	0.00	0.00	0.00
10,500.00	10.00	290.84	10,456.84	185.79	-488.06	222.76	0.00	0.00	0.00

OXY

Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Tuna Nut 24_13 Fed Com 612H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=25' @ 3776.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=25' @ 3776.00ft
Site:	Tuna Nut 24_13 Fed Com	**North Reference:**	Grid
Well:	Tuna Nut 24_13 Fed Com 612H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,600.00	10.00	290.84	10,555.32	191.98	-504.30	230.17	0.00	0.00	0.00
10,700.00	10.00	290.84	10,653.80	198.16	-520.53	237.58	0.00	0.00	0.00
10,800.00	10.00	290.84	10,752.28	204.34	-536.77	244.99	0.00	0.00	0.00
10,900.00	10.00	290.84	10,850.76	210.52	-553.01	252.40	0.00	0.00	0.00
11,000.00	10.00	290.84	10,949.24	216.70	-569.24	259.81	0.00	0.00	0.00
11,100.00	10.00	290.84	11,047.72	222.88	-585.48	267.22	0.00	0.00	0.00
11,200.00	10.00	290.84	11,146.20	229.06	-601.71	274.63	0.00	0.00	0.00
11,300.00	10.00	290.84	11,244.67	235.24	-617.95	282.04	0.00	0.00	0.00
11,400.00	10.00	290.84	11,343.15	241.42	-634.19	289.45	0.00	0.00	0.00
11,500.00	10.00	290.84	11,441.63	247.60	-650.42	296.86	0.00	0.00	0.00
11,590.99	10.00	290.84	11,531.24	253.23	-665.20	303.61	0.00	0.00	0.00
KOP, Build & Turn 10°/100'									
11,600.00	10.36	295.52	11,540.11	253.85	-666.66	304.34	10.00	3.95	51.98
11,700.00	17.20	327.51	11,637.30	270.24	-682.76	321.92	10.00	6.84	31.98
11,800.00	26.13	340.00	11,730.19	303.49	-698.27	356.26	10.00	8.93	12.49
11,900.00	35.60	346.31	11,815.96	352.58	-712.73	406.32	10.00	9.47	6.31
12,000.00	45.28	350.21	11,891.99	416.03	-725.69	470.58	10.00	9.68	3.91
12,100.00	55.05	352.99	11,955.98	491.91	-736.76	547.09	10.00	9.77	2.77
12,200.00	64.87	355.16	12,005.98	577.92	-745.60	633.51	10.00	9.82	2.18
12,300.00	74.72	357.01	12,040.47	671.43	-751.95	727.24	10.00	9.85	1.85
12,400.00	84.58	358.69	12,058.41	769.61	-755.61	825.41	10.00	9.86	1.68
12,454.88	90.00	359.59	12,061.00	824.40	-756.43	880.10	10.00	9.87	1.63
Landing Point									
12,500.00	90.00	359.59	12,061.00	869.52	-756.76	925.11	0.00	0.00	0.00
12,600.00	90.00	359.59	12,061.00	969.52	-757.48	1,024.87	0.00	0.00	0.00
12,700.00	90.00	359.59	12,061.00	1,069.51	-758.21	1,124.63	0.00	0.00	0.00
12,800.00	90.00	359.59	12,061.00	1,169.51	-758.93	1,224.38	0.00	0.00	0.00
12,900.00	90.00	359.59	12,061.00	1,269.51	-759.66	1,324.14	0.00	0.00	0.00
13,000.00	90.00	359.59	12,061.00	1,369.51	-760.38	1,423.90	0.00	0.00	0.00
13,100.00	90.00	359.59	12,061.00	1,469.50	-761.10	1,523.66	0.00	0.00	0.00
13,200.00	90.00	359.59	12,061.00	1,569.50	-761.83	1,623.41	0.00	0.00	0.00
13,300.00	90.00	359.59	12,061.00	1,669.50	-762.55	1,723.17	0.00	0.00	0.00
13,400.00	90.00	359.59	12,061.00	1,769.49	-763.28	1,822.93	0.00	0.00	0.00
13,500.00	90.00	359.59	12,061.00	1,869.49	-764.00	1,922.69	0.00	0.00	0.00
13,600.00	90.00	359.59	12,061.00	1,969.49	-764.73	2,022.44	0.00	0.00	0.00
13,700.00	90.00	359.59	12,061.00	2,069.49	-765.45	2,122.20	0.00	0.00	0.00
13,800.00	90.00	359.59	12,061.00	2,169.48	-766.17	2,221.96	0.00	0.00	0.00
13,900.00	90.00	359.59	12,061.00	2,269.48	-766.90	2,321.71	0.00	0.00	0.00
14,000.00	90.00	359.59	12,061.00	2,369.48	-767.62	2,421.47	0.00	0.00	0.00
14,100.00	90.00	359.59	12,061.00	2,469.48	-768.35	2,521.23	0.00	0.00	0.00
14,200.00	90.00	359.59	12,061.00	2,569.47	-769.07	2,620.99	0.00	0.00	0.00
14,300.00	90.00	359.59	12,061.00	2,669.47	-769.80	2,720.74	0.00	0.00	0.00
14,400.00	90.00	359.59	12,061.00	2,769.47	-770.52	2,820.50	0.00	0.00	0.00
14,472.53	90.00	359.59	12,061.00	2,842.00	-771.05	2,892.85	0.00	0.00	0.00
PPP-1 Cross									
14,500.00	90.00	359.59	12,061.00	2,869.47	-771.24	2,920.26	0.00	0.00	0.00
14,600.00	90.00	359.59	12,061.00	2,969.46	-771.97	3,020.01	0.00	0.00	0.00
14,700.00	90.00	359.59	12,061.00	3,069.46	-772.69	3,119.77	0.00	0.00	0.00
14,800.00	90.00	359.59	12,061.00	3,169.46	-773.42	3,219.53	0.00	0.00	0.00
14,900.00	90.00	359.59	12,061.00	3,269.46	-774.14	3,319.29	0.00	0.00	0.00
15,000.00	90.00	359.59	12,061.00	3,369.45	-774.87	3,419.04	0.00	0.00	0.00
15,100.00	90.00	359.59	12,061.00	3,469.45	-775.59	3,518.80	0.00	0.00	0.00
15,200.00	90.00	359.59	12,061.00	3,569.45	-776.31	3,618.56	0.00	0.00	0.00
15,300.00	90.00	359.59	12,061.00	3,669.44	-777.04	3,718.32	0.00	0.00	0.00
15,400.00	90.00	359.59	12,061.00	3,769.44	-777.76	3,818.07	0.00	0.00	0.00

OXY
Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Tuna Nut 24_13 Fed Com 612H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=25' @ 3776.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=25' @ 3776.00ft
Site:	Tuna Nut 24_13 Fed Com	**North Reference:**	Grid
Well:	Tuna Nut 24_13 Fed Com 612H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
15,500.00	90.00	359.59	12,061.00	3,869.44	-778.49	3,917.83	0.00	0.00	0.00
15,600.00	90.00	359.59	12,061.00	3,969.44	-779.21	4,017.59	0.00	0.00	0.00
15,700.00	90.00	359.59	12,061.00	4,069.43	-779.94	4,117.34	0.00	0.00	0.00
15,800.00	90.00	359.59	12,061.00	4,169.43	-780.66	4,217.10	0.00	0.00	0.00
15,900.00	90.00	359.59	12,061.00	4,269.43	-781.38	4,316.86	0.00	0.00	0.00
16,000.00	90.00	359.59	12,061.00	4,369.43	-782.11	4,416.62	0.00	0.00	0.00
16,100.00	90.00	359.59	12,061.00	4,469.42	-782.83	4,516.37	0.00	0.00	0.00
16,200.00	90.00	359.59	12,061.00	4,569.42	-783.56	4,616.13	0.00	0.00	0.00
16,300.00	90.00	359.59	12,061.00	4,669.42	-784.28	4,715.89	0.00	0.00	0.00
16,400.00	90.00	359.59	12,061.00	4,769.42	-785.01	4,815.64	0.00	0.00	0.00
16,500.00	90.00	359.59	12,061.00	4,869.41	-785.73	4,915.40	0.00	0.00	0.00
16,600.00	90.00	359.59	12,061.00	4,969.41	-786.45	5,015.16	0.00	0.00	0.00
16,700.00	90.00	359.59	12,061.00	5,069.41	-787.18	5,114.92	0.00	0.00	0.00
16,800.00	90.00	359.59	12,061.00	5,169.41	-787.90	5,214.67	0.00	0.00	0.00
16,900.00	90.00	359.59	12,061.00	5,269.40	-788.63	5,314.43	0.00	0.00	0.00
17,000.00	90.00	359.59	12,061.00	5,369.40	-789.35	5,414.19	0.00	0.00	0.00
17,100.00	90.00	359.59	12,061.00	5,469.40	-790.08	5,513.95	0.00	0.00	0.00
17,112.60	90.00	359.59	12,061.00	5,482.00	-790.17	5,526.51	0.00	0.00	0.00
PPP-2 Cross									
17,200.00	90.00	359.59	12,061.00	5,569.40	-790.80	5,613.70	0.00	0.00	0.00
17,300.00	90.00	359.59	12,061.00	5,669.39	-791.52	5,713.46	0.00	0.00	0.00
17,400.00	90.00	359.59	12,061.00	5,769.39	-792.25	5,813.22	0.00	0.00	0.00
17,500.00	90.00	359.59	12,061.00	5,869.39	-792.97	5,912.97	0.00	0.00	0.00
17,600.00	90.00	359.59	12,061.00	5,969.38	-793.70	6,012.73	0.00	0.00	0.00
17,700.00	90.00	359.59	12,061.00	6,069.38	-794.42	6,112.49	0.00	0.00	0.00
17,800.00	90.00	359.59	12,061.00	6,169.38	-795.15	6,212.25	0.00	0.00	0.00
17,900.00	90.00	359.59	12,061.00	6,269.38	-795.87	6,312.00	0.00	0.00	0.00
18,000.00	90.00	359.59	12,061.00	6,369.37	-796.59	6,411.76	0.00	0.00	0.00
18,100.00	90.00	359.59	12,061.00	6,469.37	-797.32	6,511.52	0.00	0.00	0.00
18,200.00	90.00	359.59	12,061.00	6,569.37	-798.04	6,611.27	0.00	0.00	0.00
18,300.00	90.00	359.59	12,061.00	6,669.37	-798.77	6,711.03	0.00	0.00	0.00
18,400.00	90.00	359.59	12,061.00	6,769.36	-799.49	6,810.79	0.00	0.00	0.00
18,432.64	90.00	359.59	12,061.00	6,802.00	-799.73	6,843.35	0.00	0.00	0.00
PPP-3 Cross									
18,500.00	90.00	359.59	12,061.00	6,869.36	-800.22	6,910.55	0.00	0.00	0.00
18,600.00	90.00	359.59	12,061.00	6,969.36	-800.94	7,010.30	0.00	0.00	0.00
18,700.00	90.00	359.59	12,061.00	7,069.36	-801.66	7,110.06	0.00	0.00	0.00
18,800.00	90.00	359.59	12,061.00	7,169.35	-802.39	7,209.82	0.00	0.00	0.00
18,900.00	90.00	359.59	12,061.00	7,269.35	-803.11	7,309.58	0.00	0.00	0.00
19,000.00	90.00	359.59	12,061.00	7,369.35	-803.84	7,409.33	0.00	0.00	0.00
19,100.00	90.00	359.59	12,061.00	7,469.35	-804.56	7,509.09	0.00	0.00	0.00
19,200.00	90.00	359.59	12,061.00	7,569.34	-805.29	7,608.85	0.00	0.00	0.00
19,300.00	90.00	359.59	12,061.00	7,669.34	-806.01	7,708.60	0.00	0.00	0.00
19,400.00	90.00	359.59	12,061.00	7,769.34	-806.73	7,808.36	0.00	0.00	0.00
19,500.00	90.00	359.59	12,061.00	7,869.33	-807.46	7,908.12	0.00	0.00	0.00
19,600.00	90.00	359.59	12,061.00	7,969.33	-808.18	8,007.88	0.00	0.00	0.00
19,700.00	90.00	359.59	12,061.00	8,069.33	-808.91	8,107.63	0.00	0.00	0.00
19,800.00	90.00	359.59	12,061.00	8,169.33	-809.63	8,207.39	0.00	0.00	0.00
19,900.00	90.00	359.59	12,061.00	8,269.32	-810.36	8,307.15	0.00	0.00	0.00
20,000.00	90.00	359.59	12,061.00	8,369.32	-811.08	8,406.90	0.00	0.00	0.00
20,100.00	90.00	359.59	12,061.00	8,469.32	-811.80	8,506.66	0.00	0.00	0.00
20,200.00	90.00	359.59	12,061.00	8,569.32	-812.53	8,606.42	0.00	0.00	0.00
20,300.00	90.00	359.59	12,061.00	8,669.31	-813.25	8,706.18	0.00	0.00	0.00
20,400.00	90.00	359.59	12,061.00	8,769.31	-813.98	8,805.93	0.00	0.00	0.00
20,500.00	90.00	359.59	12,061.00	8,869.31	-814.70	8,905.69	0.00	0.00	0.00

OXY
Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Tuna Nut 24_13 Fed Com 612H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=25' @ 3776.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=25' @ 3776.00ft
Site:	Tuna Nut 24_13 Fed Com	**North Reference:**	Grid
Well:	Tuna Nut 24_13 Fed Com 612H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
20,600.00	90.00	359.59	12,061.00	8,969.31	-815.43	9,005.45	0.00	0.00	0.00
20,700.00	90.00	359.59	12,061.00	9,069.30	-816.15	9,105.21	0.00	0.00	0.00
20,800.00	90.00	359.59	12,061.00	9,169.30	-816.87	9,204.96	0.00	0.00	0.00
20,900.00	90.00	359.59	12,061.00	9,269.30	-817.60	9,304.72	0.00	0.00	0.00
21,000.00	90.00	359.59	12,061.00	9,369.30	-818.32	9,404.48	0.00	0.00	0.00
21,100.00	90.00	359.59	12,061.00	9,469.29	-819.05	9,504.23	0.00	0.00	0.00
21,200.00	90.00	359.59	12,061.00	9,569.29	-819.77	9,603.99	0.00	0.00	0.00
21,300.00	90.00	359.59	12,061.00	9,669.29	-820.50	9,703.75	0.00	0.00	0.00
21,400.00	90.00	359.59	12,061.00	9,769.29	-821.22	9,803.51	0.00	0.00	0.00
21,500.00	90.00	359.59	12,061.00	9,869.28	-821.94	9,903.26	0.00	0.00	0.00
21,600.00	90.00	359.59	12,061.00	9,969.28	-822.67	10,003.02	0.00	0.00	0.00
21,700.00	90.00	359.59	12,061.00	10,069.28	-823.39	10,102.78	0.00	0.00	0.00
21,800.00	90.00	359.59	12,061.00	10,169.27	-824.12	10,202.53	0.00	0.00	0.00
21,900.00	90.00	359.59	12,061.00	10,269.27	-824.84	10,302.29	0.00	0.00	0.00
22,000.00	90.00	359.59	12,061.00	10,369.27	-825.57	10,402.05	0.00	0.00	0.00
22,100.00	90.00	359.59	12,061.00	10,469.27	-826.29	10,501.81	0.00	0.00	0.00
22,200.00	90.00	359.59	12,061.00	10,569.26	-827.01	10,601.56	0.00	0.00	0.00
22,300.00	90.00	359.59	12,061.00	10,669.26	-827.74	10,701.32	0.00	0.00	0.00
22,374.88	90.00	359.59	12,061.00	10,744.14	-828.28	10,776.02	0.00	0.00	0.00
TD at 22374.88' MD									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
KOP (Tuna Nut 24_13	0.00	0.00	0.00	252.00	-752.29	499,131.76	759,285.21	32.370207	-103.627406
- plan misses target center by 793.37ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Point									
FTP (Tuna Nut 24_13	0.00	0.00	12,061.00	302.00	-752.65	499,181.76	759,284.85	32.370344	-103.627406
- plan misses target center by 202.56ft at 12024.67ft MD (11908.97 TVD, 433.68 N, -728.61 E)									
- Point									
PBHL (Tuna Nut	0.00	0.00	12,061.00	10,744.14	-828.28	509,623.50	759,209.22	32.399046	-103.627428
- plan hits target center									
- Point									

OXY

Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Tuna Nut 24_13 Fed Com 612H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=25' @ 3776.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=25' @ 3776.00ft
Site:	Tuna Nut 24_13 Fed Com	**North Reference:**	Grid
Well:	Tuna Nut 24_13 Fed Com 612H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,018.00	1,018.00	RUSTLER			
1,700.00	1,700.00	SALADO			
3,417.00	3,417.00	CASTILE			
4,957.00	4,957.00	DELAWARE			
5,012.00	5,012.00	BELL CANYON			
5,783.00	5,783.00	CHERRY CANYON			
7,109.01	7,109.00	BRUSHY CANYON			
8,762.74	8,746.00	BONE SPRING			
9,884.81	9,851.00	BONE SPRING 1ST			
10,581.40	10,537.00	BONE SPRING 2ND			
11,734.52	11,670.00	BONE SPRING 3RD			
12,138.55	11,977.00	WOLFCAMP			
12,195.39	12,004.00	WOLFCAMP			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
6,995.00	6,995.00	0.00	0.00	Build 1°/100'
7,995.46	7,990.38	31.00	-81.42	Hold 10° Tangent
11,590.99	11,531.24	253.23	-665.20	KOP, Build & Turn 10°/100'
12,454.88	12,061.00	824.40	-756.43	Landing Point
14,472.53	12,061.00	2,842.00	-771.05	PPP-1 Cross
17,112.60	12,061.00	5,482.00	-790.17	PPP-2 Cross
18,432.64	12,061.00	6,802.00	-799.73	PPP-3 Cross
22,374.88	12,061.00	10,744.14	-828.28	TD at 22374.88' MD

Oxy USA Inc. - Tuna Nut 24_13 Fed Com 612H
Drill Plan

1. Geologic Formations

TVD of Target (ft):	12061	Pilot Hole Depth (ft):	
Total Measured Depth (ft):	22375	Deepest Expected Fresh Water (ft):	1018

Delaware Basin

Formation	MD-RKB (ft)	TVD-RKB (ft)	Expected Fluids
Rustler	1018	1018	
Salado	1700	1700	Salt
Castile	3417	3417	Salt
Delaware	4957	4957	Oil/Gas/Brine
Bell Canyon	5012	5012	Oil/Gas/Brine
Cherry Canyon	5783	5783	Oil/Gas/Brine
Brushy Canyon	7109	7109	Losses
Bone Spring	8763	8746	Oil/Gas
Bone Spring 1st	9885	9851	Oil/Gas
Bone Spring 2nd	10581	10537	Oil/Gas
Bone Spring 3rd	11735	11670	Oil/Gas
Wolfcamp	12195	12004	Oil/Gas
Penn			Oil/Gas
Strawn			Oil/Gas

*H2S, water flows, loss of circulation, abnormal pressures, etc.

2. Casing Program

		MD		TVD					
Section	Hole Size (in)	From (ft)	To (ft)	From (ft)	To (ft)	Csg. OD (in)	Csg Wt. (ppf)	Grade	Conn.
Surface	17.5	0	1078	0	1078	13.375	54.5	J-55	BTC
Salt	12.25	0	4957	0	4957	10.75	45.5	L-80 HC	BTC-SC
Intermediate	9.875	0	11491	0	11431	7.625	26.4	L-80 HC	BTC
Production	6.75	0	22375	0	12061	5.5	20	P-110	Sprint-SF

All casing strings will be tested in accordance with 43 CFR part 3170 Subpart 3172

All Casing SF Values will meet or exceed those below			
SF Collapse	**SF Burst**	**Body SF Tension**	**Joint SF Tension**
1.00	1.100	1.4	1.4

	Y or N
Is casing new? If used, attach certification as required in 43 CFR 3160	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	Y
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-Q?	N
If yes, are the first 2 strings cemented to surface and 3rd string cement tied back 500' into previous casing?	
Is well located in R-111-Q and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

3. Cementing Program

Section	Stage	Slurry:	Sacks	Yield (ft^3/ft)	Density (lb/gal)	Excess:	TOC	Placement	Description
Surface	1	Surface - Tail	1126	1.33	14.8	100%	-	Circulate	Class C+Accel.
Int.1	1	Intermediate - Tail	85	1.33	14.8	20%	4,457	Circulate	Class C+Accel.
Int.1	1	Intermediate - Lead	699	1.73	12.9	50%	-	Circulate	Class Pozz+Ret.
Int. 2	1	Intermediate 1S - Tail	555	1.68	13.2	5%	7,359	Circulate	Class C+Ret., Disper.
Int. 2	2	Intermediate 2S - Tail BH	1023	1.71	13.3	25%	-	Bradenhead	Class C+Accel.
Prod.	1	Production - Tail	645	1.84	13.3	25%	10,991	Circulate	Class C+Ret.

Offline Cementing Request

Oxy requests a variance to cement the 9.625” and/or 7.625” intermediate casing strings offline in accordance to the approved variance, EC Tran 461365. Please see Offline Cementing Variance attachment for further details.

Bradenhead CBL Request

Oxy requests permission to adjust the CBL requirement after bradenhead cement jobs, on 7-5/8” intermediate casings, as per the agreement reached in the OXY/BLM meeting on September 5, 2019. Please see Bradenhead CBL Variance attachment for further details.

4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	✓	Tested to:	TVD Depth (ft) per Section:
12.25" Hole	13-5/8"	5M	Annular	✓	70% of working pressure	4957
		5M	Blind Ram	✓	250 psi / 5000 psi	
			Pipe Ram			
			Double Ram	✓		
			Other*			
9.875" Hole	13-5/8"	5M	Annular	✓	70% of working pressure	11431
		5M	Blind Ram	✓	250 psi / 5000 psi	
			Pipe Ram			
			Double Ram	✓		
			Other*			
6.75" Hole	13-5/8"	5M	Annular	✓	100% of working pressure	12061
		10M	Blind Ram	✓	250 psi / 10000 psi	
			Pipe Ram			
			Double Ram	✓		
			Other*			

*Specify if additional ram is utilized

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per 43 CFR part 3170 Subpart 3172 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold.

5M Annular BOP Request

Per BLM's Memorandum No. NM-2017-008: *Decision and Rationale for a Variance Allowing the Use of a 5M Annular Preventer with a 10M BOP Stack*, Oxy requests to employ a 5M annular with a 10M BOPE stack in the pilot and lateral sections of the well and will ensure that two barriers to flow are maintained at all times. Please see Annular BOP Variance attachment for further details.

	Formation integrity test will be performed per 43 CFR part 3170 Subpart 3172.
	On Exploratory wells or 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. Will be tested in accordance with 43 CFR part 3170 Subpart 3172.
	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.
	Y Are anchors required by manufacturer?
	A multibowl or a unionized multibowl wellhead system will be employed. The wellhead and connection to the BOPE will meet all API 6A requirements. The BOP will be tested per 43 CFR part 3170 Subpart 3172 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested. We will test the flange connection of the wellhead with a test port that is directly in the flange. We are proposing that we will run the wellhead through the rotary prior to cementing surface casing as discussed with the BLM on October 8, 2015. See attached schematics.

BOP Break Testing Request

Oxy requests permission to adjust the BOP break testing requirements as per the agreement reached in the OXY/BLM meeting on September 5, 2019. Please see BOP Break Testing Variance attachment for further details.

Oxy will use Cameron ADAPT wellhead system that uses an OEC top flange connection. This connection has been fully vetted and verified by API to Spec 6A and carries an API monogram.

5. Mud Program

Section	Depth		Depth - TVD		Type	Weight (ppg)	Viscosity	Water Loss
	From (ft)	To (ft)	From (ft)	To (ft)				
Surface	0	1078	0	1078	Water-Based Mud	8.6 - 8.8	40-60	N/C
Intermediate 1	1078	4957	1078	4957	Saturated Brine-Based or Oil-Based Mud	8.0 - 10.0	35-45	N/C
Intermediate 2	4957	11491	4957	11431	Water-Based or Oil-Based Mud	8.0 - 10.0	38-50	N/C
Production	11491	22375	11431	12061	Water-Based or Oil-Based Mud	9.5 - 12.5	38-50	N/C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times. The following is a general list of products: Barite, Bentonite, Gypsum, Lime, Soda Ash, Caustic Soda, Nut Plug, Cedar Fiber, Cotton Seed Hulls, Drilling Paper, Salt Water Clay, CACL2. Oxy will use a closed mud system.

What will be used to monitor the loss or gain of fluid?	PVT/MD Totco/Visual Monitoring

6. Logging and Testing Procedures

Logging, Coring and Testing.	
Yes	Will run GR from TD to surface (horizontal well – vertical portion of hole).
	Stated logs run will be in the Completion Report and submitted to the BLM.
No	Logs are planned based on well control or offset log information.
No	Drill stem test? If yes, explain
No	Coring? If yes, explain

Additional logs planned		Interval
No	Resistivity	
No	Density	
Yes	CBL	Production string
Yes	Mud log	Bone Spring – TD
No	PEX	

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	7840 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	177°F

Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times. Appropriately weighted mud will be used to isolate potential gas, oil, and water zones until such time as casing can be cemented into place for zonal

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of 43 CFR part 3170 Subpart 3172. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.	
N	H2S is present
Y	H2S Plan attached

8. Other facets of operation

	Yes/No
Will the well be drilled with a walking/skidding operation? If yes, describe. We plan to drill the 4 well pad in batch by section: all surface sections, intermediate sections and production sections. The wellhead will be secured with a night cap whenever the rig is not over the well.	Yes
Will more than one drilling rig be used for drilling operations? If yes, describe. Oxy requests the option to contract a Surface Rig to drill, set surface casing, and cement for this well. If the timing between rigs is such that Oxy would not be able to preset surface, the Primary Rig will MIRU and drill the well in its entirety per the APD. Please see the attached document for information on the spudder rig.	Yes

Total Estimated Cuttings Volume: 1987 bbls

C-102

Submit Electronically
Via OCD Permitting

State of New Mexico
Energy, Minerals, & Natural Resources Department
OIL CONSERVATION DIVISION

Revised July 9, 2024
PAGE 1 OF 2

Submittal Type: [X] Initial Submittal [ ] Amended Report [ ] As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name
30-025-54402	98177	WC-025 G-09 S223332A; UPR WOLFCAMP

Property Code	Property Name	Well Number
	TUNA NUT 24_13 FED COM	612H

OGRID No.	Operator Name	Ground Level Elevation
16696	OXY USA INC.	3751'

Surface Owner: [ ] State [ ] Fee [ ] Tribal [✓] Federal
Mineral Owner: [ ] State [ ] Fee [ ] Tribal [✓] Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
B	25	22S	32E		210' FNL	1599' FEL	32.36950056	-103.62497464	LEA

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
B	13	22S	32E		20' FNL	2350' FEL	32.39904611	-103.62742751	LEA

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
1280.00	INFILL	N/A	N	N/A

Order Numbers: R-23633
Well setbacks are under Common Ownership: [ ] Yes [ ] No

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
O	24	22S	32E		50' FSL	2350' FEL	32.37020685	-103.62740564	LEA

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
O	24	22S	32E		100' FSL	2350' FEL	32.37034429	-103.62740573	LEA

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
B	13	22S	32E		100' FNL	2350' FEL	32.39882621	-103.62742737	LEA

Unitized Area or Area of Uniform Interest	Spacing Unit Type: [X] Horizontal [ ] Vertical	Ground Floor Elevation
N/A		3751'

OPERATOR CERTIFICATIONS

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

Melissa Guidry — 02/28/25
Signature — Date

Melissa Guidry
Printed Name

melissa_guidry@oxy.com
Email Address

SURVEYOR CERTIFICATIONS

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

LLOYD P. SHORT
NEW MEXICO
21653
PROFESSIONAL SURVEYOR

Signature and Seal of Professional Surveyor

Certificate Number	Date of Survey
21653	JANUARY 10, 2025

Note: No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

BHL (NAD83)
X:759209.22' / Y:509623.50'
LAT:32.39904611 / LON:-103.62742751

BHL (NAD27)
X:718026.81' / Y:509562.89'
LAT:32.39892301 / LON:-103.62694123

LTP (NAD83)
X:759209.79' / Y:509543.50'
LAT:32.39882621 / LON:-103.62742737

LTP (NAD27)
X:718027.38' / Y:509482.89'
LAT:32.39870310 / LON:-103.62694110

PPP-3 (NAD83)
X:759237.76' / Y:505681.57'
LAT:32.38821072 / LON:-103.62741933

PPP-3 (NAD27)
X:718055.25' / Y:505621.07'
LAT:32.38808757 / LON:-103.62693344

PPP-2 (NAD83)
X:759247.33' / Y:504361.56'
LAT:32.38458233 / LON:-103.62741658

PPP-2 (NAD27)
X:718064.78' / Y:504301.10'
LAT:32.38445917 / LON:-103.62693081

PPP-1 (NAD83)
X:759266.45' / Y:501721.77'
LAT:32.37732617 / LON:-103.62741105

PPP-1 (NAD27)
X:718083.84' / Y:501661.38'
LAT:32.37720299 / LON:-103.62692554

FTP (NAD83)
X:759284.85' / Y:499181.76'
LAT:32.37034429 / LON:-103.62740573

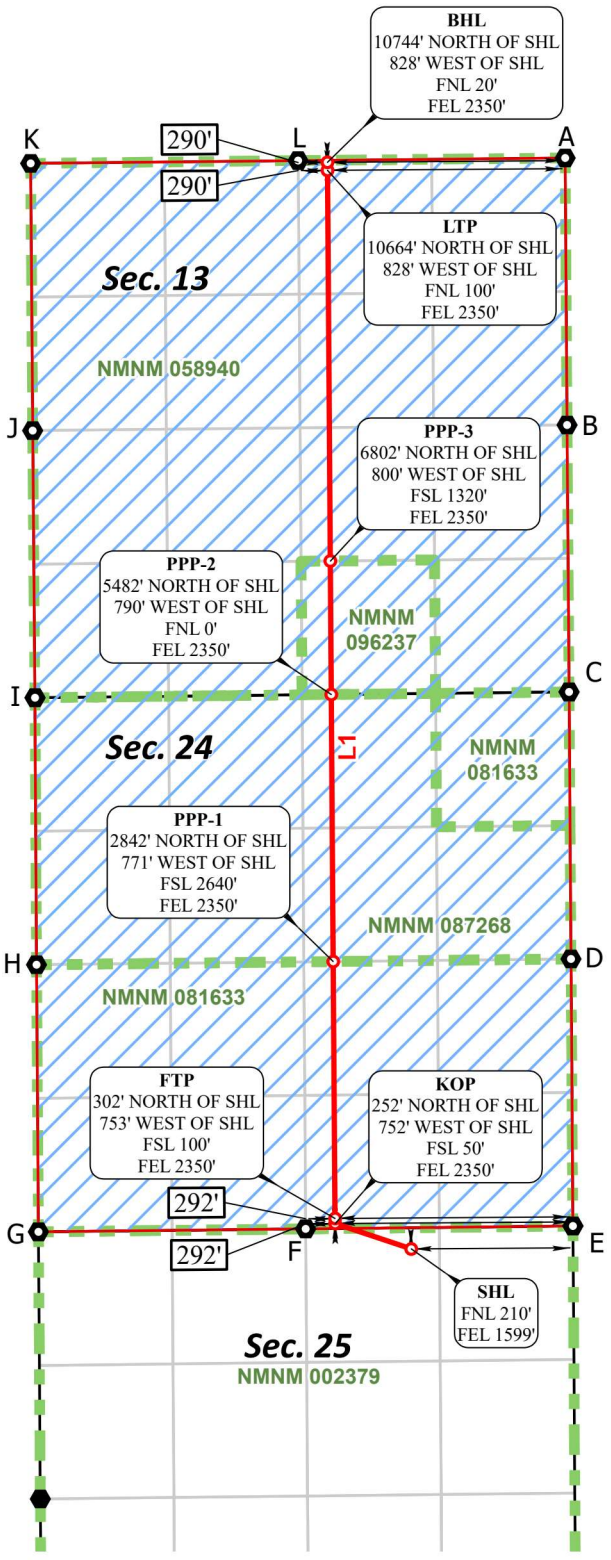
FTP (NAD27)
X:718102.17' / Y:499121.44'
LAT:32.37022108 / LON:-103.62692046

KOP (NAD83)
X:759285.21' / Y:499131.76'
LAT:32.37020685 / LON:-103.62740564

KOP (NAD27)
X:718102.53' / Y:499071.44'
LAT:32.37008364 / LON:-103.62692037

SHL (NAD83)
X:760037.47' / Y:498879.77'
LAT:32.36950056 / LON:-103.62497464

SHL (NAD27)
X:718854.78' / Y:498819.46'
LAT:32.36937733 / LON:-103.62448947



CORNER COORDINATES NAD 83, SPCS NM EAST	CORNER COORDINATES NAD 27, SPCS NM EAST
A - X: 761558.98' / Y:509666.12'	A - X: 720376.55' / Y:509605.50'
B - X: 761577.70' / Y:507026.11'	B - X: 720395.20' / Y:506965.57'
C - X: 761597.23' / Y:504386.86'	C - X: 720414.67' / Y:504326.39'
D - X: 761616.41' / Y:501747.24'	D - X: 720433.78' / Y:501686.85'
E - X: 761635.45' / Y:499107.07'	E - X: 720452.76' / Y:499046.75'
F - X: 758993.62' / Y:499078.62'	F - X: 717810.94' / Y:499018.31'
G - X: 756352.66' / Y:499049.16'	G - X: 715169.99' / Y:498988.85'
H - X: 756333.80' / Y:501689.98'	H - X: 715151.20' / Y:501629.59'
I - X: 756319.04' / Y:504329.83'	I - X: 715136.51' / Y:504269.37'
J - X: 756295.56' / Y:506970.96'	J - X: 715113.10' / Y:506910.43'
K - X: 756275.91' / Y:509612.69'	K - X: 715093.52' / Y:509552.08'
L - X: 758919.12' / Y:509640.71'	L - X: 717736.71' / Y:509580.10'

*FTP TO LTP LINE BEARINGS

LINE	BEARING
L1	N 00°24'54" W ~ 10362.01'

*FTP TO LTP LEASE DISTANCES

TRACT	DISTANCE
NMNM 081633	2540.08'
NMNM 087268	2639.86'
NMNM 096237	1320.04'
NMNM 058940	3862.03'
TOTAL	10362.01'

Drill Line Events | Section Corners | Drill Line | Dimension Lines | Federal Leases | HSU | HSU Corners

JOB No. R4195_015_13645
REV 1 REM 12/30/2024

All bearings and coordinates refer to New Mexico State Plane Coordinate System, East Zone, U.S. Survey Feet.

Distances/areas relative to NAD 83 grid measurements. Combined Scale Factor: 0.99975697 and a Convergence Angle: 0.07066669°

OXY APD CHANGE SUNDRY LIST FORM

DATE SUNDRY WORKSHEET CREATED	2/28/2025
WELL NAME_NUMBER	STACK CATS 25_36 FED COM 3H
API NUMBER	30-025-54402
ESTIMATED SPUD DATE	4/4/2025

	ITEM	APD BASE LINE (For Regulatory to Complete)	SUNDRY PLAN (Groups to complete the latest plan)
		Date APD/BASE LINE APPROVED: 02/05/25	DATE Sundry Worksheet : 02/28/25
Surface Planning	NAME	STACK CATS 25_36 FED COM 3H	TUNA NUT 24_13 FED COM 612H
	NSL	NO	NO
	SHL	210' FNL 1719' FEL	210' FNL 1599' FEL
	PAD	REDTNK_T22SR32E_2504	REDTNK_T22SR32E_2504
	BHL	20' FSL 1800' FEL	20' FNL 2350' FEL
	HSU SIZE, ACRES	320	1280
	POOL	RED TANK, BONE SPRING	WC-025 G-09 S223332A, UPR WOLFCAMP
	TVD	10105	12061
	TARGET FORMATION	BONE SPRING	WOLFCAMP

CASING PROGRAM

	APD BASE LINE								SUNDRY PLAN							
Section	Hole Size (in.)	MD	TVD	Csg OD	Csg WT	Grade	Conn.		Section	Hole Size (in.)	MD	TVD	Csg OD (in)	Csg WT (ppf)	Grade	Conn.
Surface	17.5	1077	1077	13.375	54.5	J-55	BTC		Surface	17.5	1078	1078	13.375	54.5	J-55	BTC
Int	12.25	9372	9334	7.625	26.4	L-80 HC	BTC		Salt	12.25	4957	4957	10.75	45.5	L-80 HC	BTC -SC
Int2									Int	9.875	11491	11431	7.625	26.4	L-80 HC	BTC
Prod	6.75	20688	10105	5.5	20	P-110	Wedge 461		Prod	6.75	22375	12061	5.5	20	P-110	Sprint-SF
Liner									Liner							

CEMENT PROGRAM

	APD BASE LINE								SUNDRY PLAN							
Section/Stage	Slurry	Sacks	Yield (ft^3/	Density (lb	Excess	TOC	Placement	Description	Section/Stage	Slurry	Sacks	Yield (ft^3/ft)	Density (lb/gal)	Excess	TOC	Placement	Description
Surf	Surface - Tail	1125	1.33	14.8	100%		Circulate	Class C+Accel	Surf	Surface - Tail	1126	1.33	14.8	100%		Circulate	Class C+Accel
Int/1	Intermediate 1S - Tail	634	1.65	13.2	5%	7385	Circulate	Class H+Accel, Disper, Salt	Int	Intermediate - Tail	85	1.33	14.8	20%	4457	Circulate	Class C+Accel
Int2	Intermediate 2S - Tail BH	2659	1.71	13.3	25%		Bradenhead	Class C+Accel	Int	Intermediate - Lead	699	1.73	12.9	50%		Circulate	Class Pozz+Ret
Prod	Production - Tail	669	1.84	13.3	25%	8872	Circulate	Class C+Ret	Int2	Intermediate 1S - Tail	555	1.68	13.2	5%	7359	Circulate	Class C+Ret, Disper
									Int2	Intermediate 2S - Tail BH	1023	1.71	13.3	25%		Bradenhead	Class+Accel
									Prod	Production - Tail	645	1.84	13.3	25%	10991	Circulate	Class C+Ret

VARIANCES

APD BASE LINE		SUNDRY PLAN	
BOP Break Tesing Variance	X	BOP Break Tesing Variance	X
5M Annular BOP Variance		5M Annular BOP Variance	X
Bradenhead CBL Variance	X	Bradenhead CBL Variance	X
Offline Cementing Variance	X	Offline Cementing Variance	X
Production Annular Clearance Variance	X	Production Annular Clearance Variance	
Flexible Choke Line Variance		Flexible Choke Line Variance	
(Pilot Hole, Logs etc.)		(Pilot Hole, Logs etc.)	

Well Name Change Sundry submitted separately, Action ID: 2839499

Old Well Name: STACK CATS 25_36 FED COM 3H
New Well Name: TUNA NUT 24_13 FED COM 612H

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

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 453633
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
matthew.gomez	Any previous COA's not addressed within the updated COA's still apply.	4/28/2025