

<b>Well Name:</b> TOP SPOT 12_13 FED	<b>Well Location:</b> T22S / R31E / SEC 13 / SESE / 32.385677 / -103.727109	<b>County or Parish/State:</b> EDDY / NM
<b>Well Number:</b> 12H	<b>Type of Well:</b> OIL WELL	<b>Allottee or Tribe Name:</b>
<b>Lease Number:</b> NMNM29233	<b>Unit or CA Name:</b>	<b>Unit or CA Number:</b>
<b>US Well Number:</b> 3001556968	<b>Operator:</b> OXY USA INCORPORATED	

**Notice of Intent**

**Sundry ID:** 2873010

**Type of Submission:** Notice of Intent

**Type of Action:** APD Change

**Date Sundry Submitted:** 09/11/2025

**Time Sundry Submitted:** 08:44

**Date proposed operation will begin:** 12/01/2025

**Procedure Description:** OXY USA Inc., respectfully requests to amend the subject AAPD to revise the Well Name, SHL, BHL, TVD and Drill Plan. Old Well Name: Top Spot 12\_13 Federal 12H New Well Name: Top Spot 12\_13 Federal Com 12H Old SHL: 520' FSL 1285' FEL New SHL: 520' FSL 1165' FEL Old BHL: 20' FSL 2263' FWL New BHL: 20' FNL 450' FEL Old TVD: 8978' New TVD: 8989' THERE IS NO ADDITIONAL SURFACE DISTURBANCE RELATED TO THIS SUNDRY" Attached is the updated C102, drill plan, blanket design, directional and APD Change Worksheet.

**NOI Attachments**

**Procedure Description**

- TOPSPOT12\_13FEDCOM12H\_13inADAPT\_13.375in\_9.625in\_10x10\_20250911084414.pdf
- TOPSPOT12\_13FEDCOM12H\_ProdCsgAnnClearanceVariance\_20250911084226.pdf
- TOPSPOT12\_13FEDCOM12H\_OfflineCementVariance\_20250911084221.pdf
- TOPSPOT12\_13FEDCOM12H\_BradenheadCBLVariance\_20250911084212.pdf
- TOPSPOT12\_13FEDCOM12H\_BOPBreakTestingVariance2025\_20250911084205.pdf
- TOPSPOT12\_13FEDCOM12H\_VAM\_DWC\_C\_HT\_IS\_5.500in\_20ppf\_P110RY\_20250911084148.pdf
- TOPSPOT12\_13FEDCOM12H\_DirectPlan\_20250911084141.pdf
- Combined\_Blanket\_Design\_\_A1\_\_A2\_\_B\_\_OXY\_\_3S\_Slim\_v8.0\_and\_4S\_Slim\_Contingency\_v4.0\_20250911084130.pdf

<b>Well Name:</b> TOPSPOT12_13 FED	<b>Well Location:</b> T22S / R31E / SEC 13 / SESE / 32.385677 / -103.727109	<b>County or Parish/State:</b> EDDY / NM
<b>Well Number:</b> 12H	<b>Type of Well:</b> OIL WELL	<b>Allottee or Tribe Name:</b>
<b>Lease Number:</b> NMNM29233	<b>Unit or CA Name:</b>	<b>Unit or CA Number:</b>
<b>US Well Number:</b> 3001556968	<b>Operator:</b> OXY USA INCORPORATED	

Blanket\_Design\_A\_Pad\_Review\_Document\_LSTTNK\_T22SR31E\_13\_LSTTNK\_1302\_20250911084123.pdf  
 TOPSPOT12\_13FEDCOM12H\_DrillPlan\_20250911084117.pdf  
 TOPSPOT12\_13FEDCOM12H\_C102\_20250911083916.pdf  
 TOPSPOT12\_13FEDCOM12H\_APDCHGSUNDRYWORKSHEET\_20250911083848.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:** SEP 11, 2025 08:44 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:** 11/13/2025  
**Signature:** Chris Walls

Form 3160-5  
(October 2024)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0220  
Expires: October 31, 2027

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

5. Lease Serial No.	NMNM29233
6. If Indian, Allottee or Tribe Name	

<b>SUBMIT IN TRIPLICATE - Other instructions on page 2</b>		7. If Unit of CA/Agreement, Name and/or No.
1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Well Name and No. TOP SPOT 12_13 FED/12H
2. Name of Operator OXY USA INCORPORATED		9. API Well No. 3001556968
3a. Address 5 GREENWAY PLAZA SUITE 110, HOUSTON, TX	3b. Phone No. (include area code) (713) 366-5716	10. Field and Pool or Exploratory Area BILBERY BASIN/Bone Spring
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description) SEC 13/T22S/R31E/NMP		11. Country or Parish, State EDDY/NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplate 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 Well Name, SHL, BHL, TVD and Drill Plan.

Old Well Name: Top Spot 12\_13 Federal 12H  
New Well Name: Top Spot 12\_13 Federal Com 12H

Old SHL: 520' FSL 1285' FEL  
New SHL: 520' FSL 1165' FEL

Old BHL: 20' FSL 2263' FWL  
New BHL: 20' FNL 450' FEL

Old TVD: 8978'

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 09/11/2025

**THE SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by CHRISTOPHER WALLS / Ph: (575) 234-2234 / Approved	Title Petroleum Engineer	Date 11/13/2025
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 of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

## Additional Information

### Additional Remarks

New TVD: 8989'

THERE IS NO ADDITIONAL SURFACE DISTURBANCE RELATED TO THIS SUNDRY"

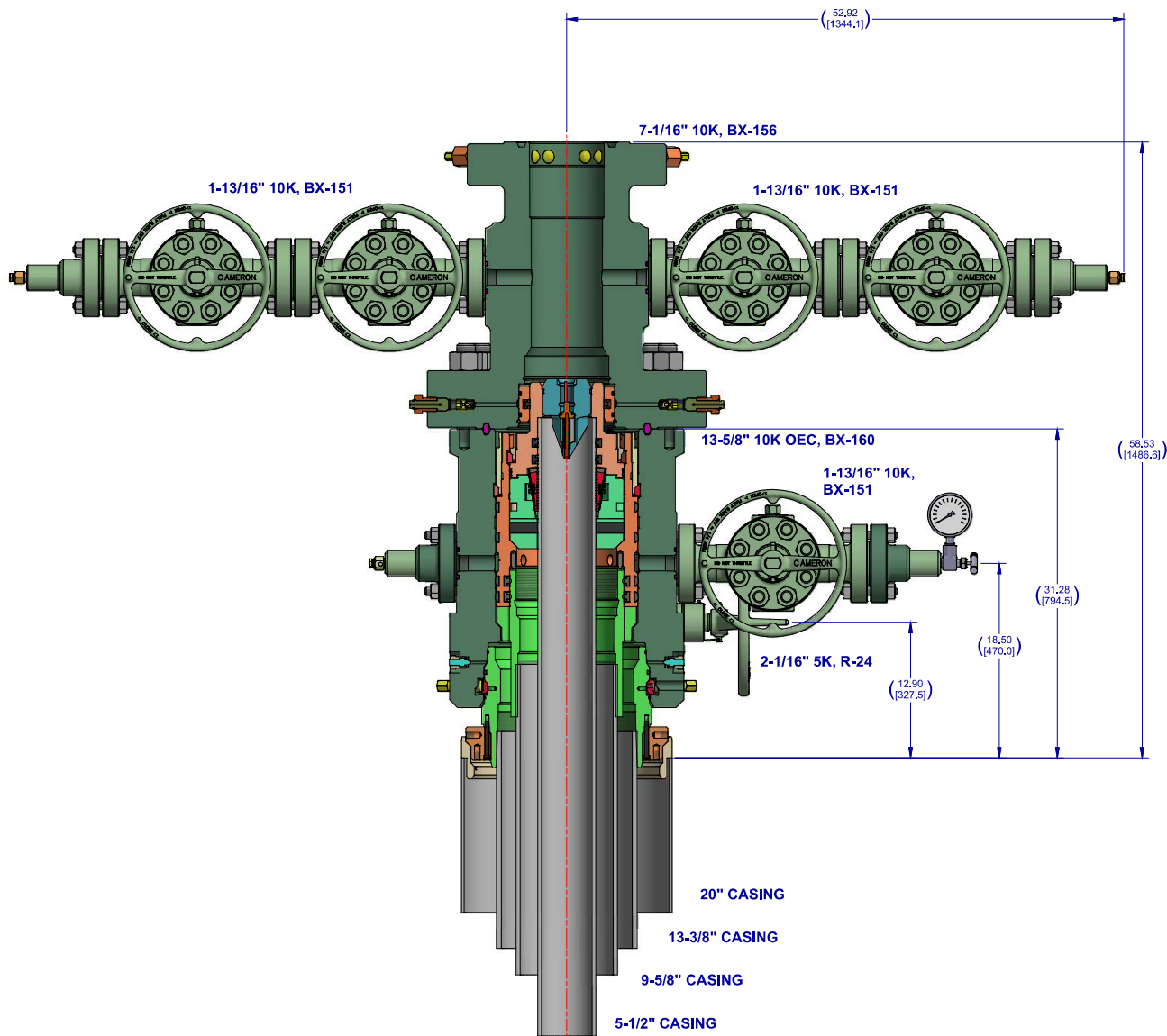
Attached is the updated C102, drill plan, blanket design, directional and APD Change Worksheet.

### Location of Well

0. SHL: SESE / 520 FSL / 1285 FEL / TWSP: 22S / RANGE: 31E / SECTION: 13 / LAT: 32.385677 / LONG: -103.727109 ( TVD: 0 feet, MD: 0 feet )

PPP: SESW / 100 FSL / 2263 FWL / TWSP: 22S / RANGE: 31E / SECTION: 13 / LAT: 32.384526 / LONG: -103.732742 ( TVD: 8978 feet, MD: 9595 feet )

BHL: NENW / 20 FNL / 2263 FWL / TWSP: 22S / RANGE: 31E / SECTION: 12 / LAT: 32.413113 / LONG: -103.732235 ( TVD: 8978 feet, MD: 19875 feet )



**Notes:**

1. THIS IS A PROPOSAL DRAWING AND DIMENSIONS SHOWN ARE SUBJECT TO CHANGE DURING THE FINAL DESIGN PROCESS.

Released to Imaging: 3/16/2026 2:56:26 PM DIGITALLY ENABLED SOLUTIONS, CHOKES AND ESD'S AVAILABLE ON REQUEST

CONFIDENTIAL			
SURFACE TREATMENT		DO NOT SCALE	
DRAWN BY: D. GOTTUNG		DATE: 18 Feb 22	
DESIGNED BY: D. GOTTUNG		DATE: 18 Feb 22	
APPROVED BY: D. GOTTUNG		DATE: 18 Feb 22	
MATERIAL & HEAT TREAT		OXY 13-5/8" 10K ADAPT 16" X 10-3/4" X 7-5/8" X 5-1/2"	
GROSS WEIGHT: 6115.088 LBS (2773.748 KG)		NET WEIGHT: 2773.748 KG	
SHEET: 1 of 1		SD-053434-94-12	
REV: 01		REVISIONS	

## **Production Casing 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 from 43 CFR part 3170 Subpart 3172 under the following conditions:

1. Annular clearance to meet or exceed 0.422" between intermediate casing ID and production casing coupling only on the first 500' overlap between both casings.
2. Annular clearance less than 0.422" is acceptable for the curve and lateral portions of the production open hole section.

## Offline Cementing Variance 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.

### 1. Cement Program

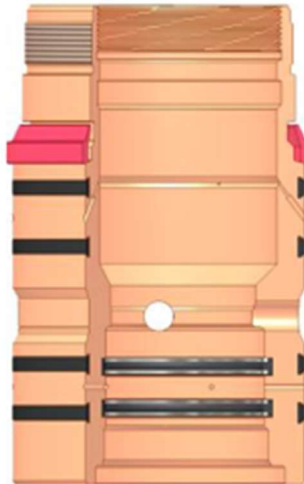
No changes to the cement program will take place for offline cementing.

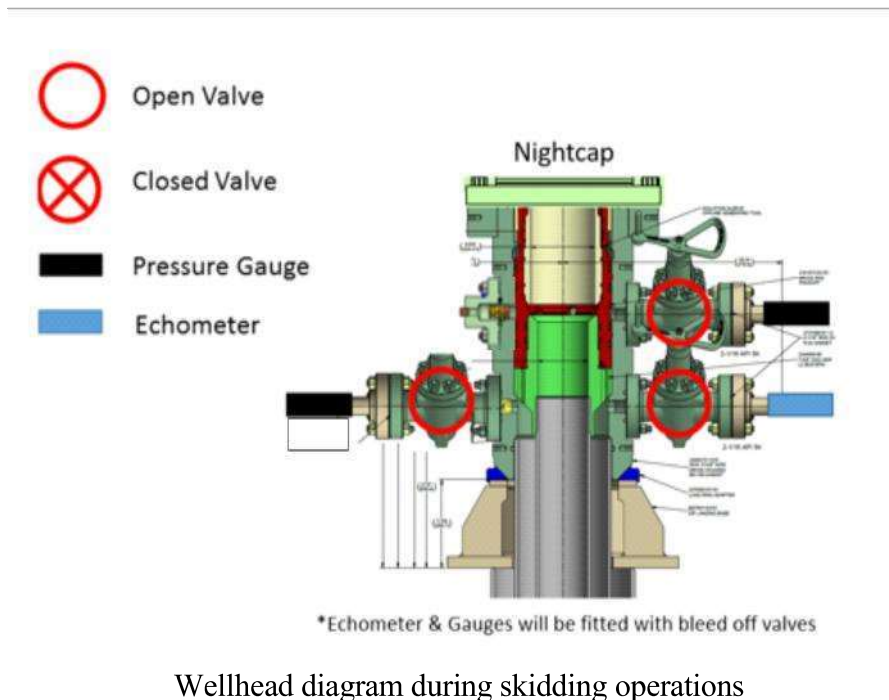
### 2. Offline Cementing Procedure

The operational sequence will be as follows:

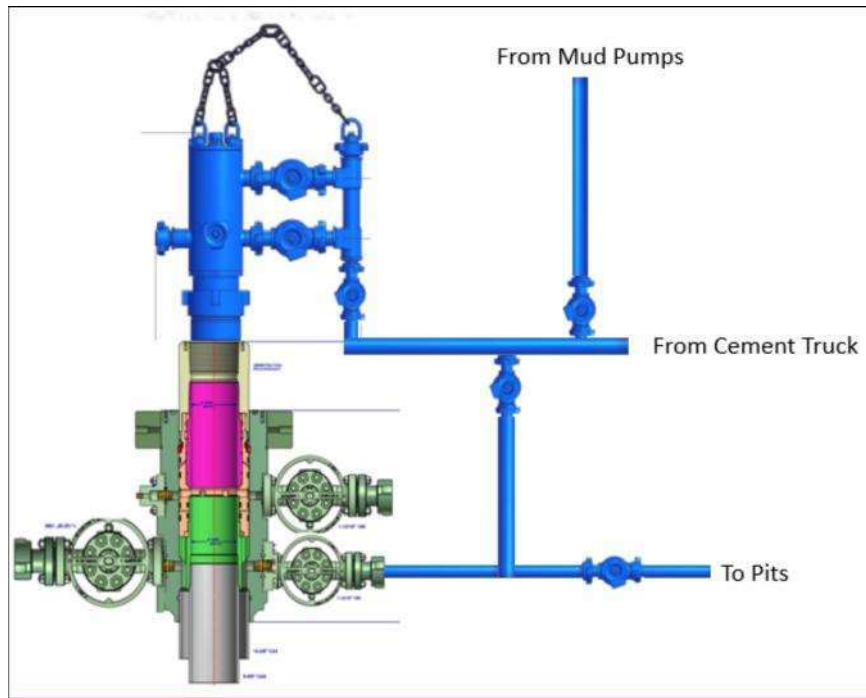
1. Run casing as per normal operations. While running casing, conduct negative pressure test and confirm integrity of the float equipment (float collar and shoe)
2. Land casing with mandrel
3. Fill pipe with kill weight fluid, do not circulate through floats and confirm well is static
4. Set annular packoff shown below and pressure test to confirm integrity of the seal.  
Pressure ratings of wellhead components and valves is 5,000 psi

Annular packoff with both external and internal seals





5. After confirmation of both annular barriers and internal barriers, nipple down BOP and install cap flange.
  - a. If any barrier fails to test, the BOP stack will not be nipped down until after the cement job is completed with cement 500ft above the highest formation capable of flow with kill weight mud above or after it has achieved 50 psi compressive strength if cannot be verified.
6. Skid rig to next well on pad.
7. Confirm well is static before removing cap flange, flange will not be removed and offline cementing operations will not commence until well is under control. If well is not static, casing outlet valves will provide access to both the casing ID and annulus. Rig or third party pump truck will kill well prior to cementing or nipping up for further remediation.
  - a. Well Control Plan
    - i. The Drillers Method will be the primary well control method to regain control of the wellbore prior to cementing, if wellbore conditions do not permit the drillers method other methods of well control may be used
    - ii. Rig pumps or a 3<sup>rd</sup> party pump will be tied into the upper casing valve to pump down the casing ID
    - iii. A high pressure return line will be rigged up to lower casing valve and run to choke manifold to control annular pressure
    - iv. Once influx is circulated out of the hole, kill weight mud will be circulated
    - v. Well will be confirmed static
    - vi. Once confirmed static, cap flange will be removed to allow for offline cementing operations to commence
8. Install offline cement tool
9. Rig up cement equipment



Wellhead diagram during offline cementing operations

10. Circulate bottoms up with cement truck
  - a. If gas is present on bottoms up, well will be shut in and returns rerouted through gas buster to handle entrained gas
  - b. Max anticipated time before circulating with cement truck is 6 hrs
11. Perform cement job taking returns from the annulus wellhead valve
12. Confirm well is static and floats are holding after cement job
13. Remove cement equipment, offline cement tools and install night cap with pressure gauge for monitoring.

## **Bradenhead Cement CBL Variance 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.

### **Three string wells:**

- CBL will be required on one well per pad
- If the pumped volume of cement is less than permitted in the APD, BLM will be notified and a CBL may be run
- Echometer will be used after bradenhead cement job to determine TOC before pumping top-out cement

### **Four string wells:**

- CBL is not required
- If the pumped volume of cement is less than permitted in the APD, BLM will be notified and a CBL may be run
- Echometer will be used after bradenhead cement job to determine TOC before pumping top-out cement

## BOP Break Testing Request

Oxy requests permission to adjust the BOP break testing requirements as per the agreement reached with OXY/BLM on April 4th, 2025.

**BOPE Break Testing is ONLY permitted for 5M BOPE or less (utilizing a 10M BOPE system.)**  
**Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP.**

BOP break test for the **intermediate or production** section under the following conditions:

- After a full BOP test is conducted.
- When skidding to drill an intermediate or production section which does not penetrate the deeper than the Wolf Camp formation (<5M).
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per 3 CFR part 3170 Subpart 3172
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- In the event break testing is not utilized, then a full BOPE test would be conducted.
- If the kill line is broken prior to skid, two tests will be performed.
  - 1) Wellhead flange, co-flex hose, kill line connections and upper pipe rams
  - 2) Wellhead flange, HCR valve, check valve, upper pipe rams
- If the kill line is not broken prior to skid, only one test will be performed.
  - 1) Wellhead flange, co-flex hose, check valve, upper pipe rams

**Subject:** Request for a Variance Allowing Break Testing of a Blowout Preventer Stack

OXY USA Inc. (OXY) requests a variance to allow break testing of the Blowout Preventer (BOP) stack when skidding a drilling rig between wells on multi-well pads. This practice entails retesting only the connections of the **BOP** stack that have been disconnected during this operation and not a complete **BOP** test.

### **Background**

43 CFR part 3170 Subpart 3172 states that a **BOP** test must be performed whenever any seal subject to test pressure is broken. The current interpretation of the Bureau of Land Management (BLM) is this requires a complete **BOP** test and not just a test of the affected component. 43 CFR part 3170 Subpart 3172, Section I.D.2. states, "Some situations may exist either on a well-by-well basis or field-wide basis whereby it is commonly accepted practice to vary a particular minimum standard(s) established in this Order. This situation can be resolved by requesting a variance...". OXY feels the practice of break testing the **BOP** stack is such a situation. Therefore, as per 43 CFR part 3170 Subpart 3172, Section IV., OXY submits this request for the variance.

### **Supporting Rationale**

43 CFR part 3170 Subpart 3172 became effective on December 19, 1988, and has remained the standard for regulating BLM onshore drilling operations for almost 30 years. During this time there have been significant changes in drilling technology. **BLM** continues to use the variance request process to allow for the use of modern technology and acceptable engineering practices that have arisen since 43 CFR part 3170 Subpart 3172 was originally released. The drilling rig fleet OXY utilizes in New Mexico was built with many modern upgrades. One of which allows the rigs to skid between wells on multi-well pads. A part of this rig package is

a hydraulic winch system which safely installs and removes the BOP from the wellhead and carries it during skidding operations. This technology has made break testing a safe and reliable procedure.

American Petroleum Institute (API) standards, specifications and recommended practices are considered industry standards and are consistently utilized and referenced by the industry. 43 CFR part 3170 Subpart 3172 recognized API Recommended Practices (RP) 53 in its original development. API Standard 53, *Blowout Prevention Equipment Systems for Drilling Wells* (Fourth Edition, November 2012, Addendum 1, July 2016) recognizes break testing as an acceptable practice. Specifically, API Standard 53, Section 6.5.3.4.1.b states "Pressure tests on the well control equipment shall be conducted after the disconnection or repair of any pressure containment seal in the **BOP** stack, choke line, kill line, choke manifold, or wellhead assembly but limited to the affected component."

The Bureau of Safety and Environmental Enforcement (BSEE), Department of Interior, has also utilized the API standards, specifications and best practices in the development of its offshore oil and gas regulations and incorporates them by reference within its regulations. BSEE issued new offshore regulations under 30 CFR Part 250, *Oil and Gas and Sulphur Operations in the Outer Continental Shelf - Blowout Preventer Systems and Well Control*, which became effective on July 28, 2016. Section 250.737(d.1) states "Follow the testing requirements of API Standard 53". In addition, Section 250.737(d.8) has adopted language from **API** Standard 53 as it states "Pressure test affected **BOP** components following the disconnection or repair of any well-pressure containment seal in the wellhead or **BOP** stack assembly".

Break testing has been approved by the BLM in the past. See the Appendix for a Sundry Notice that was approved in 2015 by the Farmington Field Office. This approval granted permission for the operator to break test when skidding its Aztec 1000 rig on multi-well pads.

Oxy feels break testing and our current procedures meet the intent of 43 CFR part 3170 Subpart 3172 and often exceed it. We have not seen any evidence that break testing results in more components failing tests than seen on full BOP tests. As skidding operations take place within the 30-day full BOPE test window, the BOP shell and components such as the pipe rams and check valve get tested to the full rated working pressure more often. Therefore, there are more opportunities to ensure components are in good working order. Also, Oxy's standard requires complete BOP tests more often than that of 43 CFR part 3170 Subpart 3172. In addition to function testing the annular at least weekly and the pipe and blind rams on each trip, Oxy also performs a choke drill prior to drilling out every casing shoe. As a crew's training is a vital part of well control, this procedure to simulate step one of the Driller's Method exceeds the requirements of 43 CFR part 3170 Subpart 3172.

#### Procedures

- 1) OXY would perform BOP break testing on multi-well pads where multiple intermediate or production sections can be drilled and cased within the 21-day BOP test window
- 2) After performing a complete BOP test on the first well and drilling and casing the hole section, three breaks would be made on the BOP.
  - Between the check valve and the kill line
  - Between the HCR valve and the co-flex hose or the co-flex hose and the manifold
  - Between the BOP flange and the wellhead
- 3) The BOP is then lifted and removed from the wellhead by the hydraulic winch system
- 4) After skidding to the next well, the BOP is moved to the wellhead by the hydraulic winch system and installed
- 5) The choke line and kill line are reconnected
- 6) A test plug is installed in the wellhead with a joint of drill pipe and the internal parts of the check valve are removed
- 7) A shell test is performed against the upper pipe rams testing all three breaks
- 8) The internal parts of the check valve are reinstalled and the HCR valve is closed. A second test is performed on them
- 9) These tests consist of a 250 psi low test and a high test to the value submitted in the APD or SN (e.g., 5000 psi)
- 10) Perform a function test of components not pressure tested to include the lower pipe rams, the blind rams and the annular
- 11) If this were a three well pad, the same three breaks on the BOP would be made and steps 4 through 11 would be repeated
- 12) A second break test would only be done if the third hole section could be completed within the 21-day BOP test window
- 13) If a second break test is performed, additional components that were not tested on the initial break test will be tested on this break test

#### Notes:

- a. If any parts of the BOP are changed out or any additional breaks are made during the skidding operation, these affected components would also be tested as in step 9.
- b. As the choke manifold remains stationary during the skidding operation and the only break to the manifold is tested in step 8 above, no further testing of the manifold is done until the next full BOP test.

## **Summary**

OXY requests a variance to allow break testing of the BOP stack when skidding drilling rigs between wells on multi-well pads. API standards, specifications and recommended practices are considered industry standards and are consistently utilized and referenced by the industry and the BLM. API Standard 53 recognizes break testing as an acceptable practice and BSEE adopted language from this standard into its newly created 30 CFR Part 250 which also supports break testing. Due to this, OXY feels this request meets the intent of 43 CFR part 3170

# **OXY**

**PRD NM DIRECTIONAL PLANS (NAD 1983)**

**Top Spot 12\_13 Fed Com**

**Top Spot 12\_13 Fed Com 12H**

**ORIG HOLE**

**Plan: Permitting Plan**

## **Standard Planning Report**

**09 September, 2025**

# OXY Planning Report

<b>Database:</b>	HOPSPP	<b>Local Co-ordinate Reference:</b>	Well Top Spot 12_13 Fed Com 12H
<b>Company:</b>	ENGINEERING DESIGNS	<b>TVD Reference:</b>	RKB=25' @ 3608.50ft
<b>Project:</b>	PRD NM DIRECTIONAL PLANS (NAD 1983)	<b>MD Reference:</b>	RKB=25' @ 3608.50ft
<b>Site:</b>	Top Spot 12_13 Fed Com	<b>North Reference:</b>	Grid
<b>Well:</b>	Top Spot 12_13 Fed Com 12H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIG HOLE		
<b>Design:</b>	Permitting Plan		

<b>Project</b> PRD NM DIRECTIONAL PLANS (NAD 1983)			
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	New Mexico Eastern Zone		Using geodetic scale factor

<b>Site</b> Top Spot 12_13 Fed Com			
<b>Site Position:</b>		<b>Northing:</b>	514,494.39 usft
<b>From:</b>	Map	<b>Easting:</b>	725,461.56 usft
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	13.200 in
		<b>Latitude:</b>	32.413000
		<b>Longitude:</b>	-103.736677

<b>Well</b> Top Spot 12_13 Fed Com 12H			
<b>Well Position</b>	+N/-S	0.00 ft	<b>Northing:</b>
	+E/-W	0.00 ft	504,571.44 usf
			<b>Latitude:</b>
			32.385676
<b>Position Uncertainty</b>		6.00 ft	<b>Easting:</b>
			728,590.26 usf
			<b>Longitude:</b>
			-103.726721
<b>Grid Convergence:</b>		0.32 °	<b>Wellhead Elevation:</b>
			ft
			<b>Ground Level:</b>
			3,583.50 ft

<b>Wellbore</b> ORIG HOLE					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM_FILE	7/9/2024	6.33	59.97	47,509,30000000

<b>Design</b> Permitting Plan				
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.10	0.00	0.00	3.78

<b>Plan Survey Tool Program</b>		<b>Date</b> 9/9/2025		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	19,313.15 Permitting Plan (ORIG HOLE)	SQC_C705Mb_MWD+IFR1	MWD+IFR1+Sag+FDIR

<b>Plan Sections</b>										
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	
3,395.00	0.00	0.00	3,395.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,395.07	10.00	126.92	4,390.00	-52.29	69.60	1.00	1.00	0.00	126.92	
8,427.85	10.00	126.92	8,361.50	-472.98	629.51	0.00	0.00	0.00	0.00	
9,388.15	90.00	359.70	8,988.50	97.27	714.51	10.00	8.33	-13.25	-126.80	
19,313.15	90.00	359.70	8,988.50	10,022.13	661.71	0.00	0.00	0.00	0.00	PBHL (Top Spot)

# OXY

## Planning Report

<b>Database:</b>	HOPSPP	<b>Local Co-ordinate Reference:</b>	Well Top Spot 12_13 Fed Com 12H
<b>Company:</b>	ENGINEERING DESIGNS	<b>TVD Reference:</b>	RKB=25' @ 3608.50ft
<b>Project:</b>	PRD NM DIRECTIONAL PLANS (NAD 1983)	<b>MD Reference:</b>	RKB=25' @ 3608.50ft
<b>Site:</b>	Top Spot 12_13 Fed Com	<b>North Reference:</b>	Grid
<b>Well:</b>	Top Spot 12_13 Fed Com 12H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIG HOLE		
<b>Design:</b>	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
3,395.00	0.00	0.00	3,395.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Build 1°/100'</b>									
3,400.00	0.05	126.92	3,400.00	0.00	0.00	0.00	1.00	1.00	0.00
3,500.00	1.05	126.92	3,499.99	-0.58	0.77	-0.53	1.00	1.00	0.00
3,600.00	2.05	126.92	3,599.96	-2.20	2.93	-2.00	1.00	1.00	0.00
3,700.00	3.05	126.92	3,699.86	-4.88	6.49	-4.44	1.00	1.00	0.00
3,800.00	4.05	126.92	3,799.66	-8.59	11.44	-7.82	1.00	1.00	0.00
3,900.00	5.05	126.92	3,899.35	-13.36	17.78	-12.16	1.00	1.00	0.00
4,000.00	6.05	126.92	3,998.88	-19.17	25.51	-17.45	1.00	1.00	0.00
4,100.00	7.05	126.92	4,098.22	-26.02	34.63	-23.68	1.00	1.00	0.00
4,200.00	8.05	126.92	4,197.35	-33.91	45.14	-30.87	1.00	1.00	0.00
4,300.00	9.05	126.92	4,296.24	-42.84	57.02	-38.99	1.00	1.00	0.00
4,395.07	10.00	126.92	4,390.00	-52.29	69.60	-47.60	1.00	1.00	0.00
<b>Hold 10° Tangent</b>									
4,400.00	10.00	126.92	4,394.85	-52.81	70.29	-48.06	0.00	0.00	0.00
4,500.00	10.00	126.92	4,493.34	-63.24	84.17	-57.56	0.00	0.00	0.00
4,600.00	10.00	126.92	4,591.82	-73.67	98.05	-67.05	0.00	0.00	0.00
4,700.00	10.00	126.92	4,690.30	-84.10	111.94	-76.55	0.00	0.00	0.00
4,800.00	10.00	126.92	4,788.78	-94.54	125.82	-86.04	0.00	0.00	0.00
4,900.00	10.00	126.92	4,887.26	-104.97	139.70	-95.53	0.00	0.00	0.00
5,000.00	10.00	126.92	4,985.74	-115.40	153.59	-105.03	0.00	0.00	0.00

## OXY Planning Report

<b>Database:</b>	HOPSPP	<b>Local Co-ordinate Reference:</b>	Well Top Spot 12_13 Fed Com 12H
<b>Company:</b>	ENGINEERING DESIGNS	<b>TVD Reference:</b>	RKB=25' @ 3608.50ft
<b>Project:</b>	PRD NM DIRECTIONAL PLANS (NAD 1983)	<b>MD Reference:</b>	RKB=25' @ 3608.50ft
<b>Site:</b>	Top Spot 12_13 Fed Com	<b>North Reference:</b>	Grid
<b>Well:</b>	Top Spot 12_13 Fed Com 12H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIG HOLE		
<b>Design:</b>	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)
5,100.00	10.00	126.92	5,084.22	-125.83	167.47	-114.52	0.00	0.00	0.00
5,200.00	10.00	126.92	5,182.70	-136.26	181.36	-124.02	0.00	0.00	0.00
5,300.00	10.00	126.92	5,281.18	-146.69	195.24	-133.51	0.00	0.00	0.00
5,400.00	10.00	126.92	5,379.66	-157.12	209.12	-143.01	0.00	0.00	0.00
5,500.00	10.00	126.92	5,478.14	-167.56	223.01	-152.50	0.00	0.00	0.00
5,600.00	10.00	126.92	5,576.62	-177.99	236.89	-161.99	0.00	0.00	0.00
5,700.00	10.00	126.92	5,675.10	-188.42	250.78	-171.49	0.00	0.00	0.00
5,800.00	10.00	126.92	5,773.58	-198.85	264.66	-180.98	0.00	0.00	0.00
5,900.00	10.00	126.92	5,872.06	-209.28	278.54	-190.48	0.00	0.00	0.00
6,000.00	10.00	126.92	5,970.54	-219.71	292.43	-199.97	0.00	0.00	0.00
6,100.00	10.00	126.92	6,069.02	-230.15	306.31	-209.47	0.00	0.00	0.00
6,200.00	10.00	126.92	6,167.50	-240.58	320.19	-218.96	0.00	0.00	0.00
6,300.00	10.00	126.92	6,265.99	-251.01	334.08	-228.45	0.00	0.00	0.00
6,400.00	10.00	126.92	6,364.47	-261.44	347.96	-237.95	0.00	0.00	0.00
6,500.00	10.00	126.92	6,462.95	-271.87	361.85	-247.44	0.00	0.00	0.00
6,600.00	10.00	126.92	6,561.43	-282.30	375.73	-256.94	0.00	0.00	0.00
6,700.00	10.00	126.92	6,659.91	-292.74	389.61	-266.43	0.00	0.00	0.00
6,800.00	10.00	126.92	6,758.39	-303.17	403.50	-275.93	0.00	0.00	0.00
6,900.00	10.00	126.92	6,856.87	-313.60	417.38	-285.42	0.00	0.00	0.00
7,000.00	10.00	126.92	6,955.35	-324.03	431.27	-294.91	0.00	0.00	0.00
7,100.00	10.00	126.92	7,053.83	-334.46	445.15	-304.41	0.00	0.00	0.00
7,200.00	10.00	126.92	7,152.31	-344.89	459.03	-313.90	0.00	0.00	0.00
7,300.00	10.00	126.92	7,250.79	-355.33	472.92	-323.40	0.00	0.00	0.00
7,400.00	10.00	126.92	7,349.27	-365.76	486.80	-332.89	0.00	0.00	0.00
7,500.00	10.00	126.92	7,447.75	-376.19	500.68	-342.39	0.00	0.00	0.00
7,600.00	10.00	126.92	7,546.23	-386.62	514.57	-351.88	0.00	0.00	0.00
7,700.00	10.00	126.92	7,644.71	-397.05	528.45	-361.37	0.00	0.00	0.00
7,800.00	10.00	126.92	7,743.19	-407.48	542.34	-370.87	0.00	0.00	0.00
7,900.00	10.00	126.92	7,841.67	-417.92	556.22	-380.36	0.00	0.00	0.00
8,000.00	10.00	126.92	7,940.16	-428.35	570.10	-389.86	0.00	0.00	0.00
8,100.00	10.00	126.92	8,038.64	-438.78	583.99	-399.35	0.00	0.00	0.00
8,200.00	10.00	126.92	8,137.12	-449.21	597.87	-408.85	0.00	0.00	0.00
8,300.00	10.00	126.92	8,235.60	-459.64	611.76	-418.34	0.00	0.00	0.00
8,400.00	10.00	126.92	8,334.08	-470.07	625.64	-427.83	0.00	0.00	0.00
8,427.85	10.00	126.92	8,361.50	-472.98	629.51	-430.48	0.00	0.00	0.00
<b>KOP, Build &amp; Turn 10°/100'</b>									
8,500.00	8.08	81.23	8,432.84	-475.97	639.54	-432.80	10.00	-2.66	-63.32
8,600.00	13.72	34.81	8,531.17	-465.14	653.29	-421.09	10.00	5.64	-46.42
8,700.00	22.58	19.43	8,626.15	-437.23	666.48	-392.37	10.00	8.86	-15.38
8,800.00	32.09	12.63	8,714.91	-393.09	678.70	-347.53	10.00	9.52	-6.80
8,900.00	41.82	8.73	8,794.73	-334.07	689.60	-287.91	10.00	9.72	-3.91
9,000.00	51.63	6.08	8,863.21	-261.95	698.83	-215.34	10.00	9.81	-2.65
9,100.00	61.49	4.07	8,918.25	-178.94	706.12	-132.03	10.00	9.86	-2.01
9,200.00	71.37	2.41	8,958.18	-87.54	711.24	-40.49	10.00	9.88	-1.66
9,300.00	81.27	0.93	8,981.80	9.46	714.04	56.48	10.00	9.90	-1.48
9,388.15	90.00	359.70	8,988.50	97.27	714.51	144.13	10.00	9.90	-1.40
<b>Landing Point</b>									
9,400.00	90.00	359.70	8,988.50	109.12	714.45	155.95	0.00	0.00	0.00
9,500.00	90.00	359.70	8,988.50	209.12	713.92	255.70	0.00	0.00	0.00
9,600.00	90.00	359.70	8,988.50	309.12	713.39	355.44	0.00	0.00	0.00
9,700.00	90.00	359.70	8,988.50	409.11	712.85	455.19	0.00	0.00	0.00
9,800.00	90.00	359.70	8,988.50	509.11	712.32	554.94	0.00	0.00	0.00
9,900.00	90.00	359.70	8,988.50	609.11	711.79	654.68	0.00	0.00	0.00
10,000.00	90.00	359.70	8,988.50	709.11	711.26	754.43	0.00	0.00	0.00
10,100.00	90.00	359.70	8,988.50	809.11	710.73	854.17	0.00	0.00	0.00

## OXY Planning Report

<b>Database:</b>	HOPSPP	<b>Local Co-ordinate Reference:</b>	Well Top Spot 12_13 Fed Com 12H
<b>Company:</b>	ENGINEERING DESIGNS	<b>TVD Reference:</b>	RKB=25' @ 3608.50ft
<b>Project:</b>	PRD NM DIRECTIONAL PLANS (NAD 1983)	<b>MD Reference:</b>	RKB=25' @ 3608.50ft
<b>Site:</b>	Top Spot 12_13 Fed Com	<b>North Reference:</b>	Grid
<b>Well:</b>	Top Spot 12_13 Fed Com 12H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIG HOLE		
<b>Design:</b>	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)	
10,200.00	90.00	359.70	8,988.50	909.11	710.19	953.92	0.00	0.00	0.00	
10,300.00	90.00	359.70	8,988.50	1,009.11	709.66	1,053.67	0.00	0.00	0.00	
10,400.00	90.00	359.70	8,988.50	1,109.10	709.13	1,153.41	0.00	0.00	0.00	
10,500.00	90.00	359.70	8,988.50	1,209.10	708.60	1,253.16	0.00	0.00	0.00	
10,600.00	90.00	359.70	8,988.50	1,309.10	708.07	1,352.91	0.00	0.00	0.00	
10,700.00	90.00	359.70	8,988.50	1,409.10	707.53	1,452.65	0.00	0.00	0.00	
10,800.00	90.00	359.70	8,988.50	1,509.10	707.00	1,552.40	0.00	0.00	0.00	
10,900.00	90.00	359.70	8,988.50	1,609.10	706.47	1,652.15	0.00	0.00	0.00	
11,000.00	90.00	359.70	8,988.50	1,709.10	705.94	1,751.89	0.00	0.00	0.00	
11,100.00	90.00	359.70	8,988.50	1,809.09	705.41	1,851.64	0.00	0.00	0.00	
11,200.00	90.00	359.70	8,988.50	1,909.09	704.87	1,951.38	0.00	0.00	0.00	
11,300.00	90.00	359.70	8,988.50	2,009.09	704.34	2,051.13	0.00	0.00	0.00	
11,400.00	90.00	359.70	8,988.50	2,109.09	703.81	2,150.88	0.00	0.00	0.00	
11,500.00	90.00	359.70	8,988.50	2,209.09	703.28	2,250.62	0.00	0.00	0.00	
11,600.00	90.00	359.70	8,988.50	2,309.09	702.75	2,350.37	0.00	0.00	0.00	
11,700.00	90.00	359.70	8,988.50	2,409.09	702.21	2,450.12	0.00	0.00	0.00	
11,800.00	90.00	359.70	8,988.50	2,509.08	701.68	2,549.86	0.00	0.00	0.00	
11,900.00	90.00	359.70	8,988.50	2,609.08	701.15	2,649.61	0.00	0.00	0.00	
12,000.00	90.00	359.70	8,988.50	2,709.08	700.62	2,749.35	0.00	0.00	0.00	
12,100.00	90.00	359.70	8,988.50	2,809.08	700.09	2,849.10	0.00	0.00	0.00	
12,200.00	90.00	359.70	8,988.50	2,909.08	699.55	2,948.85	0.00	0.00	0.00	
12,300.00	90.00	359.70	8,988.50	3,009.08	699.02	3,048.59	0.00	0.00	0.00	
12,400.00	90.00	359.70	8,988.50	3,109.08	698.49	3,148.34	0.00	0.00	0.00	
12,500.00	90.00	359.70	8,988.50	3,209.07	697.96	3,248.09	0.00	0.00	0.00	
12,600.00	90.00	359.70	8,988.50	3,309.07	697.43	3,347.83	0.00	0.00	0.00	
12,700.00	90.00	359.70	8,988.50	3,409.07	696.90	3,447.58	0.00	0.00	0.00	
12,800.00	90.00	359.70	8,988.50	3,509.07	696.36	3,547.32	0.00	0.00	0.00	
12,900.00	90.00	359.70	8,988.50	3,609.07	695.83	3,647.07	0.00	0.00	0.00	
13,000.00	90.00	359.70	8,988.50	3,709.07	695.30	3,746.82	0.00	0.00	0.00	
13,100.00	90.00	359.70	8,988.50	3,809.07	694.77	3,846.56	0.00	0.00	0.00	
13,200.00	90.00	359.70	8,988.50	3,909.06	694.24	3,946.31	0.00	0.00	0.00	
13,300.00	90.00	359.70	8,988.50	4,009.06	693.70	4,046.06	0.00	0.00	0.00	
13,400.00	90.00	359.70	8,988.50	4,109.06	693.17	4,145.80	0.00	0.00	0.00	
13,500.00	90.00	359.70	8,988.50	4,209.06	692.64	4,245.55	0.00	0.00	0.00	
13,600.00	90.00	359.70	8,988.50	4,309.06	692.11	4,345.29	0.00	0.00	0.00	
13,700.00	90.00	359.70	8,988.50	4,409.06	691.58	4,445.04	0.00	0.00	0.00	
13,800.00	90.00	359.70	8,988.50	4,509.06	691.04	4,544.79	0.00	0.00	0.00	
13,900.00	90.00	359.70	8,988.50	4,609.05	690.51	4,644.53	0.00	0.00	0.00	
14,000.00	90.00	359.70	8,988.50	4,709.05	689.98	4,744.28	0.00	0.00	0.00	
14,100.00	90.00	359.70	8,988.50	4,809.05	689.45	4,844.03	0.00	0.00	0.00	
14,200.00	90.00	359.70	8,988.50	4,909.05	688.92	4,943.77	0.00	0.00	0.00	
14,300.00	90.00	359.70	8,988.50	5,009.05	688.38	5,043.52	0.00	0.00	0.00	
14,400.00	90.00	359.70	8,988.50	5,109.05	687.85	5,143.27	0.00	0.00	0.00	
14,500.00	90.00	359.70	8,988.50	5,209.05	687.32	5,243.01	0.00	0.00	0.00	
14,600.00	90.00	359.70	8,988.50	5,309.05	686.79	5,342.76	0.00	0.00	0.00	
14,700.00	90.00	359.70	8,988.50	5,409.04	686.26	5,442.50	0.00	0.00	0.00	
14,800.00	90.00	359.70	8,988.50	5,509.04	685.72	5,542.25	0.00	0.00	0.00	
14,900.00	90.00	359.70	8,988.50	5,609.04	685.19	5,642.00	0.00	0.00	0.00	
15,000.00	90.00	359.70	8,988.50	5,709.04	684.66	5,741.74	0.00	0.00	0.00	
15,100.00	90.00	359.70	8,988.50	5,809.04	684.13	5,841.49	0.00	0.00	0.00	
15,200.00	90.00	359.70	8,988.50	5,909.04	683.60	5,941.24	0.00	0.00	0.00	
15,300.00	90.00	359.70	8,988.50	6,009.04	683.06	6,040.98	0.00	0.00	0.00	
15,400.00	90.00	359.70	8,988.50	6,109.03	682.53	6,140.73	0.00	0.00	0.00	
15,500.00	90.00	359.70	8,988.50	6,209.03	682.00	6,240.47	0.00	0.00	0.00	
15,600.00	90.00	359.70	8,988.50	6,309.03	681.47	6,340.22	0.00	0.00	0.00	

**OXY**  
Planning Report

<b>Database:</b>	HOPSPP	<b>Local Co-ordinate Reference:</b>	Well Top Spot 12_13 Fed Com 12H
<b>Company:</b>	ENGINEERING DESIGNS	<b>TVD Reference:</b>	RKB=25' @ 3608.50ft
<b>Project:</b>	PRD NM DIRECTIONAL PLANS (NAD 1983)	<b>MD Reference:</b>	RKB=25' @ 3608.50ft
<b>Site:</b>	Top Spot 12_13 Fed Com	<b>North Reference:</b>	Grid
<b>Well:</b>	Top Spot 12_13 Fed Com 12H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIG HOLE		
<b>Design:</b>	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)
15,700.00	90.00	359.70	8,988.50	6,409.03	680.94	6,439.97	0.00	0.00	0.00
15,800.00	90.00	359.70	8,988.50	6,509.03	680.40	6,539.71	0.00	0.00	0.00
15,900.00	90.00	359.70	8,988.50	6,609.03	679.87	6,639.46	0.00	0.00	0.00
16,000.00	90.00	359.70	8,988.50	6,709.03	679.34	6,739.21	0.00	0.00	0.00
16,100.00	90.00	359.70	8,988.50	6,809.02	678.81	6,838.95	0.00	0.00	0.00
16,200.00	90.00	359.70	8,988.50	6,909.02	678.28	6,938.70	0.00	0.00	0.00
16,300.00	90.00	359.70	8,988.50	7,009.02	677.74	7,038.44	0.00	0.00	0.00
16,400.00	90.00	359.70	8,988.50	7,109.02	677.21	7,138.19	0.00	0.00	0.00
16,500.00	90.00	359.70	8,988.50	7,209.02	676.68	7,237.94	0.00	0.00	0.00
16,600.00	90.00	359.70	8,988.50	7,309.02	676.15	7,337.68	0.00	0.00	0.00
16,691.98	90.00	359.70	8,988.50	7,401.00	675.66	7,429.43	0.00	0.00	0.00
<b>LC Cross</b>									
16,700.00	90.00	359.70	8,988.50	7,409.02	675.62	7,437.43	0.00	0.00	0.00
16,800.00	90.00	359.70	8,988.50	7,509.01	675.08	7,537.18	0.00	0.00	0.00
16,900.00	90.00	359.70	8,988.50	7,609.01	674.55	7,636.92	0.00	0.00	0.00
17,000.00	90.00	359.70	8,988.50	7,709.01	674.02	7,736.67	0.00	0.00	0.00
17,100.00	90.00	359.70	8,988.50	7,809.01	673.49	7,836.41	0.00	0.00	0.00
17,200.00	90.00	359.70	8,988.50	7,909.01	672.96	7,936.16	0.00	0.00	0.00
17,300.00	90.00	359.70	8,988.50	8,009.01	672.42	8,035.91	0.00	0.00	0.00
17,400.00	90.00	359.70	8,988.50	8,109.01	671.89	8,135.65	0.00	0.00	0.00
17,500.00	90.00	359.70	8,988.50	8,209.00	671.36	8,235.40	0.00	0.00	0.00
17,600.00	90.00	359.70	8,988.50	8,309.00	670.83	8,335.15	0.00	0.00	0.00
17,700.00	90.00	359.70	8,988.50	8,409.00	670.30	8,434.89	0.00	0.00	0.00
17,800.00	90.00	359.70	8,988.50	8,509.00	669.76	8,534.64	0.00	0.00	0.00
17,900.00	90.00	359.70	8,988.50	8,609.00	669.23	8,634.39	0.00	0.00	0.00
18,000.00	90.00	359.70	8,988.50	8,709.00	668.70	8,734.13	0.00	0.00	0.00
18,100.00	90.00	359.70	8,988.50	8,809.00	668.17	8,833.88	0.00	0.00	0.00
18,200.00	90.00	359.70	8,988.50	8,908.99	667.64	8,933.62	0.00	0.00	0.00
18,300.00	90.00	359.70	8,988.50	9,008.99	667.10	9,033.37	0.00	0.00	0.00
18,400.00	90.00	359.70	8,988.50	9,108.99	666.57	9,133.12	0.00	0.00	0.00
18,500.00	90.00	359.70	8,988.50	9,208.99	666.04	9,232.86	0.00	0.00	0.00
18,600.00	90.00	359.70	8,988.50	9,308.99	665.51	9,332.61	0.00	0.00	0.00
18,700.00	90.00	359.70	8,988.50	9,408.99	664.98	9,432.36	0.00	0.00	0.00
18,800.00	90.00	359.70	8,988.50	9,508.99	664.44	9,532.10	0.00	0.00	0.00
18,900.00	90.00	359.70	8,988.50	9,608.98	663.91	9,631.85	0.00	0.00	0.00
19,000.00	90.00	359.70	8,988.50	9,708.98	663.38	9,731.59	0.00	0.00	0.00
19,100.00	90.00	359.70	8,988.50	9,808.98	662.85	9,831.34	0.00	0.00	0.00
19,200.00	90.00	359.70	8,988.50	9,908.98	662.32	9,931.09	0.00	0.00	0.00
19,300.00	90.00	359.70	8,988.50	10,008.98	661.78	10,030.83	0.00	0.00	0.00
19,313.15	90.00	359.70	8,988.50	10,022.13	661.71	10,043.95	0.00	0.00	0.00
<b>TD at 19313.15' MD</b>									

## OXY Planning Report

<b>Database:</b>	HOPSPP	<b>Local Co-ordinate Reference:</b>	Well Top Spot 12_13 Fed Com 12H
<b>Company:</b>	ENGINEERING DESIGNS	<b>TVD Reference:</b>	RKB=25' @ 3608.50ft
<b>Project:</b>	PRD NM DIRECTIONAL PLANS (NAD 1983)	<b>MD Reference:</b>	RKB=25' @ 3608.50ft
<b>Site:</b>	Top Spot 12_13 Fed Com	<b>North Reference:</b>	Grid
<b>Well:</b>	Top Spot 12_13 Fed Com 12H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIG HOLE		
<b>Design:</b>	Permitting Plan		

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 (Top Spot 12_13 - plan misses target center by 855.99ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E) - Point	0.00	0.00	0.00	-466.76	717.53	504,104.70	729,307.75	32.384382	-103.724405
FTP (Top Spot 12_13 - plan misses target center by 196.95ft at 8975.78ft MD (8847.78 TVD, -280.51 N, 696.76 E) - Point	0.00	0.00	8,988.50	-416.77	717.25	504,154.69	729,307.47	32.384520	-103.724405
PBHL (Top Spot - plan hits target center - Point	0.00	0.00	8,988.50	10,022.13	661.71	514,593.04	729,251.94	32.413212	-103.724393

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
829.50	829.50	RUSTLER				
1,124.50	1,124.50	SALADO				
2,000.00	2,000.00	MARKER BED 126		0.00		
2,854.50	2,854.50	CASTILE				
4,524.54	4,517.50	DELAWARE				
4,606.79	4,598.50	BELL CANYON				
5,445.53	5,424.50	CHERRY CANYON				
6,709.74	6,669.50	BRUSHY CANYON				
8,485.52	8,418.50	BONE SPRING				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
3,395.00	3,395.00	0.00	0.00	Build 1°/100'	
4,395.07	4,390.00	-52.29	69.60	Hold 10° Tangent	
8,427.85	8,361.50	-472.98	629.51	KOP, Build & Turn 10°/100'	
9,388.15	8,988.50	97.27	714.51	Landing Point	
16,691.98	8,988.50	7,401.00	675.66	LC Cross	
19,313.15	8,988.50	10,022.13	661.71	TD at 19313.15' MD	



# 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.

Section	Hole Size (in)	MD		TVD		Csg. OD (in)	Csg Wt. (ppf)	Grade	Conn.
		From (ft)	To (ft)	From (ft)	To (ft)				
Surface	17.5	0	1200	0	1200	13.375	54.5	J-55	BTC
Intermediate 1	12.25†	0	4832	0	4832	10.75	40.5	J-55	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 Sprint-TC SC

\*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.

<i>All Casing SF Values will meet or exceed those below</i>			
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 <sup>3</sup> /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 cas	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 (intermediate and production) requirements as per the agreement reached in the OXY/BLM meeting on April 4th, 2025. 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
---	--------------------------------

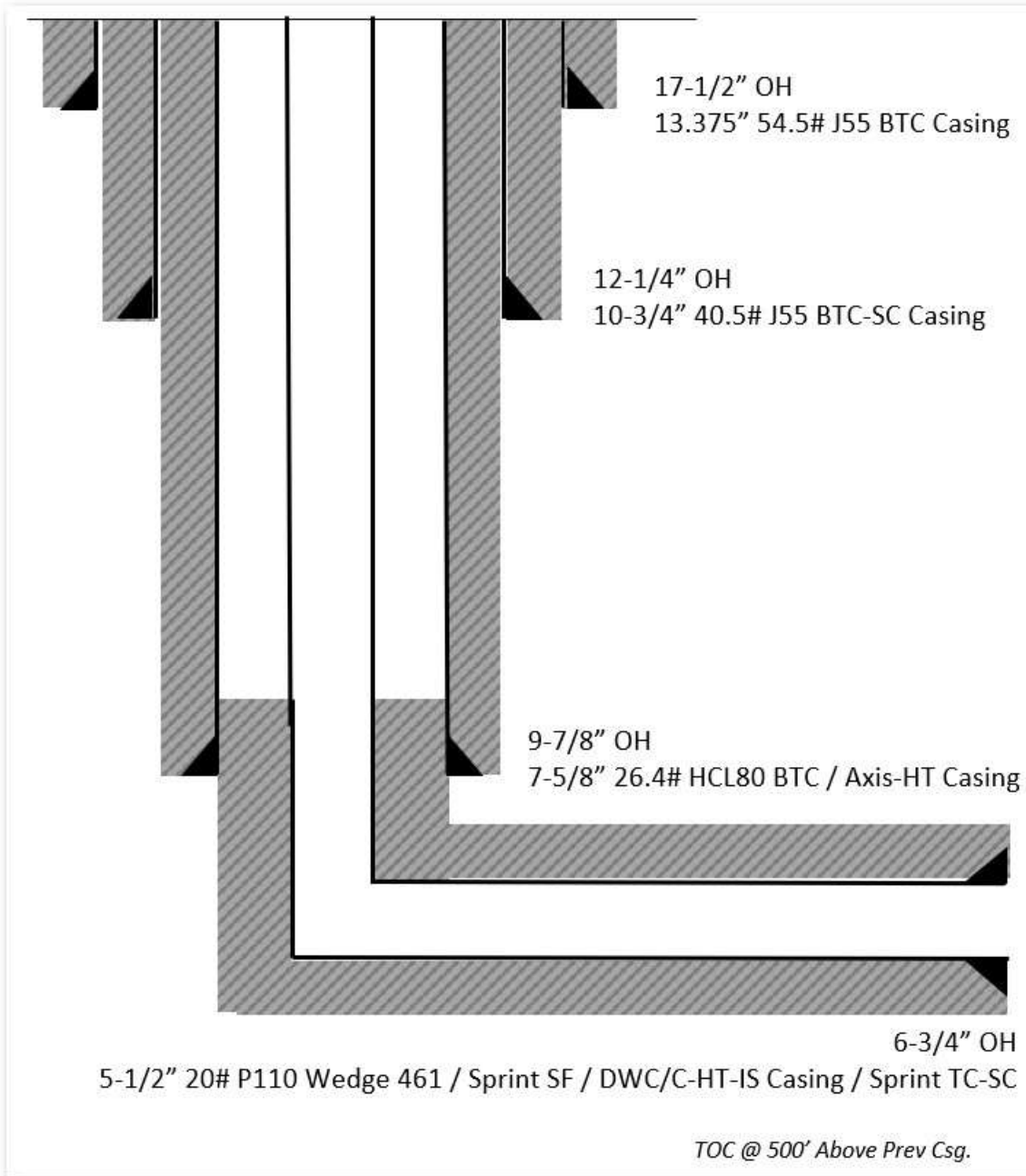
Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times. Appropriately weighted mud will be used to isolate potential 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

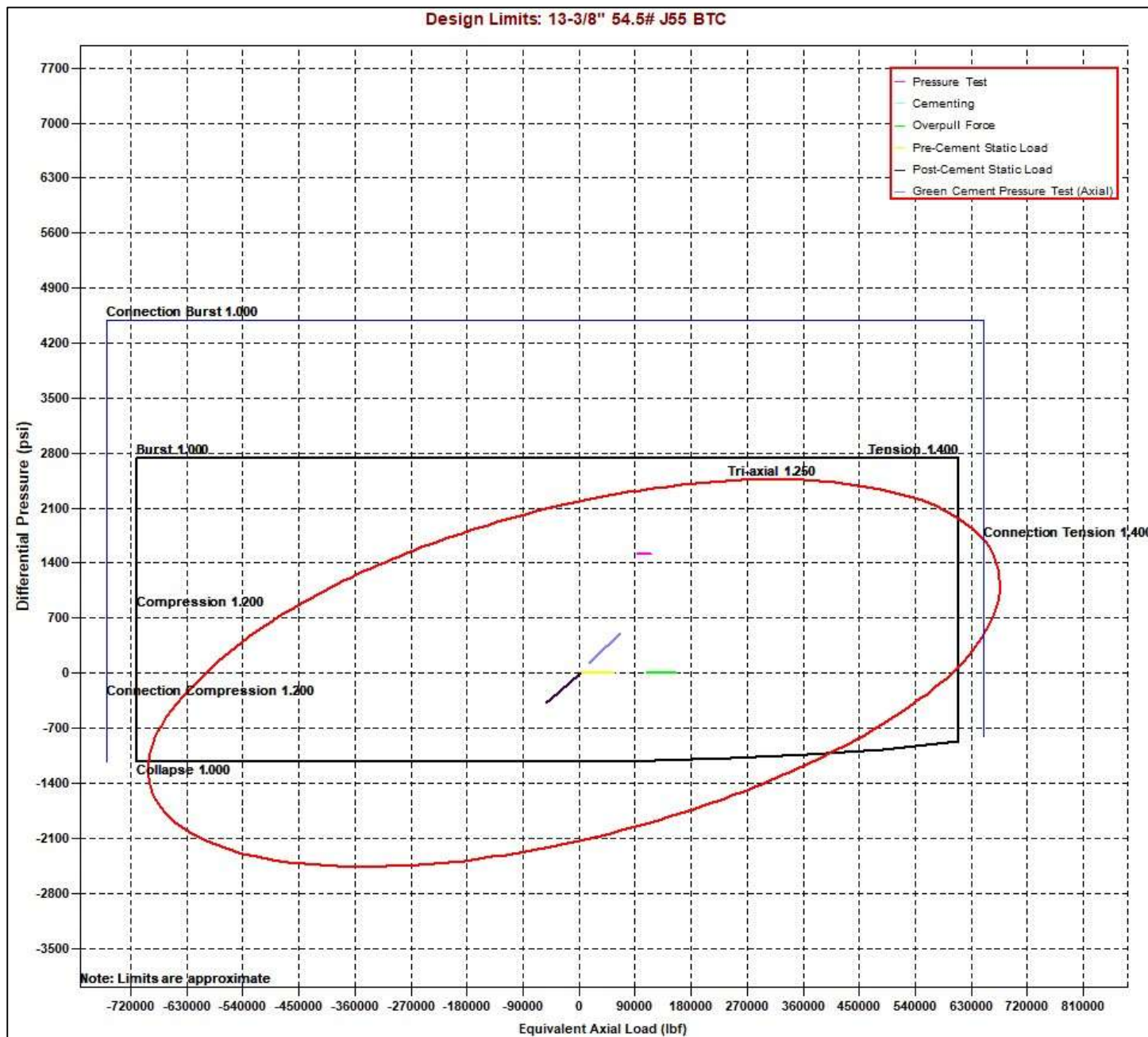




# Oxy Blanket Design - Casing Design "B"

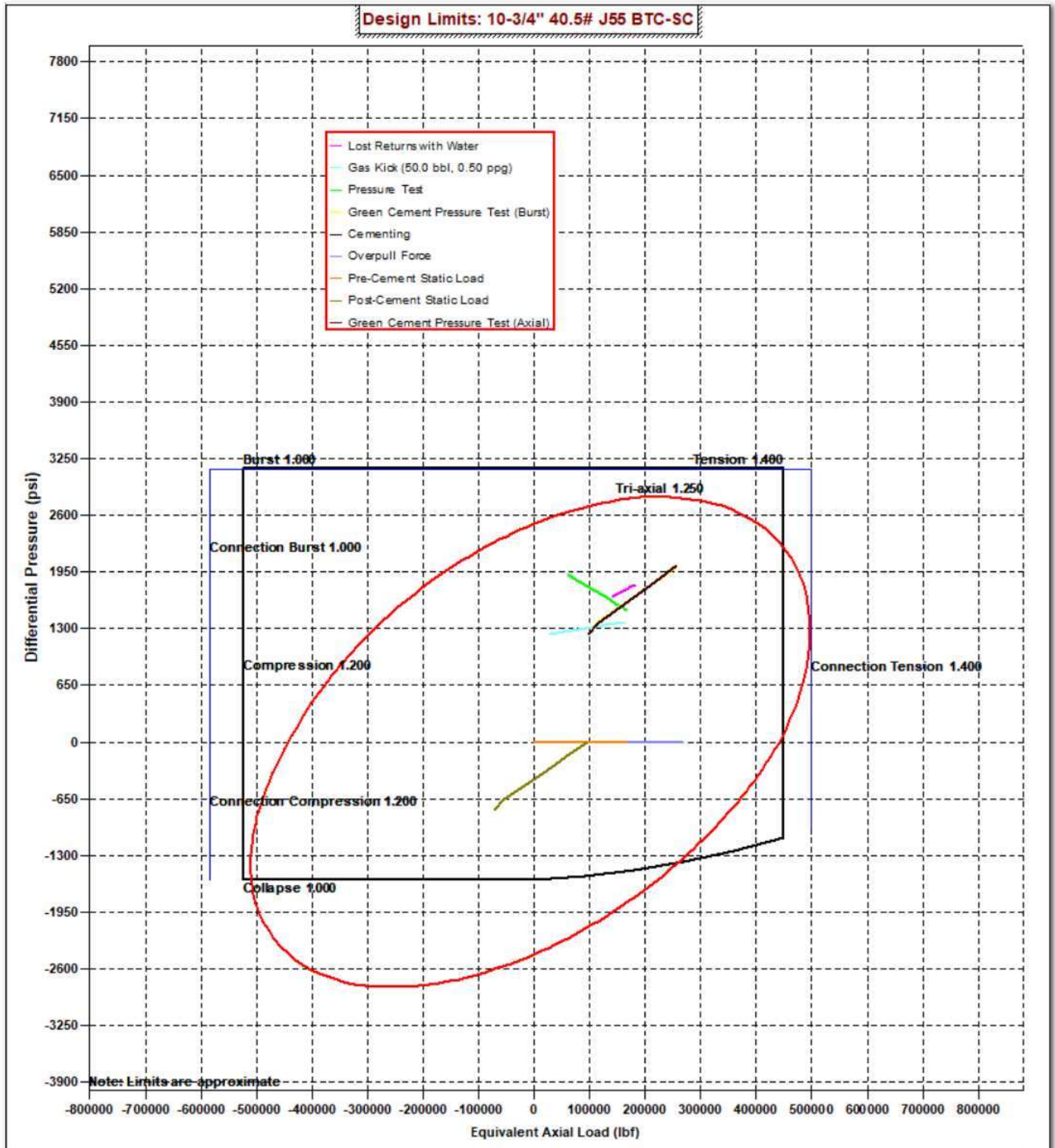


## 7. Landmark StressCheck Screenshots – Triaxial Output





# Oxy Blanket Design - Casing Design "B"

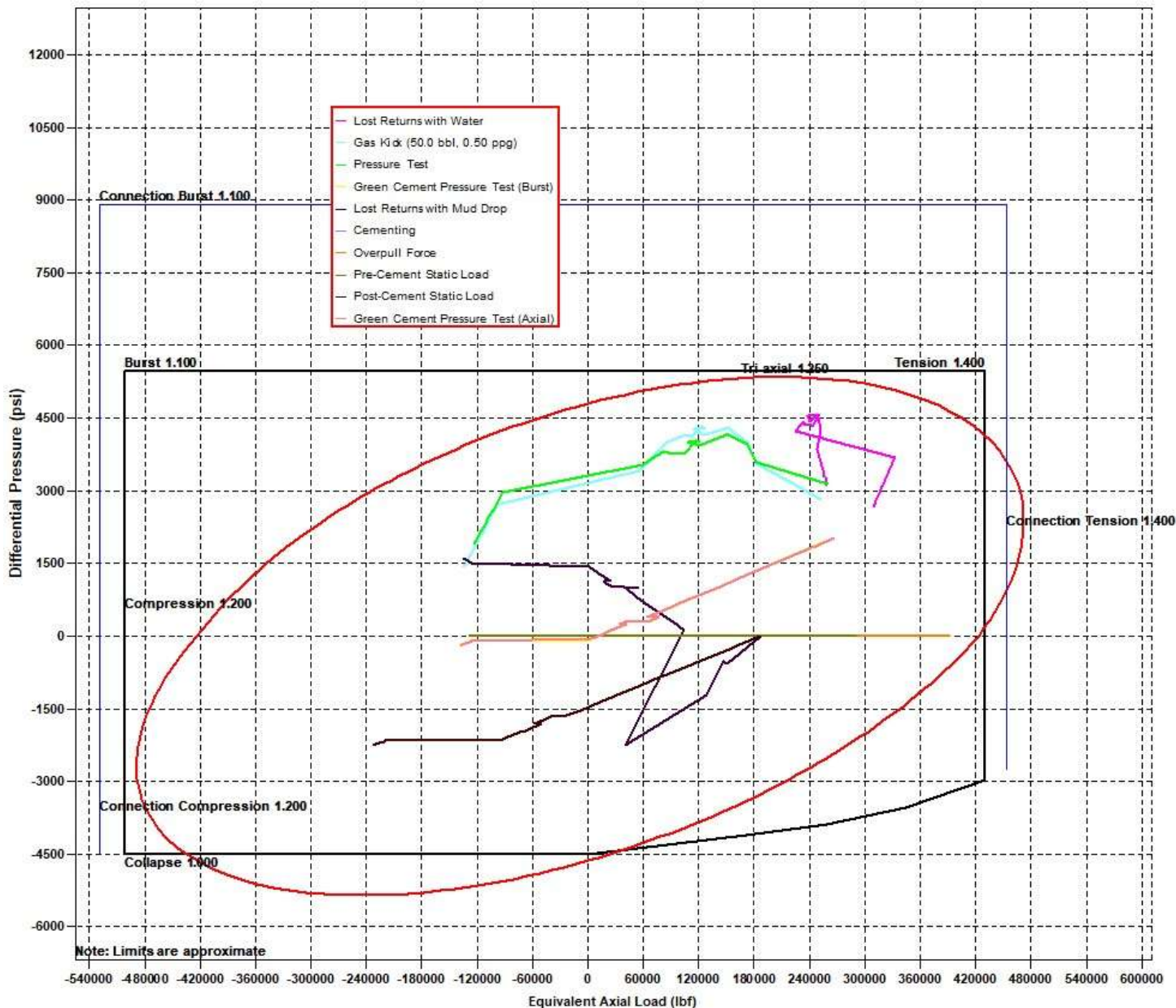




# Oxy Blanket Design - Casing Design "B"



Design Limits: 7-5/8" 26.4# HC-L80 BTC

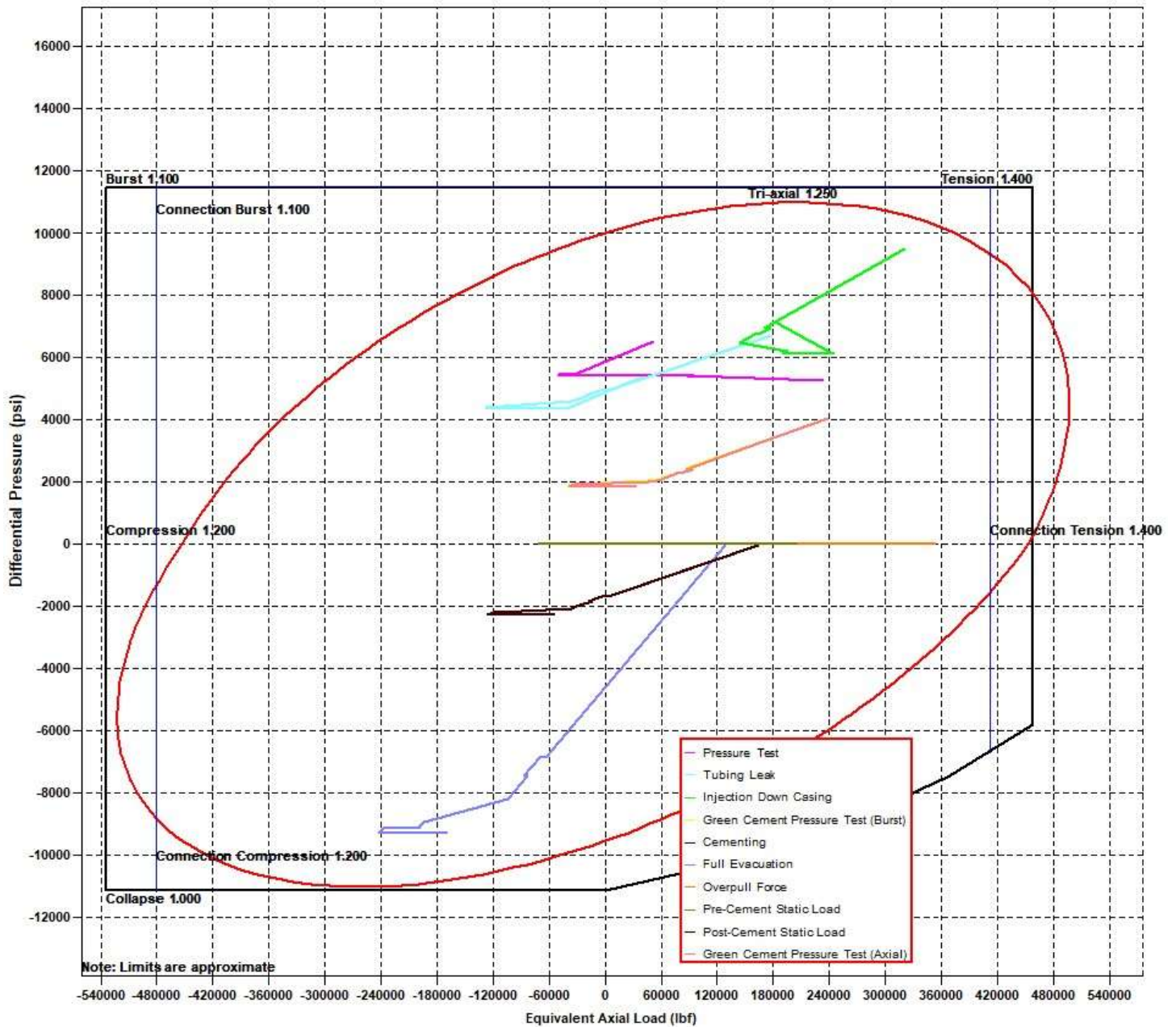




# Oxy Blanket Design - Casing Design "B"



Design Limits: 5-1/2" 20# P110 Sprint SF





## Oxy Blanket Design - Casing Design "B"



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

#### Burst Load Cases

Burst Loads Data	
<b>Drilling Load:</b>	<b>Lost Returns with Water</b>
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)
<b>Drilling Load:</b>	<b>Gas Kick Profile</b>
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)
<b>Drilling Load:</b>	<b>Pressure Test</b>
Test Pressure:	3120 psi
Mud Weight:	10.00 ppg
Assigned External Pressure:	Fluid Gradients (w/ Pore Pressure)
<b>Drilling Load:</b>	<b>Green Cement Pressure Test</b>
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
<b>External Pressure:</b>	<b>Fluid Gradients (w/ Pore Pressure)</b>
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

Collapse Loads Data	
<b>Drilling Load:</b>	<b>Cementing</b>
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
Assigned External Pressure:	Fluid Gradients (w/ Pore Pressure)
<b>Drilling Load:</b>	<b>Lost Returns with Mud Drop</b>
Lost Returns Depth, MD:	13111.10 ft
Pore Pressure at Lost Returns Depth:	7918 psi
Pore Pressure Gradient at Lost Returns Depth:	11.93 ppg
Mud Weight:	13.50 ppg
Mud Drop Level, MD:	1484.14 ft
Assigned External Pressure:	Fluid Gradients (w/ Pore Pressure)
<b>External Pressure:</b>	<b>Fluid Gradients (w/ Pore Pressure)</b>
TOC, MD:	25.00 ft
Prior Shoe, MD:	4832.00 ft
Fluid Gradient Above TOC:	10.00 ppg
Fluid Gradient Below TOC:	10.00 ppg
Wellhead Pressure:	18 psi
Pore Pressure In Open Hole Below TOC:	No

## Axial Load Cases

Axial Loads Data	
Overpull Force:	100000 lbf
Pre-Cement Static Load:	Yes
Pickup Force:	0 lbf
Post-Cement Static Load:	Yes
Green Cement Pressure Test:	2000 psi
Service Loads:	Yes



# Oxy Blanket Design - Casing Design "B"



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

Depth (MD) (ft)	Axial Force (lb)		Equivalent Axial Load (lb)	Bending Stress at OD (psi)	Absolute Safety Factor				Temperature (°F)	Pressure (psi)		Add'l Pickup To Prevent Buck. (lb)	Buckled Length (ft)
	Apparent (w/Bending)	Actual (w/o Bending)			Triaxial	Burst	Collapse (V)	Axial		Internal	External		
29	12400	-149056	-24069	-9987	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	-116222	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													
55													
56													

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



### 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: -

Printed on: 06-19-2025

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Outside Diameter	10.750 in.	Wall Thickness	0.350 in.	Grade	J55 (Casing)
Min. Wall Thickness	87.50 %	Pipe Body Drift	API Standard	Type	Casing
Connection OD Option	Special Clearance				

#### Pipe Body Data

Geometry		Performance	
Nominal OD	10.750 in.	Drift	9.894 in.
Wall Thickness	0.350 in.	Plain End Weight	38.91 lb/ft
Nominal Weight	40.500 lb/ft	OD Tolerance	API
Nominal ID	10.050 in.		
		SMYS	55,000 psi
		Min UTS	75,000 psi
		Body Yield Strength	629 x1000 lb
		Min. Internal Yield Pressure	3130 psi
		Collapse Pressure	1580 psi
		Max. Allowed Bending	23 °/100 ft.

#### Connection Data

Geometry		Performance	
Thread per In	5	Joint Strength	700 x1000 lb
Connection OD	11.250 in.	Coupling Face Load	329 x1000 lb
Hand Tight Stand Off	1 in.	Internal Pressure Capacity	3130 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.

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## Oxy Blanket Design - Casing Design "B"



### 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

Disclaimer: The content of this Technical Data Sheet is for general information only and does not guarantee performance and/or accuracy, which can only be determined by a professional expert with the specific installation and operation parameters. Information printed or downloaded may not be current and no longer in control by Axis Pipe and Tube. Anyone using the information herein does so at his or her own risk. To verify that you have the latest technical information, please contact Axis Pipe and Tube Technical Sales +1 (979) 599-7600. [www.axispipeandtube.com](http://www.axispipeandtube.com)

## 11. Production Non-API Casing Spec Sheets



# Oxy Blanket Design - Casing Design "B"



Printed on: 11/09/2021

Tenaris

## TenarisHydril Wedge 461<sup>®</sup> MS



Coupling	Pipe Body
Grade: P110-4CY	Grade: P110-4CY
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	P110-4CY
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.
Nominal Weight	20 lb/ft	Plain End Weight	19.83 lb/ft
Drift	4.653 in.	OD Tolerance	API
Nominal ID	4.778 in.		
		Body Yield Strength	729 x1000 lb
		Min. Internal Yield Pressure	14,360 psi
		SMYS	125,000 psi
		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 latest performance data, always visit our website: [www.tenaris.com](http://www.tenaris.com)

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# Oxy Blanket Design - Casing Design "B"



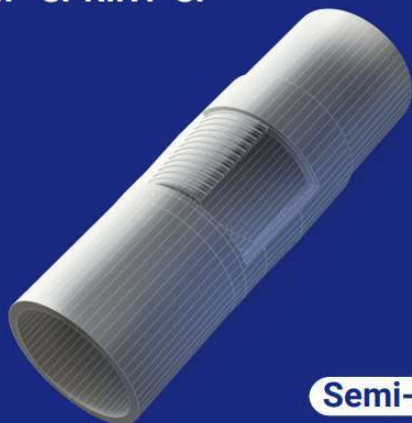
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## CONNECTION DATA SHEET

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



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# 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	<sup>o</sup> /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](mailto:tech.support@vam-usa.com)

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

Connection specifications within the control of VAM USA were correct as of the date printed. Specifications are subject to change without notice. Certain connection specifications are dependent on the mechanical properties of the pipe. Mechanical properties of mill proprietary pipe grades were obtained from mill publications and are subject to change. Properties of mill proprietary grades should be confirmed with the mill. Users are advised to obtain current connection specifications and verify pipe mechanical properties for each application.

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# 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<sup>®</sup> USA Sales E-mail: [VAMUSAsales@vam-usa.com](mailto:VAMUSAsales@vam-usa.com)  
 Tech Support Email: [tech.support@vam-usa.com](mailto: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](mailto:tech.support@vam-usa.com) for details on connection ratings and make-up.

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# Oxy Blanket Design - Casing Design "B"



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## CONNECTION DATA SHEET

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

### VAM® SPRINT-TC SC



T&C

#### Field Torque Values

##### Make-up Torque (ft-lb)

- 23,000 MIN
- 24,000 OPTI
- 25,000 MAX

##### Torque with Sealability (ft-lb)

- 39,200 MTS

##### Locked Flank Torque (ft-lb)

- 1,200 MIN
- 16,800 MAX

(1) MTS: Maximum Torque with Sealability.  
 (2) Note: Thread compound must be applied as a thin even layer

#### 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	High Yield	
Minimum Yield Strength	125	ksi
Maximum Yield Strength	140	ksi
Minimum Ultimate Tensile Strength	135	ksi
Pipe Body Yield Strength	729	kib
Internal Yield Pressure	14,360	psi
Collapse Pressure	12,090	psi

#### CONNECTION PROPERTIES

Connection Type	Semi-Premium Threaded & Coupled	
Nominal Connection OD	5.900	in.
Nominal Connection ID	4.830	in.
Make-up Loss	3.973	in.
Coupling Length	8.296	in.
Tension Efficiency	100	% Pipe Body
Compression Efficiency	100	% Pipe Body
Internal Pressure Efficiency	100	% Pipe Body
External Pressure Efficiency	100	% Pipe Body

#### JOINT PERFORMANCES

Tension Strength	729	kib
Compression Strength	729	kib
Internal Pressure Resistance	14,360	psi
External Pressure Resistance	12,090	psi
Maximum Bending, Structural	104	°/100 ft
Maximum Bending, with Sealability	30	°/100 ft
Maximum Load on Coupling Face	227	kib

(4) Sealability rating demonstrated as per API RP 5CS / ISO 13679



**BOOST YOUR EFFICIENCY, REDUCE COSTS  
 AND ENSURE 100% WELL INTEGRITY WITH  
 VAM® FIELD SERVICE**

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# Oxy Blanket Design - Casing Design "A"



## 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.

### Design Variation "A1"

Section	Hole Size (in)	MD		TVD		Csg. OD (in)	Csg Wt. (ppf)	Grade	Conn.
		From (ft)	To (ft)	From (ft)	To (ft)				
Surface	14.75	0	1200	0	1200	10.75	40.5	J-55	BTC
Intermediate	9.875	0	13111*	0	12775*	7.625	26.4	L-80 HC	BTC Axis HT GBCD
Production	6.75	0	23361	0	12775	5.5	20	P-110	Wedge 461 Sprint SF DWC/C-HT-IS Sprint-TC SC

\*Curve could be in intermediate or production section

### Design Variation "A2" - Option to Pivot to Design "B" for Contingency 4S

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

\*Curve could be in intermediate or production section

†If 4S Contingency is not required, Oxy requests permission to transition from 12.25" to 9.875" Intermediate at some point during the hole section. Cement volumes will be updated on C103 submission.

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



## Oxy Blanket Design - Casing Design "A"

<i>All Casing SF Values will meet or exceed those below</i>			
<b>SF</b>	<b>SF</b>	<b>Body SF</b>	<b>Joint SF</b>
<b>Collapse</b>	<b>Burst</b>	<b>Tension</b>	<b>Tension</b>
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.

## 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
Intermediate	5000 <small>(inside Cherry Canyon)</small>	6500	4980	6390	20°	2°/100 ft
	12211	13111	12202	12775	92° ‡	12°/100 ft ‡
Production	12211 <small>(~100' MD past ICP)</small>	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.



## Oxy Blanket Design - Casing Design "A"



### 3. Cementing Program

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

#### Design Variation "A1"

Section	Stage	Slurry:	Sacks	Yield (ft <sup>3</sup> /ft)	Density (lb/gal)	Excess:	TOC	Placement	Description
Surface	1	Surface - Tail	819	1.33	14.8	100%	-	Circulate	Class C+Accel.
Int.	1	Intermediate 1S - Tail	658	1.68	13.2	5%	7,206	Circulate	Class C+Ret., Disper.
Int.	2	Intermediate 2S - Tail BH	1111	1.71	13.3	25%	-	Bradenhead	Class C+Accel.
Prod.	1	Production - Tail	665	1.84	13.3	25%	11,611	Circulate	Class C+Ret.
Prod.	2*	Production - Tail BH*	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

#### Design Variation "A2"

Section	Stage	Slurry:	Sacks	Yield (ft <sup>3</sup> /ft)	Density (lb/gal)	Excess:	TOC	Placement	Description
Surface	1	Surface - Tail	1023	1.33	14.8	100%	-	Circulate	Class C+Accel.
Int.	1	Intermediate 1S - Tail	658	1.68	13.2	5%	7,206	Circulate	Class C+Ret., Disper.
Int.	2	Intermediate 2S - Tail BH	1293	1.71	13.3	25%	-	Bradenhead	Class C+Accel.
Prod.	1	Production - Tail	665	1.84	13.3	25%	11,611	Circulate	Class C+Ret.
Prod.	2*	Production - Tail BH*	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.

#### 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.



## Oxy Blanket Design - Casing Design "A"



### 4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	✓	Tested to:	Deepest TVD Depth (ft) per Section:
9.875" Hole	13-5/8"	5M	Annular	✓	70% of working pressure	12775**
		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 "A"



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 (intermediate and production) requirements as per the agreement reached in the OXY/BLM meeting on April 4th, 2025. 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 "A"



### 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	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 utilize 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.

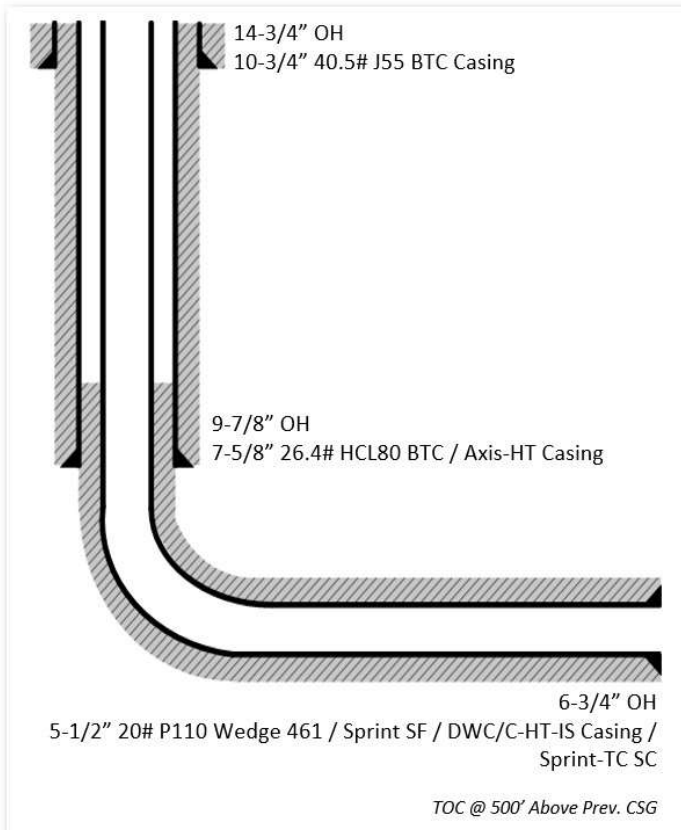


# Oxy Blanket Design - Casing Design "A"

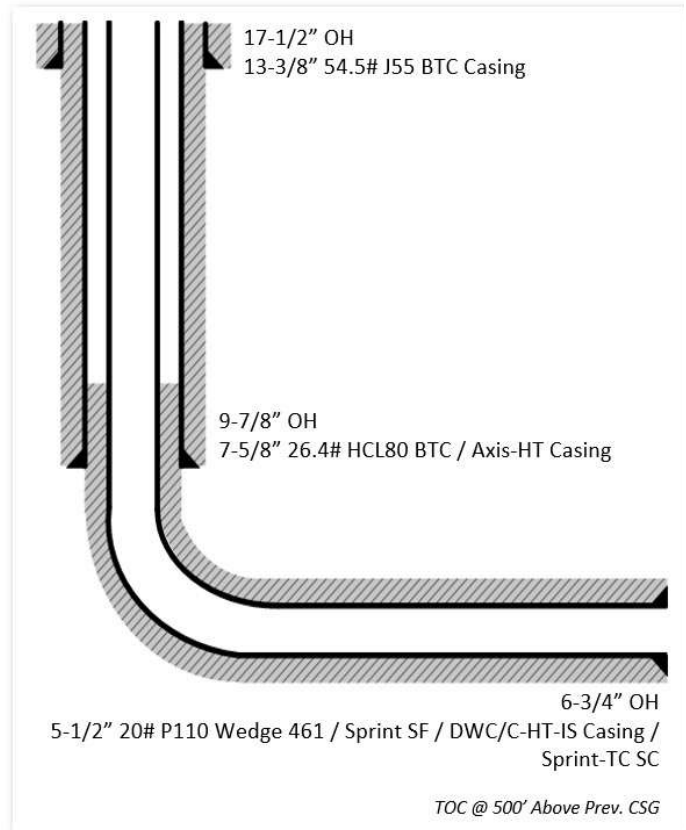


## 6. Wellbore Diagram(s)

### Design Variation "A1"



### Design Variation "A2"

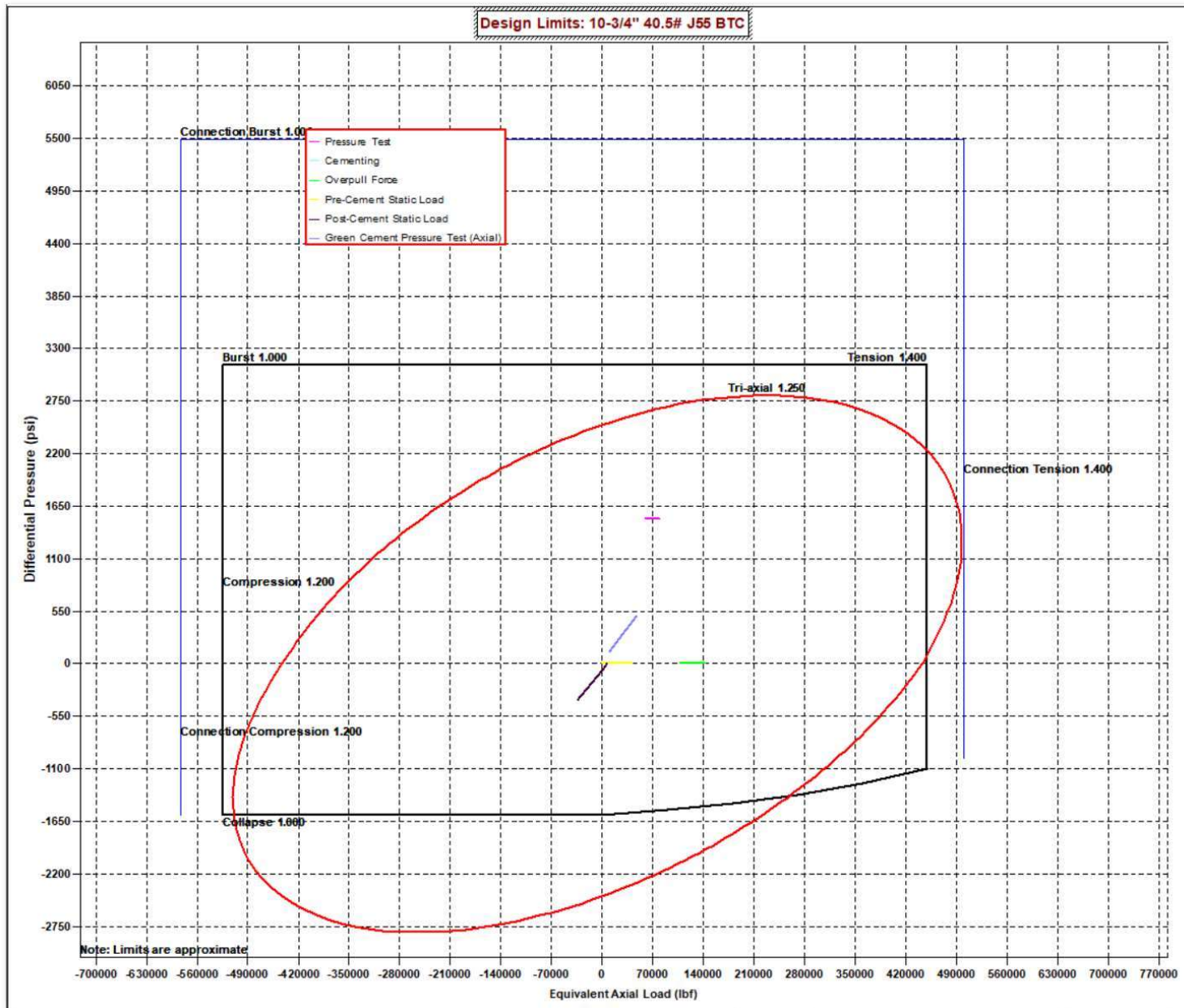




# Oxy Blanket Design - Casing Design "A"

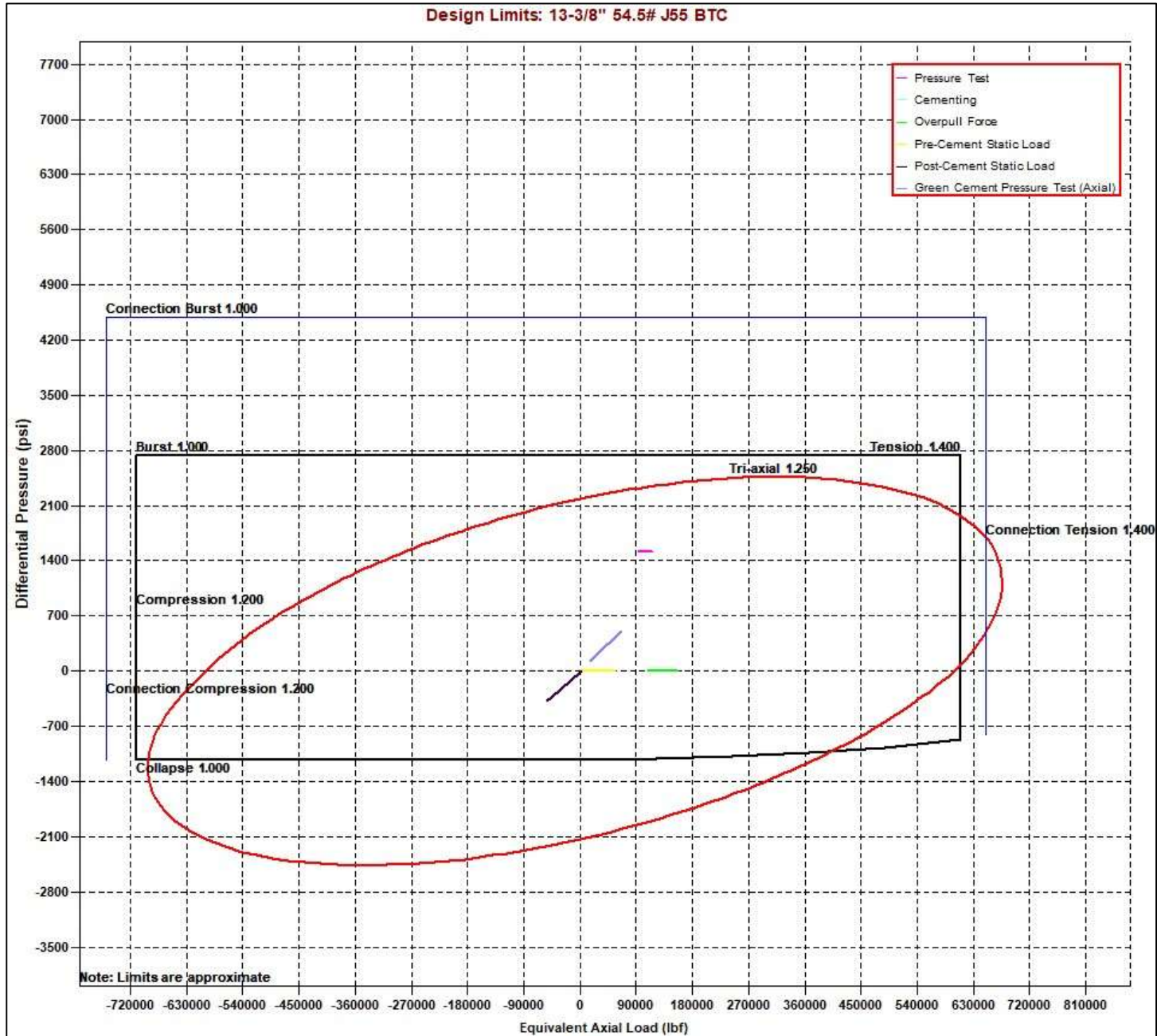


## 7. Landmark StressCheck Screenshots – Triaxial Output





# Oxy Blanket Design - Casing Design "A"

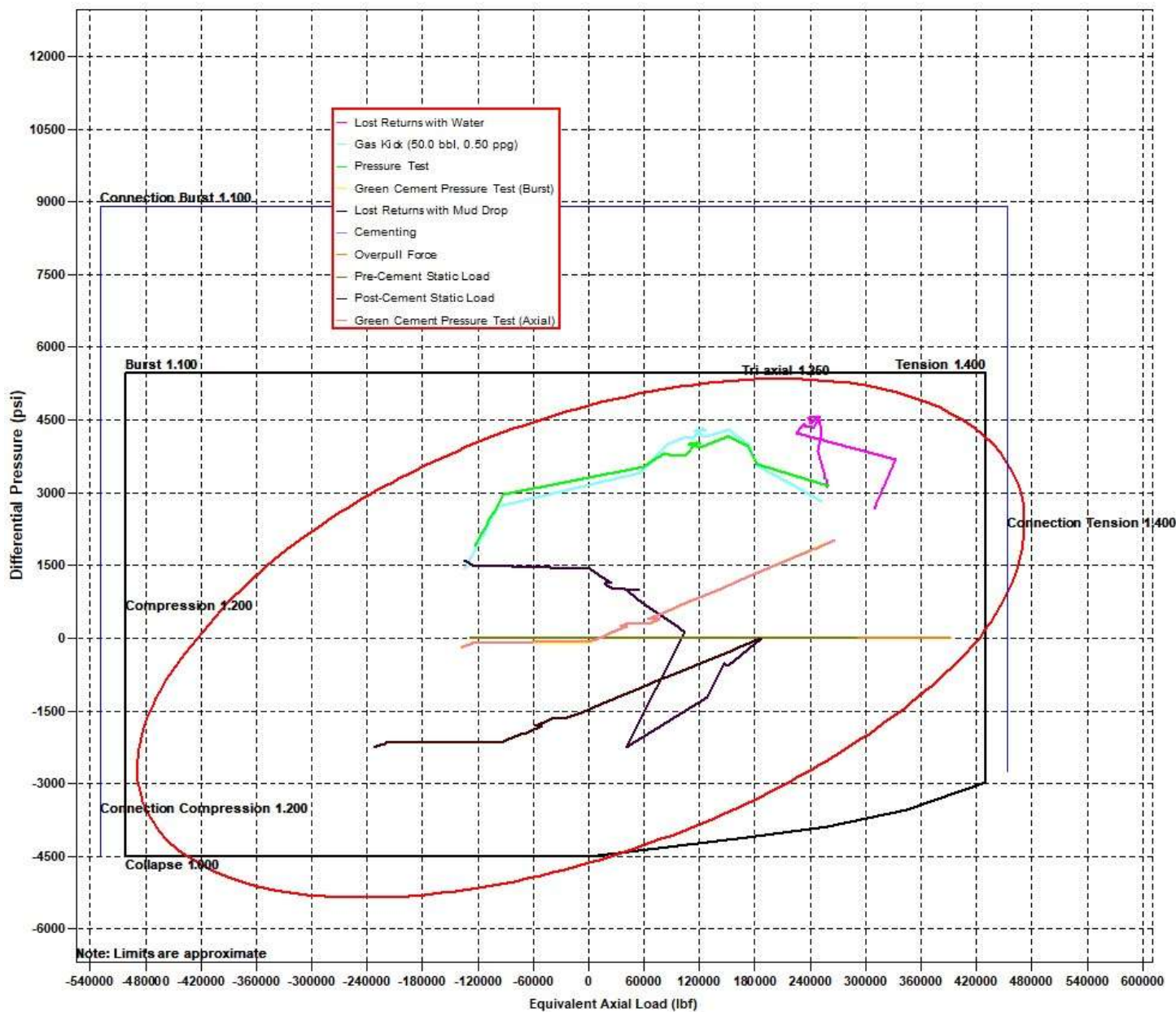




# Oxy Blanket Design - Casing Design "A"



Design Limits: 7-5/8" 26.4# HC-L80 BTC

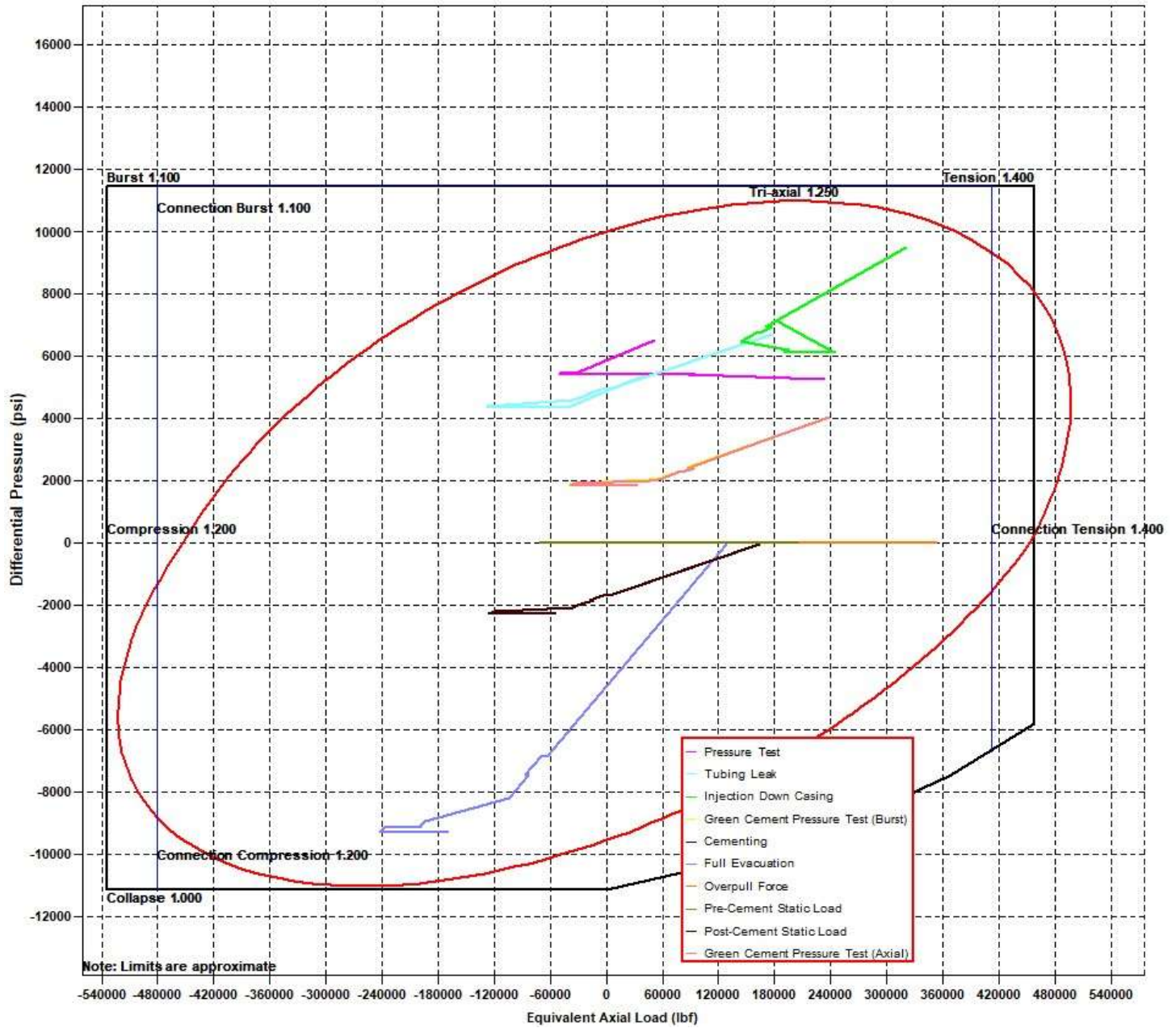




# Oxy Blanket Design - Casing Design "A"



Design Limits: 5-1/2" 20# P110 Sprint SF





## Oxy Blanket Design - Casing Design "A"



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

#### Burst Load Cases

Burst Loads Data	
<b>Drilling Load:</b>	<b>Lost Returns with Water</b>
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)
<b>Drilling Load:</b>	<b>Gas Kick Profile</b>
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)
<b>Drilling Load:</b>	<b>Pressure Test</b>
Test Pressure:	3120 psi
Mud Weight:	10.00 ppg
Assigned External Pressure:	Fluid Gradients (w/ Pore Pressure)
<b>Drilling Load:</b>	<b>Green Cement Pressure Test</b>
Test Pressure:	2000 psi
Mud Weight at Shoe:	10.00 ppg
TOC, MD:	25.00 ft
Lead Slurry Density:	13.30 ppg
Tail Slurry Density:	13.30 ppg
Tail Slurry Length:	5906.00 ft
Displacement Fluid Density:	10.00 ppg
Float Collar Depth, MD:	12800.00 ft
<b>External Pressure:</b>	<b>Fluid Gradients (w/ Pore Pressure)</b>
TOC, MD:	25.00 ft
Prior Shoe, MD:	1200.00 ft
Mud Weight Above TOC:	10.00 ppg
Fluid Gradient Below TOC:	8.33 ppg
Wellhead Pressure:	13 psi
Pore Pressure In Open Hole:	Yes



## Oxy Blanket Design - Casing Design "A"



### Collapse Load Cases

Collapse Loads Data	
<b>Drilling Load:</b>	
Mud Weight at Shoe:	10.00 ppg
TOC, MD:	25.00 ft
Lead Slurry Density:	13.30 ppg
Tail Slurry Density:	13.30 ppg
Tail Slurry Length:	5906.00 ft
Displacement Fluid Density:	10.00 ppg
Float Collar Depth, MD:	12800.00 ft
Assigned External Pressure:	Fluid Gradients (w/ Pore Pressure)
<b>Drilling Load:</b>	
Lost Returns Depth, MD:	13110.89 ft
Pore Pressure at Lost Returns Depth:	8183 psi
Pore Pressure Gradient at Lost Returns Depth:	12.33 ppg
Mud Weight:	13.50 ppg
Mud Drop Level, MD:	1106.39 ft
Assigned External Pressure:	Fluid Gradients (w/ Pore Pressure)
<b>External Pressure:</b>	
TOC, MD:	25.00 ft
Prior Shoe, MD:	1200.00 ft
Fluid Gradient Above TOC:	10.00 ppg
Fluid Gradient Below TOC:	10.00 ppg
Wellhead Pressure:	13 psi
Pore Pressure In Open Hole Below TOC:	No

### Axial Load Cases

Axial Loads Data	
Overpull Force:	100000 lbf
Pre-Cement Static Load:	Yes
Pickup Force:	0 lbf
Post-Cement Static Load:	Yes
Green Cement Pressure Test:	2000 psi
Service Loads:	Yes



# Oxy Blanket Design - Casing Design "A"



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

Depth (MD) (ft)	Axial Force (lb)			Equivalent Axial Load (lb)	Bending Stress at OD (psi)	Absolute Safety Factor				Temperature (°F)	Pressure (psi)		Add'l Pickup To Prevent Buck. (lb)	Buckled Length (ft)
	Apparent (w/Bending)	Actual (w/o Bending)				Triaxial	Burst	Collapse (V)	Axial		Internal	External		
28	12300	-142410	-17423	-94936	16622.5	1.79	2.10	N/A	(4.09)	178	9505	6732		
29	12400	-149639	-24652	-100590	16622.5	1.87	2.25	N/A	(3.89)	179	9555	6970		
30	12400	-149640	-24653	-100591	16622.5	1.87	2.25	N/A	(3.89)	179	9555	6970		
31	12500	-156448	-31461	-105919	16622.5	1.95	2.42	N/A	(3.72)	180	9603	7193		
32	12500	-156449	-31462	-105920	16622.5	1.95	2.42	N/A	(3.72)	180	9603	7193		
33	12550	-159630	-34643	-108410	16622.5	1.99	2.50	N/A	(3.64)	180	9625	7298		
34	12550	-159631	-34644	-108411	16622.5	1.99	2.50	N/A	(3.64)	180	9625	7298		
35	12600	-162630	-37643	-110759	16622.5	2.03	2.59	N/A	(3.58)	180	9646	7396		
36	12600	-162631	-37644	-110760	16622.5	2.03	2.59	N/A	(3.58)	180	9646	7396		
37	12650	-165426	-40439	-112949	16622.5	2.07	2.67	N/A	(3.52)	181	9665	7488		
38	12650	-165427	-40440	-112950	16622.5	2.07	2.67	N/A	(3.52)	181	9665	7488		
39	12700	-167997	-43010	-114963	16622.5	2.10	2.76	N/A	(3.46)	181	9683	7573		
40	12700	-167998	-43011	-114963	16622.5	2.10	2.76	N/A	(3.46)	181	9683	7573		
41	12750	-170322	-45335	-116784	16622.5	2.13	2.84	N/A	(3.41)	181	9699	7649		
42	12750	-170323	-45336	-116785	16622.5	2.13	2.84	N/A	(3.41)	181	9699	7649		
43	12800	-172385	-47398	-118401	16622.5	2.16	2.91	N/A	(3.37)	181	9714	7717		
44	12800	-172386	-47399	-118401	16622.5	2.16	2.91	N/A	(3.37)	181	9714	7717		
45	12850	-174169	-49183	-119799	16622.5	2.19	2.98	N/A	(3.34)	182	9726	7775		
46	12850	-174170	-49183	-119800	16622.5	2.19	2.98	N/A	(3.34)	182	9726	7775		
47	12900	-175662	-50675	-120969	16622.5	2.21	3.04	N/A	(3.31)	182	9736	7824		
48	12950	-176851	-51864	-121901	16622.5	2.23	3.09	N/A	(3.29)	182	9745	7863		
49	13000	-177727	-52740	-122588	16622.5	2.24	3.13	N/A	(3.27)	182	9751	7892		
50	13000	-177728	-52741	-122588	16622.5	2.24	3.13	N/A	(3.27)	182	9751	7892		
51	13050	-178285	-53298	-123025	16622.5	2.25	3.15	N/A	(3.26)	182	9755	7910		
52	13111	-178527	-53540	-123214	16622.5	2.25	3.16	N/A	(3.26)	182	9756	7918		
53														
54														
55														
56														

( ) Compression  
(V) Vector Collapse Safety Factor

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 "A"



## 10. Intermediate Non-API Casing Spec Sheet



### 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

		<i>Pipe</i>	<i>AXIS HT</i>
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

		<i>Pipe</i>	<i>AXIS HT</i>
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

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

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# Oxy Blanket Design - Casing Design "A"



## 11. Production Non-API Casing Spec Sheets

Printed on: 11/09/2021



**TenarisHydril Wedge  
461<sup>®</sup> MS**



Coupling	Pipe Body
Grade: P110-4CY	Grade: P110-4CY
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	P110-4CY
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.
Nominal Weight	20 lb/ft	Plain End Weight	19.83 lb/ft
Drift	4.653 in.	OD Tolerance	API
Nominal ID	4.778 in.		
		Body Yield Strength	729 x1000 lb
		Min. Internal Yield Pressure	14,360 psi
		SMYS	125,000 psi
		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 latest performance data, always visit our website: [www.tenaris.com](http://www.tenaris.com)

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# Oxy Blanket Design - Casing Design "A"



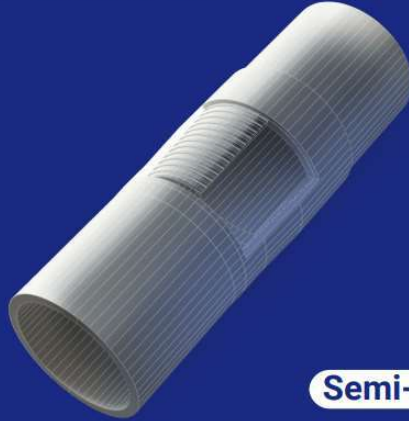
Generated on May 21, 2024



## 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



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# Oxy Blanket Design - Casing Design "A"



**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	<sup>o</sup> /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](mailto:tech.support@vam-usa.com)

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

Connection specifications within the control of VAM USA were correct as of the date printed. Specifications are subject to change without notice. Certain connection specifications are dependent on the mechanical properties of the pipe. Mechanical properties of mill proprietary pipe grades were obtained from mill publications and are subject to change. Properties of mill proprietary grades should be confirmed with the mill. Users are advised to obtain current connection specifications and verify pipe mechanical properties for each application.

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# Oxy Blanket Design - Casing Design "A"



VAM USA  
 2107 CityWest Boulevard Suite 1300  
 Houston, TX 77042  
 Phone: 713-479-3200  
 Fax: 713-479-3234  
 VAM<sup>®</sup> USA Sales E-mail: [VAMUSAsales@vam-usa.com](mailto:VAMUSAsales@vam-usa.com)  
 Tech Support Email: [tech.support@vam-usa.com](mailto: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](mailto:tech.support@vam-usa.com) for details on connection ratings and make-up.

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# Oxy Blanket Design - Casing Design "A"



Generated on May 14, 2025



## CONNECTION DATA SHEET

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

### VAM® SPRINT-TC SC



#### Field Torque Values

##### Make-up Torque (ft-lb)

- 23,000 MIN
- 24,000 OPTI
- 25,000 MAX

##### Torque with Sealability (ft-lb)

- 39,200 MTS

##### Locked Flank Torque (ft-lb)

- 1,200 MIN
- 16,800 MAX

(1) MTS: Maximum Torque with Sealability  
 (2) Note: Thread compound must be applied as a thin even layer

#### 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	High Yield	
Minimum Yield Strength	125	ksi
Maximum Yield Strength	140	ksi
Minimum Ultimate Tensile Strength	135	ksi
Pipe Body Yield Strength	729	kib
Internal Yield Pressure	14,360	psi
Collapse Pressure	12,090	psi

#### CONNECTION PROPERTIES

Connection Type	Semi-Premium Threaded & Coupled	
Nominal Connection OD	5.900	in.
Nominal Connection ID	4.830	in.
Make-up Loss	3.973	in.
Coupling Length	8.296	in.
Tension Efficiency	100	% Pipe Body
Compression Efficiency	100	% Pipe Body
Internal Pressure Efficiency	100	% Pipe Body
External Pressure Efficiency	100	% Pipe Body

#### JOINT PERFORMANCES

Tension Strength	729	kib
Compression Strength	729	kib
Internal Pressure Resistance	14,360	psi
External Pressure Resistance	12,090	psi
Maximum Bending, Structural	104	"/100 ft
Maximum Bending, with Sealability	30	"/100 ft
Maximum Load on Coupling Face	227	kib

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



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# Oxy USA Inc. - Blanket Design Pad Document

## OXY - Blanket Design A

Pad Name: LSTTNK\_T22SR31E\_13\_LSTTNK\_1302

SHL: 520' FSL 1165' FEL, Sec 13, T22S-R31E

Oxy requests for the bellow wells to be approved for the two designs listed in the Blanket Design document (**Blanket Design A –OXY –3S Slim v8.0.**) 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		Intermediate		Production	
		MD	TVD	MD	TVD	MD	TVD
TOP SPOT 12_13 FED COM 12H	10400101278	900	900	8328	8262	19313	8989
TOP SPOT 12_13 FED COM 13H	10400101319	904	904	8492	8453	19507	9222

### 2. Review Criteria Table

	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?	Y
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500’ into previous casing?	Y
Is well located in R-111-Q and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> 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. Geologic Formations

Formation	MD-RKB (ft)	TVD-RKB (ft)	Expected Fluids
Rustler	830	830	
Salado	1125	1125	Salt
Marker Bed 126	2000	2000	Salt
Castile	2855	2855	Salt
Delaware	4525	4518	Oil/Gas/Brine
Bell Canyon	4607	4599	Oil/Gas/Brine
Cherry Canyon	5446	5425	Oil/Gas/Brine
Brushy Canyon	6710	6670	Losses
Bone Spring	8486	8419	Oil/Gas
Bone Spring 1st			Oil/Gas
Bone Spring 2nd			Oil/Gas
Bone Spring 3rd			Oil/Gas
Wolfcamp			Oil/Gas
Penn			Oil/Gas
Strawn			Oil/Gas

### 4. Cementing Program

Section	Stage	Slurry:	Sacks	Yield (ft <sup>3</sup> /ft)	Density (lb/gal)	Excess:	TOC	Placement	Description
Surface	1	Surface - Tail	940	1.33	14.8	100%	-	Circulate	Class C+Accel.
Int.	1	Intermediate 1S - Tail	184	1.68	13.2	5%	6,960	Circulate	Class C+Ret., Disper.
Int.	2	Intermediate 2S - Tail BH	1241	1.71	13.3	25%	-	Bradenhead	Class C+Accel.
Prod.	1	Production - Tail	650	1.84	13.3	25%	7,828	Circulate	Class C+Ret.

# Oxy USA Inc. - TOP SPOT 12\_13 FED COM 12H Drill Plan

## 1. Geologic Formations

TVD of Target (ft):	8989	Pilot Hole Depth (ft):	
Total Measured Depth (ft):	19313	Deepest Expected Fresh Water (ft):	830

### Delaware Basin

Formation	MD-RKB (ft)	TVD-RKB (ft)	Expected Fluids
Rustler	830	830	
Salado	1125	1125	Salt
Marker Bed 126	2000	2000	Salt
Castile	2855	2855	Salt
Delaware	4525	4518	Oil/Gas/Brine
Bell Canyon	4607	4599	Oil/Gas/Brine
Cherry Canyon	5446	5425	Oil/Gas/Brine
Brushy Canyon	6710	6670	Losses
Bone Spring	8486	8419	Oil/Gas
Bone Spring 1st			Oil/Gas
Bone Spring 2nd			Oil/Gas
Bone Spring 3rd			Oil/Gas
Wolfcamp			Oil/Gas
Penn			Oil/Gas
Strawn			Oil/Gas

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

## 2. Casing Program

Section	Hole Size (in)	MD		TVD		Csg. OD (in)	Csg Wt. (ppf)	Grade	Conn.
		From (ft)	To (ft)	From (ft)	To (ft)				
Surface	17.5	0	900	0	900	13.375	54.5	J-55	BTC
Intermediate	9.875	0	8328	0	8262	7.625	26.4	L-80 HC	BTC
Production	6.75	0	19313	0	8989	5.5	20	P-110	DWC/C-HT-IS

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

\*Oxy requests the option to run the 10.75" Intermediate I as a contingency string to be run only if severe hole conditions dictate an additional casing string necessary. This would make the planned 7.625" / 7.827" Casing the Intermediate II.  
 \*\*If 4S Contingency is not required, Oxy requests permission to transition from 12.25" to 9.875" Intermediate I at 1st trip point below Brushy top (estimated top in formation table above). Cement volumes will be updated on C103 submission.

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.

	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?	Y
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?	Y
Is well located in R-111-Q and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> 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 <sup>3</sup> /ft)	Density (lb/gal)	Excess:	TOC	Placement	Description
Surface	1	Surface - Tail	940	1.33	14.8	100%	-	Circulate	Class C+Accel.
Int.	1	Intermediate 1S - Tail	184	1.68	13.2	5%	6,960	Circulate	Class C+Ret., Disper.
Int.	2	Intermediate 2S - Tail BH	1241	1.71	13.3	25%	-	Bradenhead	Class C+Accel.
Prod.	1	Production - Tail	650	1.84	13.3	25%	7,828	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:	Deepest TVD Depth (ft) per Section:
9.875" Hole	13-5/8"	5M	Annular	✓	70% of working pressure	8262
		5M	Blind Ram	✓	250 psi / 5000 psi	
			Pipe Ram			
			Double Ram	✓		
			Other*			
6.75" Hole	13-5/8"	5M	Annular	✓	70% of working pressure	8989
		5M	Blind Ram	✓	250 psi / 5000 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.

	<p>Formation integrity test will be performed per 43 CFR part 3170 Subpart 3172.</p> <p>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.</p>
	<p>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.</p>
Y	<p>Are anchors required by manufacturer?</p>
	<p>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.</p> <p>See attached schematics.</p>

**BOP Break Testing Request**

Oxy requests permission to adjust the BOP break testing (intermediate and production) requirements as per the agreement reached in the OXY/BLM meeting on April 4th, 2025. 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 - MD		Depth - TVD		Type	Weight (ppg)	Viscosity	Water Loss
	From (ft)	To (ft)	From (ft)	To (ft)				
Surface	0	900	0	900	Water-Based Mud	8.6 - 8.8	40-60	N/C
Intermediate	900	8328	900	8262	Saturated Brine-Based or Oil-Based Mud	8.0 - 10.0	35-45	N/C
Production	8328	19313	8262	8989	Water-Based or Oil-Based Mud	8.0 - 9.6	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, ACL2. Oxy will use a closed mud system.

What will be used to monitor the loss or gain of fluid?	PVT/MD Totco/Visual Monitoring
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**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	4488 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	152°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 2 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: 1458 bbls**

<b>C-102</b>  Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department <b>OIL CONSERVATION DIVISION</b>	Revised July 9, 2024
		Submittal Type: <input type="checkbox"/> Initial Submittal <input checked="" type="checkbox"/> Amended Report <input type="checkbox"/> As Drilled

**WELL LOCATION INFORMATION**

API Number 30-015-56968	Pool Code 5695	Pool Name <b>BILBREY BASIN; BONE SPRING</b>
Property Code 335970	Property Name TOP SPOT 12_13 FED COM	Well Number 12H
OGRID No. 16696	Operator Name OXY USA INC.	Ground Level Elevation 3583.5'
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD 83)	Longitude (NAD 83)	County
P	13	22S	31E		520 SOUTH	1165 EAST	32.385676°	-103.726721°	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD 83)	Longitude (NAD 83)	County
A	12	22S	31E		20 NORTH	450 EAST	32.413212°	-103.724392°	EDDY

Dedicated Acres 320	Infill or Defining Well <b>INFILL</b>	Defining Well API 33H - 30-015-47953	Overlapping Spacing Unit (Y/N) <b>N</b>	Consolidation Code <b>C</b>
Order Numbers. <b>N/A</b>		Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD 83)	Longitude (NAD 83)	County
P	13	22S	31E		50 SOUTH	450 EAST	32.384382°	-103.724405°	EDDY


First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD 83)	Longitude (NAD 83)	County
P	13	22S	31E		100 SOUTH	450 EAST	32.384519°	-103.724405°	EDDY

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD 83)	Longitude (NAD 83)	County
A	12	22S	31E		100 NORTH	450 EAST	32.412992°	-103.724393°	EDDY

Unitized Area or Area of Uniform Interest <b>N</b>	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation: <b>3583.5'</b>
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<p><b>OPERATOR CERTIFICATIONS</b></p> <p><i>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.</i></p> <p><i>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.</i></p> <p><b>Melissa Guidry</b>      09/11/25</p> <hr/> Signature      Date <b>Melissa Guidry</b> <hr/> Printed Name <b>melissa_guidry@oxy.com</b> <hr/> Email Address	<p><b>SURVEYOR CERTIFICATIONS</b></p> <p><i>I hereby certify that the well location shown on this plat was plotted from the 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.</i></p> <div style="text-align: right;">  </div> <hr/> Signature and Seal of Professional Surveyor 23782      June 25, 2025 <hr/> Certificate Number      Date of Survey
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Note: No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.



OXY APD CHANGE SUNDRY LIST FORM

DATE SUNDRY WORKSHEET CREATED	9/11/2025
WELL NAME NUMBER	TOP SPOUT 12_13 FEDERAL COM 13H
APD NUMBER	30-415-5598
ESTIMATED SUD DATE	

ITEM	APD BASE LINE (For Regulatory to Complete)										SUNDRY PLAN (Groups to complete the latest plan)									
	DATE APD/BASE LINE APPROVED: 06/20/25	TOP SPOUT 12_13 FEDERAL COM 13H	MD	TVD	Yield (ft <sup>3</sup> /hr)	Density (lb/gal)	Excess	TOC	Placement	Description	Section/Stage	Sacks	Yield (ft <sup>3</sup> /hr)	Density (lb/gal)	Excess	TOC	Placement	Description		
Surface Planning	NAME	TOP SPOUT 12_13 FEDERAL COM 13H																		
	SHL	520 FSL 12467 FEL	909	903	13.375	14.8	100%	54.5	J-55	Surface	17.5	900	13.375	14.8	100%	J-55	CLASS C-ACCEL			
	PAID	520 FSL 12467 FEL	909	903	13.375	14.8	100%	54.5	J-55	Surface	17.5	900	13.375	14.8	100%	J-55	CLASS C-ACCEL			
	BHL	520 FSL 12467 FEL	909	903	13.375	14.8	100%	54.5	J-55	Surface	17.5	900	13.375	14.8	100%	J-55	CLASS C-ACCEL			
	HSU SIZE, ACRES	520 FSL 12467 FEL	909	903	13.375	14.8	100%	54.5	J-55	Surface	17.5	900	13.375	14.8	100%	J-55	CLASS C-ACCEL			
	POOL	520 FSL 12467 FEL	909	903	13.375	14.8	100%	54.5	J-55	Surface	17.5	900	13.375	14.8	100%	J-55	CLASS C-ACCEL			
	TARGET FORMATION	520 FSL 12467 FEL	909	903	13.375	14.8	100%	54.5	J-55	Surface	17.5	900	13.375	14.8	100%	J-55	CLASS C-ACCEL			
		520 FSL 12467 FEL	909	903	13.375	14.8	100%	54.5	J-55	Surface	17.5	900	13.375	14.8	100%	J-55	CLASS C-ACCEL			
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		520 FSL 12467 FEL	909	903	13.375	14.8	100%	54.5	J-55	Surface	17.5	900	13.375	14.8	100%	J-55	CLASS C-ACCEL			
Drilling	DATE APD/BASE LINE APPROVED: 09/11/25	TOP SPOUT 12_13 FEDERAL COM 13H																		
	SHL	520 FSL 11467 FEL	8248	8242	7.625	26.4	25%	6960	BTC	Surf	6.75	8248	7.625	26.4	25%	6960	CLASS C-ACCEL			
	PAID	520 FSL 11467 FEL	8248	8242	7.625	26.4	25%	6960	BTC	Surf	6.75	8248	7.625	26.4	25%	6960	CLASS C-ACCEL			
	BHL	520 FSL 11467 FEL	8248	8242	7.625	26.4	25%	6960	BTC	Surf	6.75	8248	7.625	26.4	25%	6960	CLASS C-ACCEL			
	HSU SIZE, ACRES	520 FSL 11467 FEL	8248	8242	7.625	26.4	25%	6960	BTC	Surf	6.75	8248	7.625	26.4	25%	6960	CLASS C-ACCEL			
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VARIANCES	DATE APD/BASE LINE APPROVED: 06/20/25	TOP SPOUT 12_13 FEDERAL COM 13H																		
	SHL	520 FSL 12467 FEL	909	903	13.375	14.8	100%	54.5	J-55	Surface	17.5	900	13.375	14.8	100%	J-55	CLASS C-ACCEL			
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		520 FSL 12467 FEL	909	903	13.375	14.8	100%	54.5	J-55	Surface	17.5	900	13.375	14.8	100%	J-55	CLASS C-ACCEL			
		520 FSL 12467 FEL	909	903	13.375	14.8	100%	54.5	J-55	Surface	17.5	900	13.375	14.8	100%	J-55	CLASS C-ACCEL			
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Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

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

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

CONDITIONS

Action 526945

**CONDITIONS**

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 526945
	Action Type: [C-103] NOI Change of Plans (C-103A)

**CONDITIONS**

Created By	Condition	Condition Date
ward.rikala	Any previous COA's not addressed within the updated COA's still apply.	3/16/2026