Well Name: TOP SPOT 12_13 FEDERAL COM

Well Location: T22S / R31E / SEC 13 / SESW / 32.385551 / -103.732306

County or Parish/State: EDDY / NM

Well Number: 23H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM29233

Unit or CA Name:

Unit or CA Number:

US Well Number: 3001547885

Operator: OXY USA INCORPORATED

Notice of Intent

Sundry ID: 2782150

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 03/28/2024

Time Sundry Submitted: 08:04

Date proposed operation will begin: 06/04/2024

Procedure Description: Oxy USA Inc., respectfully requests to amend the subject APD with the following updates: UPDATE 4S FALCON PLAN - THE WELL NAME, SHL, BHL, HSU SIZE, TVD, SURFACE CASING, INTERMEDIATE CASING, AND PRODUCTION CASING ARE CHANGING. The C-102, DRILL PLAN, CASING CONNECTIONS, DIRECTIONAL PLAN AND A CONTINGENCY TIE BACK ARE ATTACHED. UPDATED VARIANCE REQUESTS FOR BOP BREAK TESTING, BRADENHEAD CBL, AND OFFLINE CEMENT ARE ATTACHED. "SHL IS MOVING 48' TO THE SOUTH AND 80' TO THE WEST. THERE IS NO ADDITIONAL SURFACE DISTURBANCE RELATED TO THIS SUNDRY"

NOI Attachments

Procedure Description

TOPSPOT12_13FED23H_OXY_APD_CHANGE_SUNDRY_LIST_03.28.24_20240528065640.pdf

TOPSPOT12_13FED23H_VAM_SPRINT_SF_5.5in_20ppf_P110RY_20240522072415.pdf

TopSpot12_13Fed23H_DirectPlan_AC_20240522072401.pdf

TopSpot12_13Fed23H_DirectPlan_20240522072347.pdf

TOPSPOT12_13FED23H_DrillPlan_20240522072331.pdf

TOPSPOT12_13FED23H_2024_KPLA_Addendum_WellboreSchematics_20240522072317.pdf

TOPSPOT12_13FED23H_C102_20240522072228.pdf

TOPSPOT12_13FED23H_FalconSL1AnnClearanceVariance_20240328080309.pdf

Well Name: TOP SPOT 12_13 FEDERAL COM	**Well Location:** T22S / R31E / SEC 13 / SESW / 32.385551 / -103.732306	**County or Parish/State:** EDDY / NM
Well Number: 23H	**Type of Well:** OIL WELL	**Allottee or Tribe Name:**
Lease Number: NMNM29233	**Unit or CA Name:**	**Unit or CA Number:**
US Well Number: 3001547885	**Operator:** OXY USA INCORPORATED	

TOPSPOT12_13FED23H_OfflineCementVariance_20240328080259.pdf

TOPSPOT12_13FED23H_BradenheadCBLVariance_20240328080251.pdf

TOPSPOT12_13FED23H_BOPBreakTestingVariance_20240328080236.pdf

TOPSPOT12_13FED23H_4SFalconSL1ContingencyTiebackDetails_20240328080224.pdf

TOPSPOT12_13FED23H_API_BTC_SC_10.750in_45.50ppf_L80IC_20240328080155.pdf

TOPSPOT12_13FED23H_TNSWedge463_7.827in_39.30ppf_P110S_20240328080142.pdf

TOPSPOT12_13FED23H_TNSWedge461_5.500in_20.00ppf_P110CY_20240328080134.pdf

Conditions of Approval

Additional

TOP_SPOT_12_13_FED_23H___R111Q___SUNDRY_COA_20240531092842.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: MAY 28, 2024 07:07 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: KEITH P IMMATTY

BLM POC Title: ENGINEER

BLM POC Phone: 5759884722

BLM POC Email Address: KIMMATTY@BLM.GOV

Disposition: Approved

Disposition Date: 06/03/2024

Signature: Chris Walls

Well Name: TOP SPOT 12_13 FEDERAL COM

Well Location: T22S / R31E / SEC 13 / SESW / 32.385551 / -103.732306

County or Parish/State: EDDY / NM

Well Number: 23H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM29233

Unit or CA Name:

Unit or CA Number:

US Well Number: 3001547885

Operator: OXY USA INCORPORATED

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE *- Other instructions on page 2*

5. Lease Serial No. NMNM29233

6. If Indian, Allottee or Tribe Name

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

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

8. Well Name and No. TOP SPOT 12_13 FEDERAL COM/2

2. Name of Operator OXY USA INCORPORATED

9. API Well No. 3001547885

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

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

10. Field and Pool or Exploratory Area RED TANK; BONE SPRING/RED TANK; BONE SPRIN

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

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

Oxy USA Inc., respectfully requests to amend the subject APD with the following updates:

UPDATE 4S FALCON PLAN - THE WELL NAME, SHL, BHL, HSU SIZE, TVD, SURFACE CASING, INTERMEDIATE CASING, AND PRODUCTION CASING ARE CHANGING.

The C-102, DRILL PLAN, CASING CONNECTIONS, DIRECTIONAL PLAN AND A CONTINGENCY TIE BACK ARE ATTACHED.
UPDATED VARIANCE REQUESTS FOR BOP BREAK TESTING, BRADENHEAD CBL, AND OFFLINE CEMENT ARE ATTACHED.

"SHL IS MOVING 48' TO THE SOUTH AND 80' TO THE WEST. THERE IS NO ADDITIONAL SURFACE DISTURBANCE RELATED TO THIS SUNDRY"

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 05/28/2024

THE SPACE FOR FEDERAL OR STATE OFICE USE

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

Title Petroleum Engineer

Date 06/03/2024

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

Office CARLSBAD

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

(Instructions on page 2)

GENERAL INSTRUCTIONS

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

SPECIFIC INSTRUCTIONS

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

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

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.
AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.
PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.
ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.
EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.
Response to this request is mandatory.
The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

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

Additional Information

Location of Well

0. SHL: SESW / 473 FSL / 2397 FWL / TWSP: 22S / RANGE: 31E / SECTION: 13 / LAT: 32.385551 / LONG: -103.732306 (TVD: 0 feet, MD: 0 feet)

PPP: SESW / 100 FSL / 2200 FWL / TWSP: 22S / RANGE: 31E / SECTION: 13 / LAT: 32.38452 / LONG: -103.732946 (TVD: 10337 feet, MD: 10747 feet)

BHL: NENW / 20 FNL / 2200 FWL / TWSP: 22S / RANGE: 31E / SECTION: 12 / LAT: 32.413235 / LONG: -103.732934 (TVD: 10337 feet, MD: 21193 feet)

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	OXY USA INCORPORATED
WELL NAME & NO.:	TOP SPOT 12-13 FED COM 23H
SURFACE HOLE FOOTAGE:	425'/S & 2317'/W
BOTTOM HOLE FOOTAGE	20'/N & 2150'/W
LOCATION:	Section 13, T.22 S., R.31 E.
COUNTY:	Eddy County, New Mexico

All previous COAs still apply

COA

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

A. CASING

Note: R111Q in effect as of 5/10/2024. Operator proposes to follow updated requirements. SALT PROTECTION SET POINT REQUIRED ADJUSTED BASED ON GEOLOGY RECOMMENDATIONS (CANNOT ENTER DELAWARE AS PER R111Q REQUIREMENTS.)

Primary Casing Design:

1. The **13-3/8** inch surface casing shall be set at approximately **888** feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature

survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours in the Potash Area** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The **10-3/4** inch salt protection intermediate casing shall be set at approximately **4,435** feet **TVD**. The minimum required fill of cement behind the **10-3/4** inch intermediate casing is:

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

3. The **7-5/8** inch protection intermediate casing shall be set at approximately **9,576** feet **TVD**. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:

    Option 1 (Single Stage):

    - Cement should tie-back at least **500 feet** into previous casing string. Operator shall provide method of verification. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**

    Option 2:

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

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

    b. Second stage:

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

Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

Operator has proposed to pump down 7-5/8" X 10-3/4" annulus. Operator must top out cement after the bradenhead squeeze and verify cement to surface. Operator can also check TOC with Echo-meter. CBL must be run from TD of the 7-5/8" casing to surface if confidence is lacking on the quality of the bradenhead squeeze cement job. Submit results to BLM.

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

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

If cement does not reach surface, the next casing string must come to surface.

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

4. The **5-1/2** inch production casing shall be set at approximately **21,193** feet. The minimum required fill of cement behind the **5-1/2** inch production casing is:

    - Cement should tie-back at least **500 feet** into previous casing string. Operator shall provide method of verification.
      Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

B. SPECIAL REQUIREMENT (S)

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

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. **(Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP)**
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer **(575-706-2779)** prior to the commencement of any BOPE Break Testing

operations.

- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per 43 CFR part 3170 Subpart 3172.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

Offline Cementing

Operator has been **(Approved)** to pump the proposed cement program offline in the **Surface and intermediate(s) intervals**.

Offline cementing should commence within 24 hours of landing the casing for the interval.

Notify the BLM 4hrs prior to cementing offline at **Eddy County: 575-361-2822**.

Casing Clearance:
Overlap OK.

Operator shall clean up cycles until wellbore is clear of cuttings and any large debris, ensure cutting sizes are adequate "coffee ground or less" before cementing.

GENERAL REQUIREMENTS

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

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

- If well located in Eddy County
  EMAIL or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
  BLM_NM_CFO_DrillingNotifications@BLM.GOV
  (575) 361-2822

- If well located in Lea County
  Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,
  (575) 689-5981

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

   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
   b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
      - BOP/BOPE test to be conducted per **43 CFR part 3170 Subpart 3172** as soon as 2nd Rig is rigged up on well.

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

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

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

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

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

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

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

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

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR part 3170 Subpart 3172** and **API STD 53 Sec. 5.3**.

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

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

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

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. Whenever any seal subject to test pressure is broken, all the tests in **43 CFR part 3170 Subpart 3172** must be followed.
    e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

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

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

    b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)

    c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR part 3170**

Subpart 3172 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

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

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

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

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

h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR part 3170 Subpart 3172**.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

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

KPI 5/31/2024

OXY APD CHANGE SUNDRY LIST

DATE	3/28/2024	
WELL NAME	TOP SPOT 12_13 FEDERAL COM 23H	
API NUMBER	30-015-47885	
SPUD DATE	7/1/2024	

ITEM	PREVIOUS	UPDATE
NAME	TOP SPOT 12 13 FEDERAL COM 23H	**TOP SPOT 12_13 FED 23H**
NSL	NA	N/A
SHL	473' FSL, 2397' FWL	**425' FSL, 2317' FWL**
PAD	LSTTNK 13021	N/A
BHL	20' FNL, 2200' FWL	**20' FNL, 2150' FWL**
HSU SIZE, ACRES	640	**320**
POOL	BONESPRING	N/A
TARGET FORMATION	BILBREY BASIN, BONE SPRING	N/A
TVD	10336'	**10337'**
SURFACE CASING	875' MD, 17.5 (in), 54.5 LBS, 13.375 (in), J-55, BTC	**888' MD**, 17.5 (in), 54.5 LBS, 13.375 (in), J-55, BTC
SALT	N/A	**4565' MD, 12.25 (in), 45.5 LBS, 10.75 (in), L-80 HC, BTC-SC**
INTERMEDIATE CASING	N/A	**9649' MD, 9.875 (in), 39.3 LBS, 7.827 (in), P110S, Wedge 463**
PRODUCTION CASING	21193' MD, 8.5 (in), 20 lbs, 5.5 (in), P-110, DQX	21193' MD, **6.75 (in)**, 20 lbs, 5.5 (in), P-110, **Wedge 461**
LINER OR TIE BACK	N/A	N/A
CEMENT	Surface (Tail)- 925 sxs, 14.8 wt, 1.33 yld, Class C, Accel	**928 sxs,** 14.8 wt, 1.33 yld., Class C+Accel
	Interm (Lead) - 1036 sxs, 12.9 wt, 1.73 yld, Pozz Cement, Retarder	**640 sxs,** 12.9 wt, 1.73 yld, Class Pozz+Ret
	Interm, (Tail) - 155 sxs, 14.8 wt, 1.33 yld, Class C, Accel	**85 sxs,** 14.8 wt, 1.33 yld, Class H+Accel
		Int 2 - 1S Tail, 350 sxs, 1.32 wt, 1.65 yld, Class H+Accel, Disper, Salt
		Int 2 - 2S Tail, 882 sxs, 13.3 wt, 1.71 yld, Class C+Accel
	Prod (Lead) - 262 sxs, 13.2 wt, 1.38 yld, Class H, Ret, Dispers, Salt	**Removed**
	Prod (Tail) - 2246 sxs, 13.2 wt, 1.38 yld, Class H, Ret, Dispers, Salt	**665 sxs, 13.3 wt, 1.84 yld, Class C+Ret**
FACILITIES	NA	N/A
OTHER	NA	N/A

OTHER COMMENTS
UPDATED 4S FALCON PLAN - THE WELL NAME, SHL, BHL, HSU SIZE, TVD, SURFACE CASING, INTERMEDIATE CASING, AND PRODUCTION CASING ARE CHANGING.

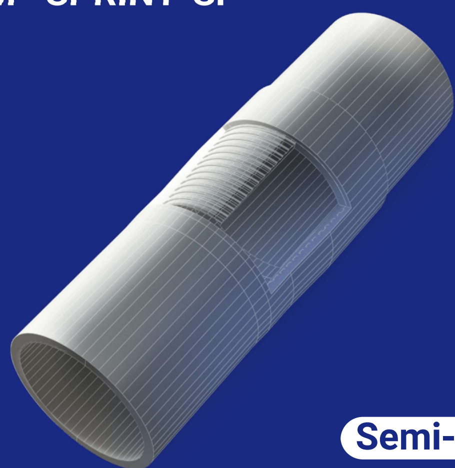
ATTACHMENTS
The C-102, DRILL PLAN, CASING CONNECTIONS, DIRECTIONAL PLAN AND A CONTINGENCY TIE BACK ARE ATTACHED. UPDATED VARIANCE REQUESTS FOR BOP BREAK TESTING, BRADENHEAD CBL, AND OFFLINE CEMENT ARE ATTACHED. **"SHL IS MOVING BY 48 FEET TO THE SOUTH AND 80 FEET TO THE WEST. THERE IS NO ADDITIONAL SURFACE DISTURBANCE RELATED TO THIS SUNDRY"**

Generated on April 25, 2024

CONNECTION DATA SHEET

OD: **5.500 in.** Grade: **P110 RY**
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	Controlled Yield	
Minimum Yield Strength	110	ksi
Maximum Yield Strength	125	ksi
Minimum Ultimate Tensile Strength	140	ksi
Pipe Body Yield Strength	641	klb
Internal Yield Pressure	12,640	psi
Collapse Pressure	11,110	psi

CONNECTION PROPERTIES

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

JOINT PERFORMANCES

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

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

ENGINEERING DESIGNS

PRD NM DIRECTIONAL PLANS (NAD 1983)
Top Spot 12_13 Fed Com
Top Spot 12_13 Fed 23H

Wellbore #1
Permitting Plan

Anticollision Summary Report

21 May, 2024

OXY

Anticollision Summary Report

Company:	ENGINEERING DESIGNS	**Local Co-ordinate Reference:**	Well Top Spot 12_13 Fed 23H
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**TVD Reference:**	RKB=25' @ 3592.90ft
Reference Site:	Top Spot 12_13 Fed Com	**MD Reference:**	RKB=25' @ 3592.90ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	Top Spot 12_13 Fed 23H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.89 ft	**Output errors are at**	2.50 sigma
Reference Wellbore	Wellbore #1	**Database:**	HOPSPP
Reference Design:	Permitting Plan	**Offset TVD Reference:**	Offset Datum

Reference	Permitting Plan		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	**Error Model:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Max. Cent. Dist. of 1,000.00ft or Max. SF of 6	**Error Surface:**	Combined Pedal Curve
Warning Levels Evaluated at:	3.50 **Sigma**	**Casing Method:**	Through Borehole Radius

Survey Tool Program **Date** 5/21/2024

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	20,556.32	Permitting Plan (Wellbore #1)	B001Mc_MWD+HRGM_R5	MWD+HRGM

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Top Spot 12_13 Fed Com						
Top Spot 12_13 Fed 22H - Wellbore #1 - Permitting Plan	4,580.00	4,580.20	30.00	5.65	1.232	Level 2 MOC, CC, ES
Top Spot 12_13 Fed 22H - Wellbore #1 - Permitting Plan	4,600.00	4,600.20	30.04	5.65	1.232	Level 2 MOC, SF

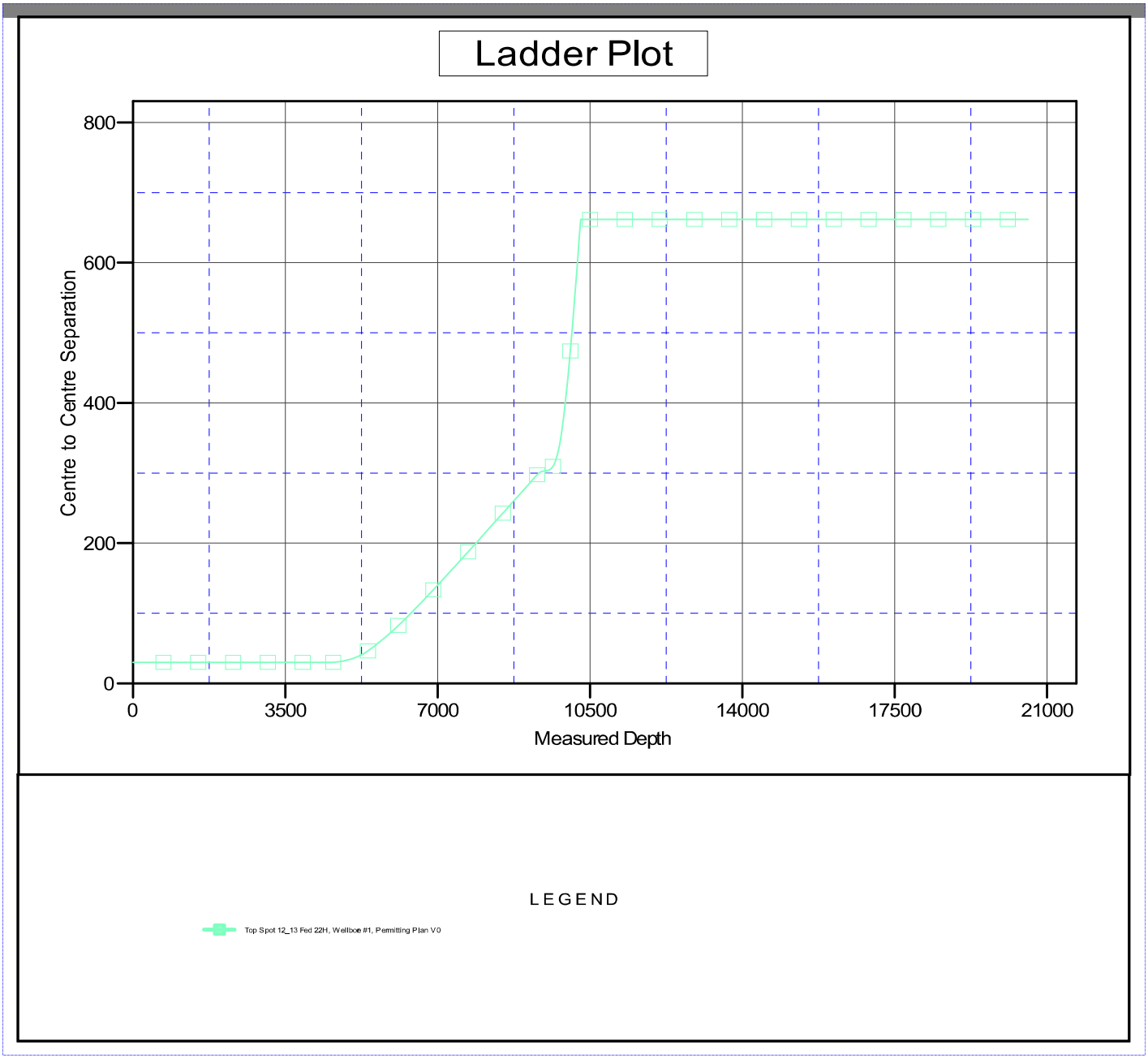
OXY

Anticollision Summary Report

Company:	ENGINEERING DESIGNS	**Local Co-ordinate Reference:**	Well Top Spot 12_13 Fed 23H
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**TVD Reference:**	RKB=25' @ 3592.90ft
Reference Site:	Top Spot 12_13 Fed Com	**MD Reference:**	RKB=25' @ 3592.90ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	Top Spot 12_13 Fed 23H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.89 ft	**Output errors are at**	2.50 sigma
Reference Wellbore	Wellbore #1	**Database:**	HOPSPP
Reference Design:	Permitting Plan	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to RKB=25' @ 3592.90ft
Offset Depths are relative to Offset Datum
Central Meridian is -104.333334

Coordinates are relative to: Top Spot 12_13 Fed 23H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.32°



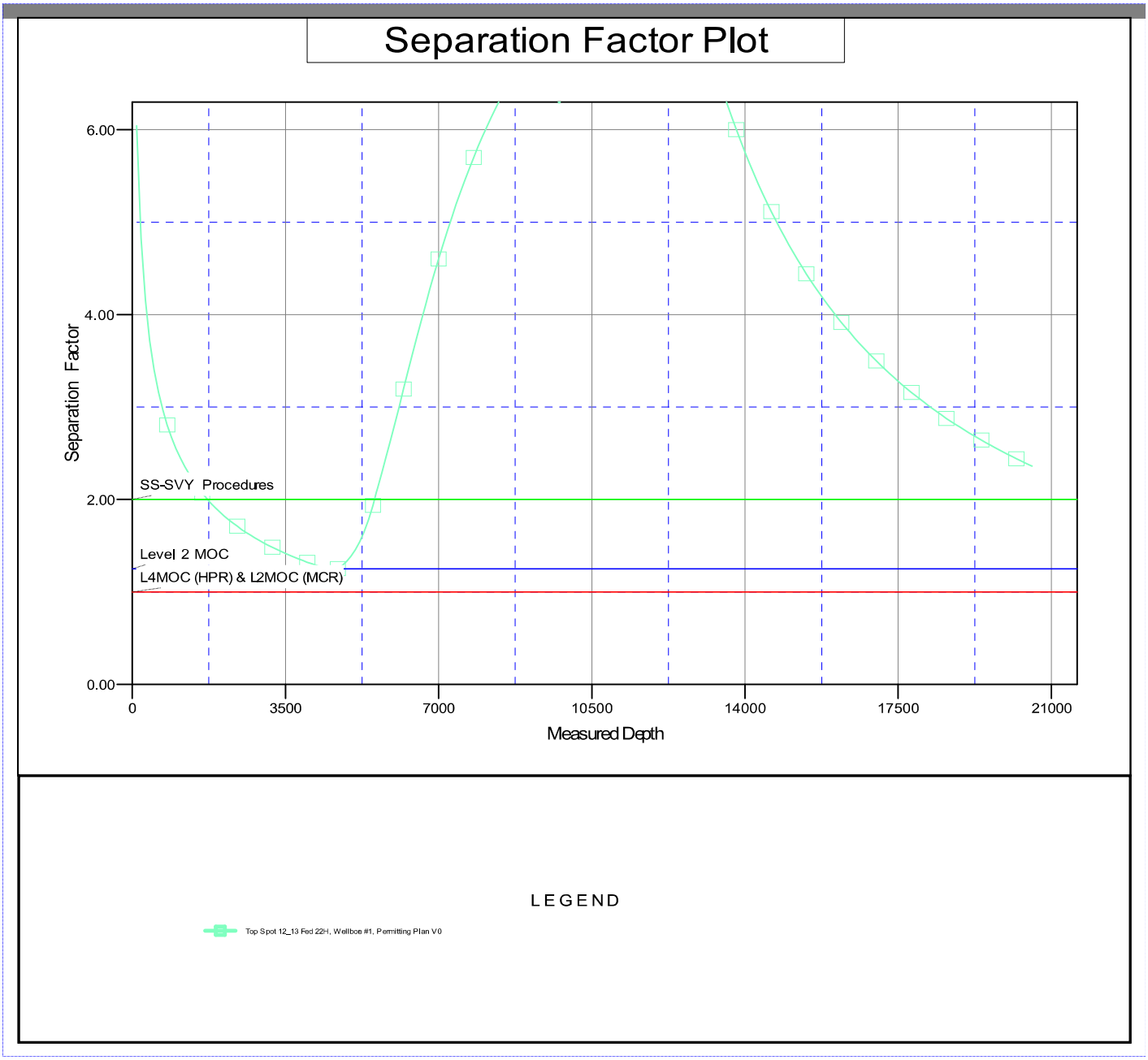
CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

OXY

Anticollision Summary Report

Company:	ENGINEERING DESIGNS	**Local Co-ordinate Reference:**	Well Top Spot 12_13 Fed 23H
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**TVD Reference:**	RKB=25' @ 3592.90ft
Reference Site:	Top Spot 12_13 Fed Com	**MD Reference:**	RKB=25' @ 3592.90ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	Top Spot 12_13 Fed 23H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.89 ft	**Output errors are at**	2.50 sigma
Reference Wellbore	Wellbore #1	**Database:**	HOPSPP
Reference Design:	Permitting Plan	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to RKB=25' @ 3592.90ft	Coordinates are relative to: Top Spot 12_13 Fed 23H
Offset Depths are relative to Offset Datum	Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Central Meridian is -104.333334	Grid Convergence at Surface is: 0.32°



CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

OXY

PRD NM DIRECTIONAL PLANS (NAD 1983)
Top Spot 12_13 Fed Com
Top Spot 12_13 Fed 23H

Wellbore #1

Plan: Permitting Plan

Standard Planning Report

21 March, 2024

OXY
Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Top Spot 12_13 Fed 23H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=25' @ 3592.90ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=25' @ 3592.90ft
Site:	Top Spot 12_13 Fed Com	**North Reference:**	Grid
Well:	Top Spot 12_13 Fed 23H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Project PRD NM DIRECTIONAL PLANS (NAD 1983)

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

Site Top Spot 12_13 Fed Com

Site Position:		**Northing:**	514,494.39 usft	**Latitude:**	32.413000
From:	Map	**Easting:**	725,461.56 usft	**Longitude:**	-103.736677
Position Uncertainty:	0.00 ft	**Slot Radius:**	13.200 in		

Well Top Spot 12_13 Fed 23H

Well Position	**+N/-S**	0.00 ft	**Northing:**	504,467.90 usf	**Latitude:**	32.385420
	+E/-W	0.00 ft	**Easting:**	726,786.90 usf	**Longitude:**	-103.732565
Position Uncertainty		0.89 ft	**Wellhead Elevation:**	0.00 ft	**Ground Level:**	3,567.90 ft
Grid Convergence:		0.32 °				

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM_FILE	11/6/2019	6.75	60.12	48,028.30000000

Design Permitting Plan

Audit Notes:

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

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	358.76

Plan Survey Tool Program **Date** 3/21/2024

	Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	20,556.32	Permitting Plan (Wellbore #1)	B001Mc_MWD+HRGM_R5	
				MWD+HRGM	

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,580.00	0.00	0.00	4,580.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,580.14	10.00	191.09	5,575.07	-85.44	-16.75	1.00	1.00	0.00	191.09	
9,286.29	10.00	191.09	9,224.90	-717.08	-140.57	0.00	0.00	0.00	0.00	
10,284.32	90.00	359.71	9,895.00	-152.61	-166.79	10.00	8.02	16.89	168.44	
20,556.32	90.00	359.71	9,895.00	10,119.25	-219.42	0.00	0.00	0.00	0.00	PBHL (Top Spot

OXY

Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Top Spot 12_13 Fed 23H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=25' @ 3592.90ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=25' @ 3592.90ft
Site:	Top Spot 12_13 Fed Com	**North Reference:**	Grid
Well:	Top Spot 12_13 Fed 23H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,580.00	0.00	0.00	4,580.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.20	191.09	4,600.00	-0.03	-0.01	-0.03	1.00	1.00	0.00
4,700.00	1.20	191.09	4,699.99	-1.23	-0.24	-1.23	1.00	1.00	0.00
4,800.00	2.20	191.09	4,799.95	-4.14	-0.81	-4.13	1.00	1.00	0.00
4,900.00	3.20	191.09	4,899.83	-8.77	-1.72	-8.73	1.00	1.00	0.00
5,000.00	4.20	191.09	4,999.62	-15.10	-2.96	-15.03	1.00	1.00	0.00
5,100.00	5.20	191.09	5,099.29	-23.14	-4.54	-23.04	1.00	1.00	0.00
5,200.00	6.20	191.09	5,198.79	-32.89	-6.45	-32.74	1.00	1.00	0.00
5,300.00	7.20	191.09	5,298.11	-44.34	-8.69	-44.14	1.00	1.00	0.00

OXY

Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Top Spot 12_13 Fed 23H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=25' @ 3592.90ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=25' @ 3592.90ft
Site:	Top Spot 12_13 Fed Com	**North Reference:**	Grid
Well:	Top Spot 12_13 Fed 23H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,400.00	8.20	191.09	5,397.20	-57.48	-11.27	-57.23	1.00	1.00	0.00
5,500.00	9.20	191.09	5,496.05	-72.33	-14.18	-72.00	1.00	1.00	0.00
5,580.14	10.00	191.09	5,575.07	-85.44	-16.75	-85.06	1.00	1.00	0.00
5,600.00	10.00	191.09	5,594.63	-88.83	-17.41	-88.43	0.00	0.00	0.00
5,700.00	10.00	191.09	5,693.11	-105.87	-20.75	-105.40	0.00	0.00	0.00
5,800.00	10.00	191.09	5,791.59	-122.91	-24.09	-122.36	0.00	0.00	0.00
5,900.00	10.00	191.09	5,890.07	-139.96	-27.44	-139.33	0.00	0.00	0.00
6,000.00	10.00	191.09	5,988.55	-157.00	-30.78	-156.30	0.00	0.00	0.00
6,100.00	10.00	191.09	6,087.03	-174.04	-34.12	-173.26	0.00	0.00	0.00
6,200.00	10.00	191.09	6,185.51	-191.09	-37.46	-190.23	0.00	0.00	0.00
6,300.00	10.00	191.09	6,283.99	-208.13	-40.80	-207.20	0.00	0.00	0.00
6,400.00	10.00	191.09	6,382.47	-225.17	-44.14	-224.16	0.00	0.00	0.00
6,500.00	10.00	191.09	6,480.95	-242.21	-47.48	-241.13	0.00	0.00	0.00
6,600.00	10.00	191.09	6,579.43	-259.26	-50.82	-258.09	0.00	0.00	0.00
6,700.00	10.00	191.09	6,677.91	-276.30	-54.16	-275.06	0.00	0.00	0.00
6,800.00	10.00	191.09	6,776.39	-293.34	-57.50	-292.03	0.00	0.00	0.00
6,900.00	10.00	191.09	6,874.87	-310.39	-60.84	-308.99	0.00	0.00	0.00
7,000.00	10.00	191.09	6,973.35	-327.43	-64.19	-325.96	0.00	0.00	0.00
7,100.00	10.00	191.09	7,071.83	-344.47	-67.53	-342.93	0.00	0.00	0.00
7,200.00	10.00	191.09	7,170.31	-361.51	-70.87	-359.89	0.00	0.00	0.00
7,300.00	10.00	191.09	7,268.79	-378.56	-74.21	-376.86	0.00	0.00	0.00
7,400.00	10.00	191.09	7,367.27	-395.60	-77.55	-393.83	0.00	0.00	0.00
7,500.00	10.00	191.09	7,465.75	-412.64	-80.89	-410.79	0.00	0.00	0.00
7,600.00	10.00	191.09	7,564.23	-429.69	-84.23	-427.76	0.00	0.00	0.00
7,700.00	10.00	191.09	7,662.71	-446.73	-87.57	-444.73	0.00	0.00	0.00
7,800.00	10.00	191.09	7,761.19	-463.77	-90.91	-461.69	0.00	0.00	0.00
7,900.00	10.00	191.09	7,859.67	-480.81	-94.25	-478.66	0.00	0.00	0.00
8,000.00	10.00	191.09	7,958.16	-497.86	-97.59	-495.63	0.00	0.00	0.00
8,100.00	10.00	191.09	8,056.64	-514.90	-100.94	-512.59	0.00	0.00	0.00
8,200.00	10.00	191.09	8,155.12	-531.94	-104.28	-529.56	0.00	0.00	0.00
8,300.00	10.00	191.09	8,253.60	-548.99	-107.62	-546.52	0.00	0.00	0.00
8,400.00	10.00	191.09	8,352.08	-566.03	-110.96	-563.49	0.00	0.00	0.00
8,500.00	10.00	191.09	8,450.56	-583.07	-114.30	-580.46	0.00	0.00	0.00
8,600.00	10.00	191.09	8,549.04	-600.12	-117.64	-597.42	0.00	0.00	0.00
8,700.00	10.00	191.09	8,647.52	-617.16	-120.98	-614.39	0.00	0.00	0.00
8,800.00	10.00	191.09	8,746.00	-634.20	-124.32	-631.36	0.00	0.00	0.00
8,900.00	10.00	191.09	8,844.48	-651.24	-127.66	-648.32	0.00	0.00	0.00
9,000.00	10.00	191.09	8,942.96	-668.29	-131.00	-665.29	0.00	0.00	0.00
9,100.00	10.00	191.09	9,041.44	-685.33	-134.34	-682.26	0.00	0.00	0.00
9,200.00	10.00	191.09	9,139.92	-702.37	-137.69	-699.22	0.00	0.00	0.00
9,286.29	10.00	191.09	9,224.90	-717.08	-140.57	-713.86	0.00	0.00	0.00
9,300.00	8.66	192.91	9,238.43	-719.25	-141.03	-716.03	10.00	-9.77	13.30
9,400.00	2.54	307.91	9,338.06	-725.25	-144.47	-721.95	10.00	-6.13	114.99
9,500.00	11.74	350.06	9,437.22	-713.84	-147.98	-710.47	10.00	9.20	42.15
9,600.00	21.66	354.68	9,532.89	-685.38	-151.45	-681.94	10.00	9.92	4.62
9,700.00	31.62	356.47	9,622.16	-640.73	-154.79	-637.22	10.00	9.97	1.79
9,800.00	41.61	357.46	9,702.32	-581.24	-157.88	-577.68	10.00	9.98	0.99
9,900.00	51.60	358.13	9,770.94	-508.73	-160.64	-505.13	10.00	9.99	0.67
10,000.00	61.59	358.63	9,825.93	-425.39	-162.99	-421.76	10.00	9.99	0.50
10,100.00	71.58	359.04	9,865.63	-333.76	-164.84	-330.11	10.00	9.99	0.41
10,200.00	81.57	359.41	9,888.81	-236.63	-166.14	-232.97	10.00	9.99	0.37
10,284.32	90.00	359.71	9,895.00	-152.61	-166.79	-148.96	10.00	9.99	0.35
10,300.00	90.00	359.71	9,895.00	-136.93	-166.87	-133.28	0.00	0.00	0.00
10,400.00	90.00	359.71	9,895.00	-36.93	-167.38	-33.30	0.00	0.00	0.00
10,500.00	90.00	359.71	9,895.00	63.07	-167.89	66.69	0.00	0.00	0.00

OXY

Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Top Spot 12_13 Fed 23H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=25' @ 3592.90ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=25' @ 3592.90ft
Site:	Top Spot 12_13 Fed Com	**North Reference:**	Grid
Well:	Top Spot 12_13 Fed 23H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,600.00	90.00	359.71	9,895.00	163.06	-168.41	166.68	0.00	0.00	0.00
10,700.00	90.00	359.71	9,895.00	263.06	-168.92	266.66	0.00	0.00	0.00
10,800.00	90.00	359.71	9,895.00	363.06	-169.43	366.65	0.00	0.00	0.00
10,900.00	90.00	359.71	9,895.00	463.06	-169.94	466.64	0.00	0.00	0.00
11,000.00	90.00	359.71	9,895.00	563.06	-170.45	566.62	0.00	0.00	0.00
11,100.00	90.00	359.71	9,895.00	663.06	-170.97	666.61	0.00	0.00	0.00
11,200.00	90.00	359.71	9,895.00	763.06	-171.48	766.59	0.00	0.00	0.00
11,300.00	90.00	359.71	9,895.00	863.06	-171.99	866.58	0.00	0.00	0.00
11,400.00	90.00	359.71	9,895.00	963.05	-172.50	966.57	0.00	0.00	0.00
11,500.00	90.00	359.71	9,895.00	1,063.05	-173.02	1,066.55	0.00	0.00	0.00
11,600.00	90.00	359.71	9,895.00	1,163.05	-173.53	1,166.54	0.00	0.00	0.00
11,700.00	90.00	359.71	9,895.00	1,263.05	-174.04	1,266.53	0.00	0.00	0.00
11,800.00	90.00	359.71	9,895.00	1,363.05	-174.55	1,366.51	0.00	0.00	0.00
11,900.00	90.00	359.71	9,895.00	1,463.05	-175.07	1,466.50	0.00	0.00	0.00
12,000.00	90.00	359.71	9,895.00	1,563.05	-175.58	1,566.48	0.00	0.00	0.00
12,100.00	90.00	359.71	9,895.00	1,663.04	-176.09	1,666.47	0.00	0.00	0.00
12,200.00	90.00	359.71	9,895.00	1,763.04	-176.60	1,766.46	0.00	0.00	0.00
12,300.00	90.00	359.71	9,895.00	1,863.04	-177.12	1,866.44	0.00	0.00	0.00
12,400.00	90.00	359.71	9,895.00	1,963.04	-177.63	1,966.43	0.00	0.00	0.00
12,500.00	90.00	359.71	9,895.00	2,063.04	-178.14	2,066.42	0.00	0.00	0.00
12,600.00	90.00	359.71	9,895.00	2,163.04	-178.65	2,166.40	0.00	0.00	0.00
12,700.00	90.00	359.71	9,895.00	2,263.04	-179.17	2,266.39	0.00	0.00	0.00
12,800.00	90.00	359.71	9,895.00	2,363.04	-179.68	2,366.38	0.00	0.00	0.00
12,900.00	90.00	359.71	9,895.00	2,463.03	-180.19	2,466.36	0.00	0.00	0.00
13,000.00	90.00	359.71	9,895.00	2,563.03	-180.70	2,566.35	0.00	0.00	0.00
13,100.00	90.00	359.71	9,895.00	2,663.03	-181.22	2,666.33	0.00	0.00	0.00
13,200.00	90.00	359.71	9,895.00	2,763.03	-181.73	2,766.32	0.00	0.00	0.00
13,300.00	90.00	359.71	9,895.00	2,863.03	-182.24	2,866.31	0.00	0.00	0.00
13,400.00	90.00	359.71	9,895.00	2,963.03	-182.75	2,966.29	0.00	0.00	0.00
13,500.00	90.00	359.71	9,895.00	3,063.03	-183.26	3,066.28	0.00	0.00	0.00
13,600.00	90.00	359.71	9,895.00	3,163.03	-183.78	3,166.27	0.00	0.00	0.00
13,700.00	90.00	359.71	9,895.00	3,263.02	-184.29	3,266.25	0.00	0.00	0.00
13,800.00	90.00	359.71	9,895.00	3,363.02	-184.80	3,366.24	0.00	0.00	0.00
13,900.00	90.00	359.71	9,895.00	3,463.02	-185.31	3,466.22	0.00	0.00	0.00
14,000.00	90.00	359.71	9,895.00	3,563.02	-185.83	3,566.21	0.00	0.00	0.00
14,100.00	90.00	359.71	9,895.00	3,663.02	-186.34	3,666.20	0.00	0.00	0.00
14,200.00	90.00	359.71	9,895.00	3,763.02	-186.85	3,766.18	0.00	0.00	0.00
14,300.00	90.00	359.71	9,895.00	3,863.02	-187.36	3,866.17	0.00	0.00	0.00
14,400.00	90.00	359.71	9,895.00	3,963.01	-187.88	3,966.16	0.00	0.00	0.00
14,500.00	90.00	359.71	9,895.00	4,063.01	-188.39	4,066.14	0.00	0.00	0.00
14,600.00	90.00	359.71	9,895.00	4,163.01	-188.90	4,166.13	0.00	0.00	0.00
14,700.00	90.00	359.71	9,895.00	4,263.01	-189.41	4,266.12	0.00	0.00	0.00
14,800.00	90.00	359.71	9,895.00	4,363.01	-189.93	4,366.10	0.00	0.00	0.00
14,900.00	90.00	359.71	9,895.00	4,463.01	-190.44	4,466.09	0.00	0.00	0.00
15,000.00	90.00	359.71	9,895.00	4,563.01	-190.95	4,566.07	0.00	0.00	0.00
15,100.00	90.00	359.71	9,895.00	4,663.01	-191.46	4,666.06	0.00	0.00	0.00
15,200.00	90.00	359.71	9,895.00	4,763.00	-191.98	4,766.05	0.00	0.00	0.00
15,300.00	90.00	359.71	9,895.00	4,863.00	-192.49	4,866.03	0.00	0.00	0.00
15,400.00	90.00	359.71	9,895.00	4,963.00	-193.00	4,966.02	0.00	0.00	0.00
15,500.00	90.00	359.71	9,895.00	5,063.00	-193.51	5,066.01	0.00	0.00	0.00
15,600.00	90.00	359.71	9,895.00	5,163.00	-194.03	5,165.99	0.00	0.00	0.00
15,700.00	90.00	359.71	9,895.00	5,263.00	-194.54	5,265.98	0.00	0.00	0.00
15,800.00	90.00	359.71	9,895.00	5,363.00	-195.05	5,365.96	0.00	0.00	0.00
15,900.00	90.00	359.71	9,895.00	5,462.99	-195.56	5,465.95	0.00	0.00	0.00
16,000.00	90.00	359.71	9,895.00	5,562.99	-196.08	5,565.94	0.00	0.00	0.00

OXY
Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Top Spot 12_13 Fed 23H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=25' @ 3592.90ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=25' @ 3592.90ft
Site:	Top Spot 12_13 Fed Com	**North Reference:**	Grid
Well:	Top Spot 12_13 Fed 23H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
16,100.00	90.00	359.71	9,895.00	5,662.99	-196.59	5,665.92	0.00	0.00	0.00
16,200.00	90.00	359.71	9,895.00	5,762.99	-197.10	5,765.91	0.00	0.00	0.00
16,300.00	90.00	359.71	9,895.00	5,862.99	-197.61	5,865.90	0.00	0.00	0.00
16,400.00	90.00	359.71	9,895.00	5,962.99	-198.12	5,965.88	0.00	0.00	0.00
16,500.00	90.00	359.71	9,895.00	6,062.99	-198.64	6,065.87	0.00	0.00	0.00
16,600.00	90.00	359.71	9,895.00	6,162.99	-199.15	6,165.85	0.00	0.00	0.00
16,700.00	90.00	359.71	9,895.00	6,262.98	-199.66	6,265.84	0.00	0.00	0.00
16,800.00	90.00	359.71	9,895.00	6,362.98	-200.17	6,365.83	0.00	0.00	0.00
16,900.00	90.00	359.71	9,895.00	6,462.98	-200.69	6,465.81	0.00	0.00	0.00
17,000.00	90.00	359.71	9,895.00	6,562.98	-201.20	6,565.80	0.00	0.00	0.00
17,100.00	90.00	359.71	9,895.00	6,662.98	-201.71	6,665.79	0.00	0.00	0.00
17,200.00	90.00	359.71	9,895.00	6,762.98	-202.22	6,765.77	0.00	0.00	0.00
17,300.00	90.00	359.71	9,895.00	6,862.98	-202.74	6,865.76	0.00	0.00	0.00
17,400.00	90.00	359.71	9,895.00	6,962.98	-203.25	6,965.75	0.00	0.00	0.00
17,500.00	90.00	359.71	9,895.00	7,062.97	-203.76	7,065.73	0.00	0.00	0.00
17,600.00	90.00	359.71	9,895.00	7,162.97	-204.27	7,165.72	0.00	0.00	0.00
17,700.00	90.00	359.71	9,895.00	7,262.97	-204.79	7,265.70	0.00	0.00	0.00
17,800.00	90.00	359.71	9,895.00	7,362.97	-205.30	7,365.69	0.00	0.00	0.00
17,900.00	90.00	359.71	9,895.00	7,462.97	-205.81	7,465.68	0.00	0.00	0.00
18,000.00	90.00	359.71	9,895.00	7,562.97	-206.32	7,565.66	0.00	0.00	0.00
18,100.00	90.00	359.71	9,895.00	7,662.97	-206.84	7,665.65	0.00	0.00	0.00
18,200.00	90.00	359.71	9,895.00	7,762.96	-207.35	7,765.64	0.00	0.00	0.00
18,300.00	90.00	359.71	9,895.00	7,862.96	-207.86	7,865.62	0.00	0.00	0.00
18,400.00	90.00	359.71	9,895.00	7,962.96	-208.37	7,965.61	0.00	0.00	0.00
18,500.00	90.00	359.71	9,895.00	8,062.96	-208.89	8,065.59	0.00	0.00	0.00
18,600.00	90.00	359.71	9,895.00	8,162.96	-209.40	8,165.58	0.00	0.00	0.00
18,700.00	90.00	359.71	9,895.00	8,262.96	-209.91	8,265.57	0.00	0.00	0.00
18,800.00	90.00	359.71	9,895.00	8,362.96	-210.42	8,365.55	0.00	0.00	0.00
18,900.00	90.00	359.71	9,895.00	8,462.96	-210.93	8,465.54	0.00	0.00	0.00
19,000.00	90.00	359.71	9,895.00	8,562.95	-211.45	8,565.53	0.00	0.00	0.00
19,100.00	90.00	359.71	9,895.00	8,662.95	-211.96	8,665.51	0.00	0.00	0.00
19,200.00	90.00	359.71	9,895.00	8,762.95	-212.47	8,765.50	0.00	0.00	0.00
19,300.00	90.00	359.71	9,895.00	8,862.95	-212.98	8,865.48	0.00	0.00	0.00
19,400.00	90.00	359.71	9,895.00	8,962.95	-213.50	8,965.47	0.00	0.00	0.00
19,500.00	90.00	359.71	9,895.00	9,062.95	-214.01	9,065.46	0.00	0.00	0.00
19,600.00	90.00	359.71	9,895.00	9,162.95	-214.52	9,165.44	0.00	0.00	0.00
19,700.00	90.00	359.71	9,895.00	9,262.95	-215.03	9,265.43	0.00	0.00	0.00
19,800.00	90.00	359.71	9,895.00	9,362.94	-215.55	9,365.42	0.00	0.00	0.00
19,900.00	90.00	359.71	9,895.00	9,462.94	-216.06	9,465.40	0.00	0.00	0.00
20,000.00	90.00	359.71	9,895.00	9,562.94	-216.57	9,565.39	0.00	0.00	0.00
20,100.00	90.00	359.71	9,895.00	9,662.94	-217.08	9,665.38	0.00	0.00	0.00
20,200.00	90.00	359.71	9,895.00	9,762.94	-217.60	9,765.36	0.00	0.00	0.00
20,300.00	90.00	359.71	9,895.00	9,862.94	-218.11	9,865.35	0.00	0.00	0.00
20,400.00	90.00	359.71	9,895.00	9,962.94	-218.62	9,965.33	0.00	0.00	0.00
20,500.00	90.00	359.71	9,895.00	10,062.93	-219.13	10,065.32	0.00	0.00	0.00
20,556.32	90.00	359.71	9,895.00	10,119.25	-219.42	10,121.63	0.00	0.00	0.00

OXY

Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Top Spot 12_13 Fed 23H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=25' @ 3592.90ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=25' @ 3592.90ft
Site:	Top Spot 12_13 Fed Com	**North Reference:**	Grid
Well:	Top Spot 12_13 Fed 23H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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 744.23ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E) - Point	0.00	0.00	0.00	-726.02	-163.64	503,741.92	726,623.27	32.383427	-103.733108
FTP (Top Spot 12_13 - plan misses target center by 25.73ft at 10114.32ft MD (9869.98 TVD, -320.12 N, -165.06 E) - Point	0.00	0.00	9,895.00	-326.08	-165.90	504,141.84	726,621.01	32.384526	-103.733108
PBHL (Top Spot - plan hits target center - Point	0.00	0.00	9,895.00	10,119.25	-219.42	514,586.61	726,567.49	32.413236	-103.733091

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
827.90	827.90	RUSTLER			
1,130.90	1,130.90	SALADO			
2,882.90	2,882.90	CASTILE			
4,464.90	4,464.90	DELAWARE			
4,511.90	4,511.90	BELL CANYON			
5,419.91	5,416.90	CHERRY CANYON			
6,613.68	6,592.90	BRUSHY CANYON			
8,398.81	8,350.90	BONE SPRING			
9,545.02	9,480.90	BONE SPRING 1ST			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
4,005.00	4,005.00	0.00	0.00	Build 2°/100'
4,505.12	4,502.61	-43.10	-4.83	Hold 10° Tangent
9,748.71	9,676.17	-891.92	-100.01	KOP, Build & Turn 10°/100'
10,747.01	10,336.90	-315.76	-115.76	Landing Point
21,193.42				TD at 21193.42' MD

Oxy USA Inc. - TOP SPOT 12_13 FED 23H
Drill Plan

1. Geologic Formations

TVD of Target (ft):	10337	Pilot Hole Depth (ft):	
Total Measured Depth (ft):	21193	Deepest Expected Fresh Water (ft):	828

Delaware Basin

Formation	MD-RKB (ft)	TVD-RKB (ft)	Expected Fluids
Rustler	828	828	
Salado	1131	1131	Salt
Castile	2883	2883	Salt
Delaware	4465	4465	Oil/Gas/Brine
Bell Canyon	4512	4512	Oil/Gas/Brine
Cherry Canyon	5420	5417	Oil/Gas/Brine
Brushy Canyon	6614	6593	Losses
Bone Spring	8399	8351	Oil/Gas
Bone Spring 1st	9545	9481	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

		MD		TVD					
Section	Hole Size (in)	From (ft)	To (ft)	From (ft)	To (ft)	Csg. OD (in)	Csg Wt. (ppf)	Grade	Conn.
Surface	17.5	0	888	0	888	13.375	54.5	J-55	BTC
Salt	12.25	0	4565	0	4565	10.75	45.5	L-80 HC	BTC-SC
Intermediate	9.875	0	9649	0	9576	7.625	26.4	L-80 HC	BTC
Production	6.75	0	21193	0	10337	5.5	20	P-110	Sprint-SF

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

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

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

3. Cementing Program

Section	Stage	Slurry:	Sacks	Yield (ft^3/ft)	Density (lb/gal)	Excess:	TOC	Placement	Description
Surface	1	Surface - Tail	928	1.33	14.8	100%	-	Circulate	Class C+Accel.
Int.1	1	Intermediate - Tail	85	1.33	14.8	20%	4,065	Circulate	Class C+Accel.
Int.1	1	Intermediate - Lead	640	1.73	12.9	50%	-	Circulate	Class Pozz+Ret.
Int. 2	1	Intermediate 1S - Tail	175	1.68	13.2	5%	6,864	Circulate	Class C+Ret., Disper.
Int. 2	2	Intermediate 2S - Tail BH	764	1.71	13.3	25%	-	Bradenhead Post-Frac	Class C+Accel.
Prod.	1	Production - Tail	682	1.84	13.3	25%	9,149	Circulate	Class C+Ret.

Offline Cementing Request

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

Bradenhead CBL Request

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

4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	✓	Tested to:	TVD Depth (ft) per Section:
12.25" Hole	13-5/8"	5M	Annular	✓	70% of working pressure	4565
		5M	Blind Ram	✓	250 psi / 5000 psi	
			Pipe Ram			
			Double Ram	✓		
			Other*			
9.875" Hole	13-5/8"	5M	Annular	✓	70% of working pressure	9576
		5M	Blind Ram	✓	250 psi / 5000 psi	
			Pipe Ram			
			Double Ram	✓		
			Other*			
6.75" Hole	13-5/8"	5M	Annular	✓	70% of working pressure	10337
		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.

	Formation integrity test will be performed per 43 CFR part 3170 Subpart 3172.
	On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with 43 CFR part 3170 Subpart 3172.
	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.
	Y — Are anchors required by manufacturer?
	A multibowl or a unionized multibowl wellhead system will be employed. The wellhead and connection to the BOPE will meet all API 6A requirements. The BOP will be tested per 43 CFR part 3170 Subpart 3172 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested. We will test the flange connection of the wellhead with a test port that is directly in the flange. We are proposing that we will run the wellhead through the rotary prior to cementing surface casing as discussed with the BLM on October 8, 2015. See attached schematics.

BOP Break Testing Request

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

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

5. Mud Program

Section	Depth		Depth - TVD		Type	Weight (ppg)	Viscosity	Water Loss
	From (ft)	To (ft)	From (ft)	To (ft)				
Surface	0	888	0	888	Water-Based Mud	8.6 - 8.8	40-60	N/C
Intermediate 1	888	4565	888	4565	Saturated Brine-Based or Oil-Based Mud	8.0 - 10.0	35-45	N/C
Intermediate 2	4565	9649	4565	9576	Water-Based or Oil-Based Mud	8.0 - 10.0	38-50	N/C
Production	9649	21193	9576	10337	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, CACL2. Oxy will use a closed mud system.

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

6. Logging and Testing Procedures

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

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

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	5161 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	163°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

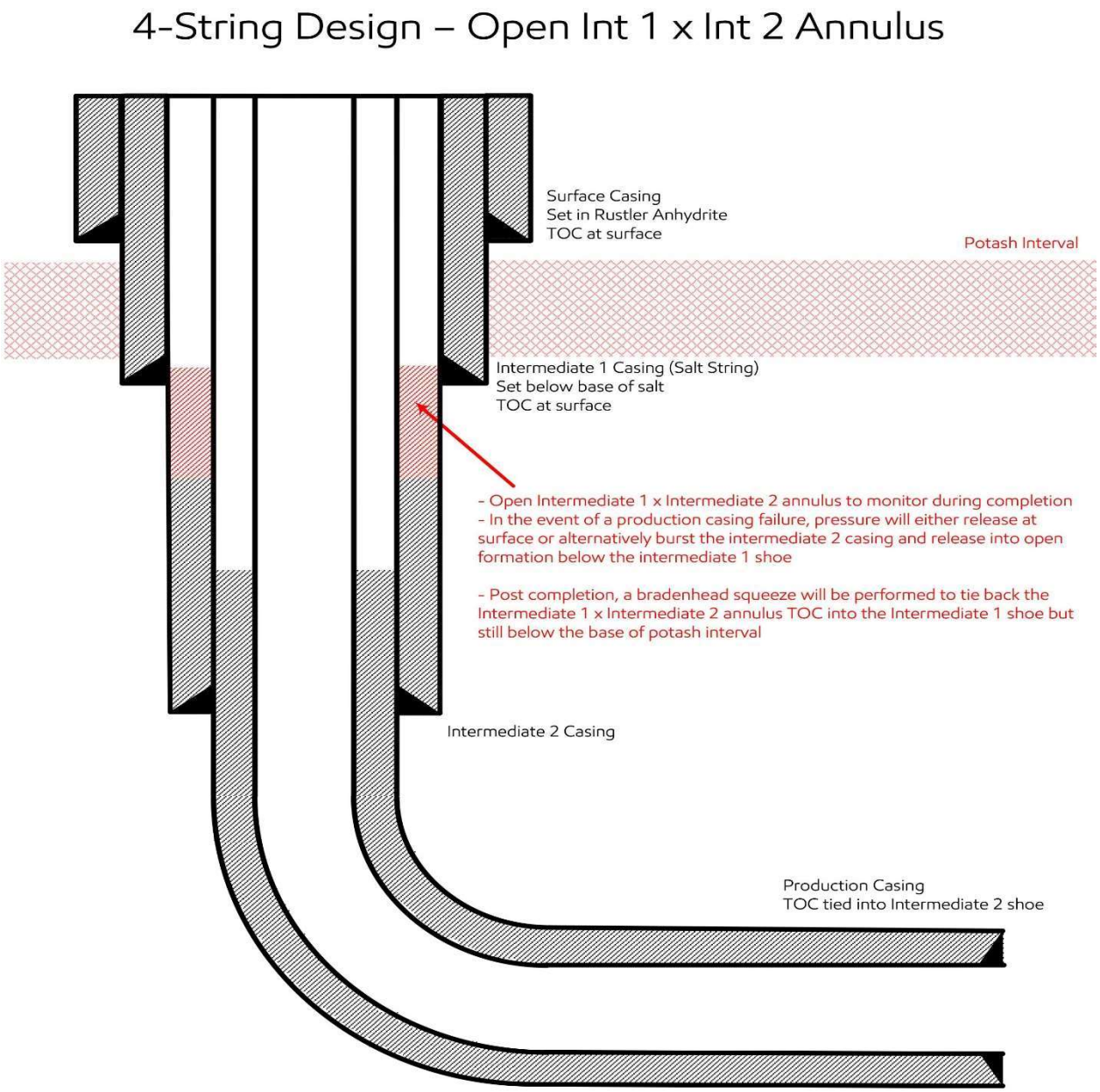
Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of 43 CFR part 3170 Subpart 3172. If Hydrogen Sulfide is encountered, measured values and formations will be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

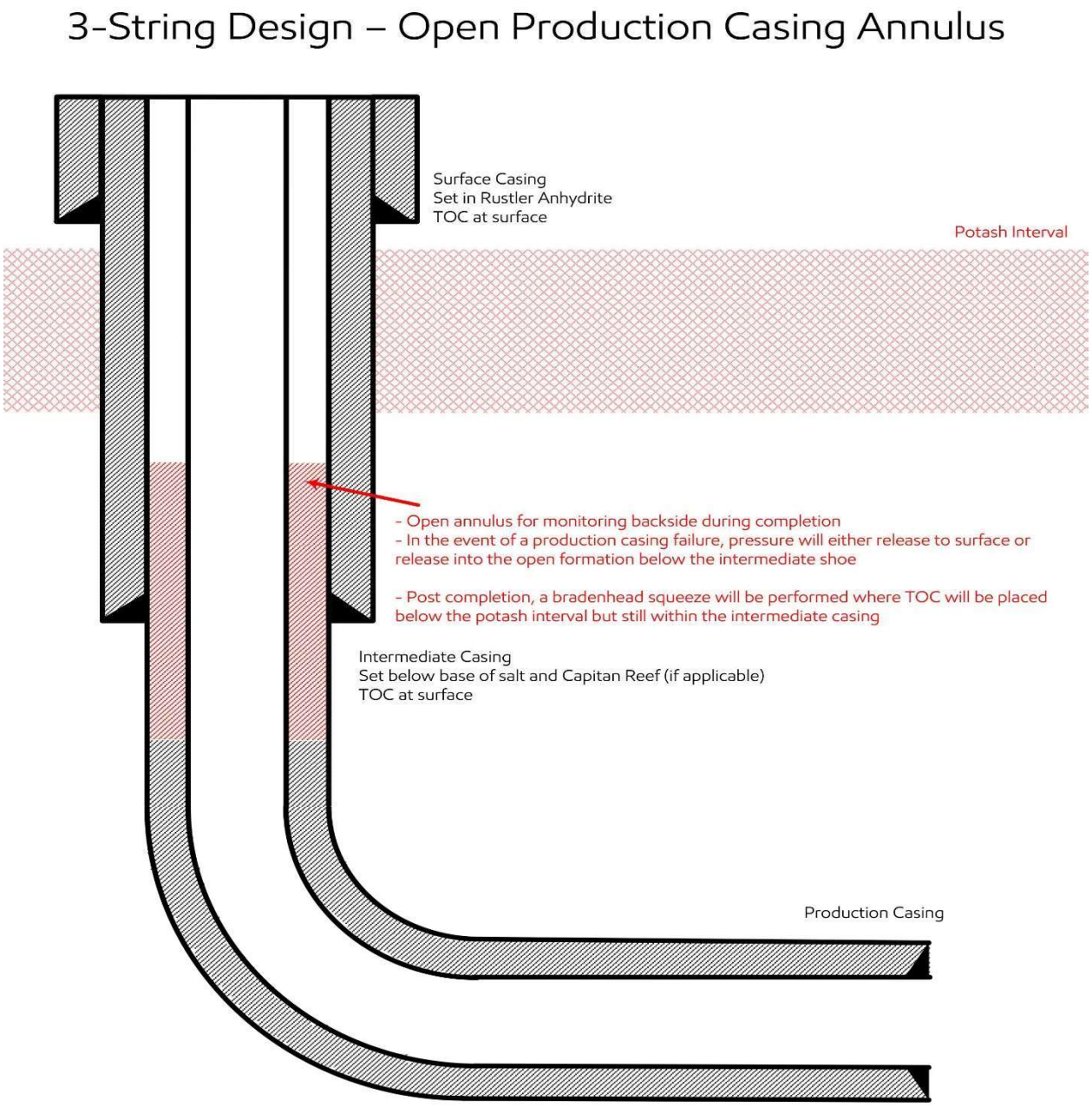
Total Estimated Cuttings Volume: 1793 bbls

Revision Date – May 21, 2024



Update May 2024:
OXY is aware of the R111-Q update and will comply with these requirements including (but not limited to):
1) Alignment with KPLA requirements per schematic above, leaving open annulus for pressure monitoring during frac and utilizing new casing that meets API standards
2) Contingency plans in place to divert formation fluids away from salt interval in event of production casing failure
3) Bradenhead squeeze to be completed within 180days to tie back TOC to salt string at least 500ft but with top below Marker Bed 126
4) Production cement to be tied back no less than 500ft inside previous casing shoe

Revision Date – May 21, 2024



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2) Contingency plans in place to divert formation fluids away from salt interval in event of production casing failure
3) Bradenhead squeeze for Production cement to be completed within 180days to tie back TOC to previous casing string at least 500ft but with top below Marker Bed 126

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-015-47885	5695	BILBREY BASIN; BONE SPRING

[4] Property Code	[5] Property Name	[6] Well Number
	TOP SPOT 12_13 FED	23H

[7] OGRID No.	[8] Operator Name	[9] Elevation
16696	OXY USA INC.	3567.9'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	13	22S	31E		425	SOUTH	2317	WEST	EDDY

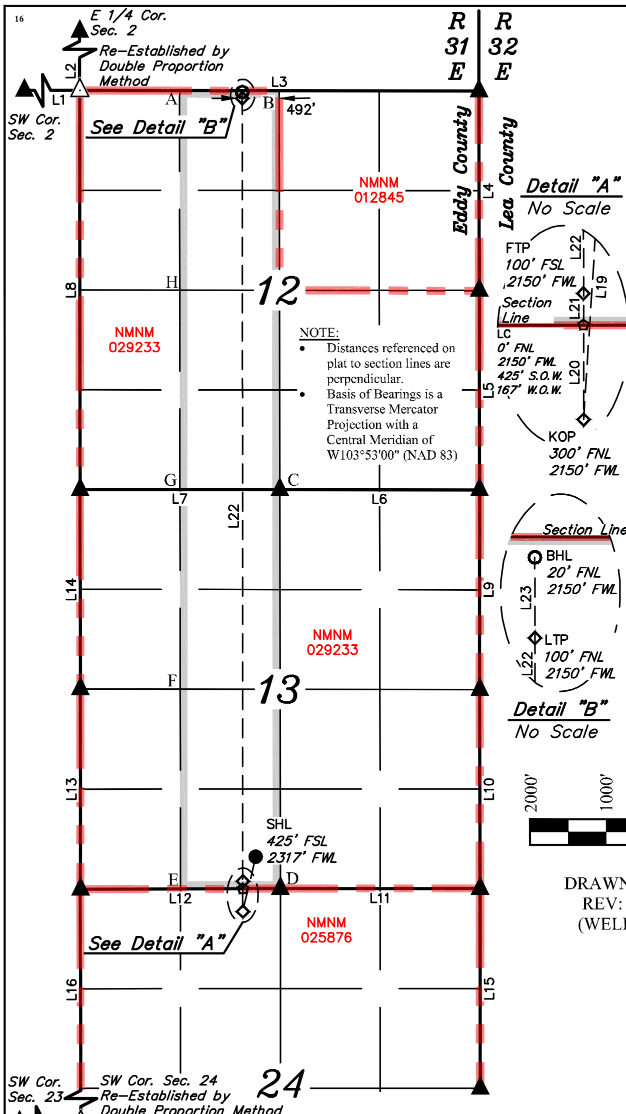
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	12	22S	31E		20	NORTH	2150	WEST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
320			

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

[16]



LINE	DIRECTION	LENGTH
L1	S89°48'38"W	5283.00'
L2	N00°05'15"W	2642.31'
L3	N89°53'45"W	5284.97'
L4	N00°02'49"W	2638.99'
L5	N00°04'00"W	2641.40'
L6	N89°55'57"W	2642.34'
L7	N89°57'03"W	2643.31'
L8	N00°02'58"W	5284.61'
L9	N00°03'46"W	2640.91'
L10	N00°04'43"W	2638.22'
L11	S89°59'17"W	2641.57'
L12	S89°52'27"W	2645.53'
L13	N00°00'53"W	2649.62'
L14	N00°05'42"W	2641.26'
L15	N00°04'12"W	2642.25'
L16	N00°06'22"W	5275.77'
L17	N00°03'45"W	2637.88'
L18	S89°54'46"W	5277.18'
L19	S12°56'34"W	744.34'
L20	N00°04'58"W	300.00'
L21	N00°04'58"W	100.00'
L22	N00°03'09"W	10366.85'
L23	N00°02'58"W	80.00'

2000' 1000' 0' 2000'

SCALE
DRAWN BY: Z.L. 02-27-24
REV: 1 N.R. 03-05-24
(WELL NAME CHANGE)

[17] OPERATOR CERTIFICATION

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

Melissa Guidry 03/28/24
Signature Date

Melissa Guidry
Printed Name

melissa_guidry@oxy.com
E-mail Address

[18] SURVEYOR CERTIFICATION

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

February 27, 2024
Date of Survey
Signature and Seal of Professional Surveyor:

Certificate Number:

HSU COORDINATES				
	NAD 27 N.M. STATE PLANE, EAST ZONE		NAD 83 N.M. STATE PLANE, EAST ZONE	
POINT	NORTHING	EASTING	NORTHING	EASTING
A	514543.93'	684556.74'	514604.62'	725738.78'
B	514547.09'	685877.72'	514607.78'	727059.77'
C	509266.21'	685905.18'	509326.77'	727087.38'
D	503984.61'	685934.52'	504045.03'	727116.88'
E	503976.14'	684612.04'	504036.56'	725794.39'
F	506621.00'	684598.83'	506681.49'	725781.10'
G	509261.78'	684583.78'	509322.34'	725765.98'
H	511903.05'	684570.26'	511963.67'	725752.38'

NAD 83 (SURFACE HOLE LOCATION)	**NAD 83 (KICK OFF POINT)**	**NAD 83 (LEASE CROSSING)**
LATITUDE = 32°23'07.51" (32.385420°)	LATITUDE = 32°23'00.34" (32.383427°)	LATITUDE = 32°23'03.30" (32.384251°)
LONGITUDE = -103°43'57.23" (-103.732564°)	LONGITUDE = -103°43'59.19" (-103.733108°)	LONGITUDE = -103°43'59.19" (-103.733108°)
NAD 27 (SURFACE HOLE LOCATION)	**NAD 27 (KICK OFF POINT)**	**NAD 27 (LEASE CROSSING)**
LATITUDE = 32°23'07.07" (32.385297°)	LATITUDE = 32°22'59.89" (32.383304°)	LATITUDE = 32°23'02.86" (32.384128°)
LONGITUDE = -103°43'55.47" (-103.732076°)	LONGITUDE = -103°43'57.43" (-103.732619°)	LONGITUDE = -103°43'57.43" (-103.732619°)
STATE PLANE NAD 83 (N.M. EAST)	**STATE PLANE NAD 83 (N.M. EAST)**	**STATE PLANE NAD 83 (N.M. EAST)**
N: 504467.90' E: 726786.90'	N: 503741.92' E: 726623.27'	N: 504041.86' E: 726621.57'
STATE PLANE NAD 27 (N.M. EAST)	**STATE PLANE NAD 27 (N.M. EAST)**	**STATE PLANE NAD 27 (N.M. EAST)**
N: 504407.48' E: 685604.55'	N: 503681.51' E: 685440.90'	N: 503981.44' E: 685439.22'
NAD 83 (FIRST TAKE POINT)	**NAD 83 (LAST TAKE POINT)**	**NAD 83 (BOTTOM HOLE LOCATION)**
LATITUDE = 32°23'04.29" (32.384526°)	LATITUDE = 32°24'46.86" (32.413016°)	LATITUDE = 32°24'47.65" (32.413236°)
LONGITUDE = -103°43'59.19" (-103.733108°)	LONGITUDE = -103°43'59.13" (-103.733091°)	LONGITUDE = -103°43'59.13" (-103.733091°)
NAD 27 (FIRST TAKE POINT)	**NAD 27 (LAST TAKE POINT)**	**NAD 27 (BOTTOM HOLE LOCATION)**
LATITUDE = 32°23'03.85" (32.384403°)	LATITUDE = 32°24'46.42" (32.412894°)	LATITUDE = 32°24'47.21" (32.413114°)
LONGITUDE = -103°43'57.43" (-103.732619°)	LONGITUDE = -103°43'57.37" (-103.732601°)	LONGITUDE = -103°43'57.36" (-103.732601°)
STATE PLANE NAD 83 (N.M. EAST)	**STATE PLANE NAD 83 (N.M. EAST)**	**STATE PLANE NAD 83 (N.M. EAST)**
N: 504141.84' E: 726621.01'	N: 514506.63' E: 726567.89'	N: 514586.61' E: 726567.49'
STATE PLANE NAD 27 (N.M. EAST)	**STATE PLANE NAD 27 (N.M. EAST)**	**STATE PLANE NAD 27 (N.M. EAST)**
N: 504081.42' E: 685438.65'	N: 514445.93' E: 685385.84'	N: 514525.91' E: 685385.44'

● = SURFACE HOLE LOCATION
◇ = KICK OFF POINT/TAKE POINTS
⬠ = LEASE CROSSING
○ = BOTTOM HOLE LOCATION
▲ = SECTION CORNER LOCATED
= LEASE LINE
= HORIZONTAL SPACING UNIT
S.O.W. = SOUTH OF WELL
W.O.W. = WEST OF WELL

Falcon SL1 Production Casing Annular Clearance Variance Request

If Production Casing Connection OD does not meet 0.422" annular clearance inside casing:

- Cement excess will be circulated from Top of Liner to surface (Cement Confirmation)
- Liner Top will be tested to confirm seal.
- If ICP in Bone Spring Pool and lateral landed in Wolfcamp Pool, a CBL will be ran.

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

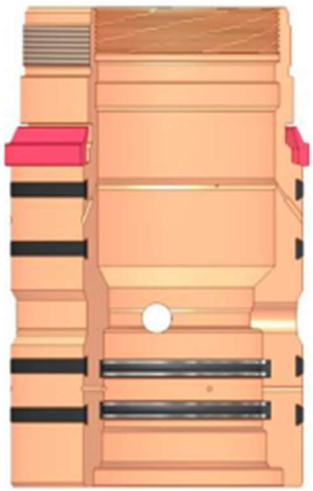
No changes to the cement program will take place for offline cementing.

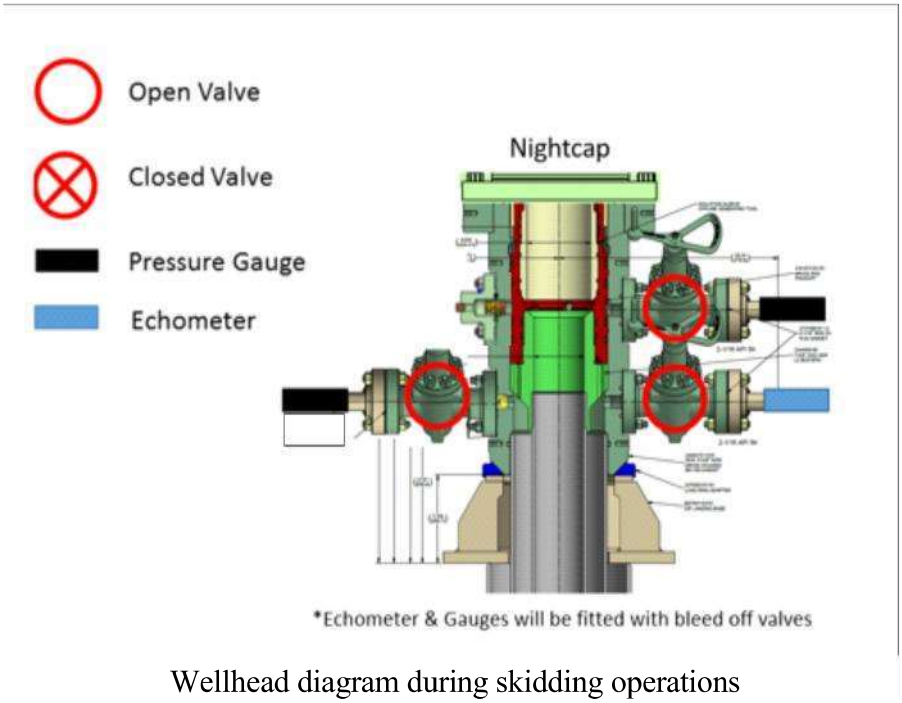
2. Offline Cementing Procedure

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

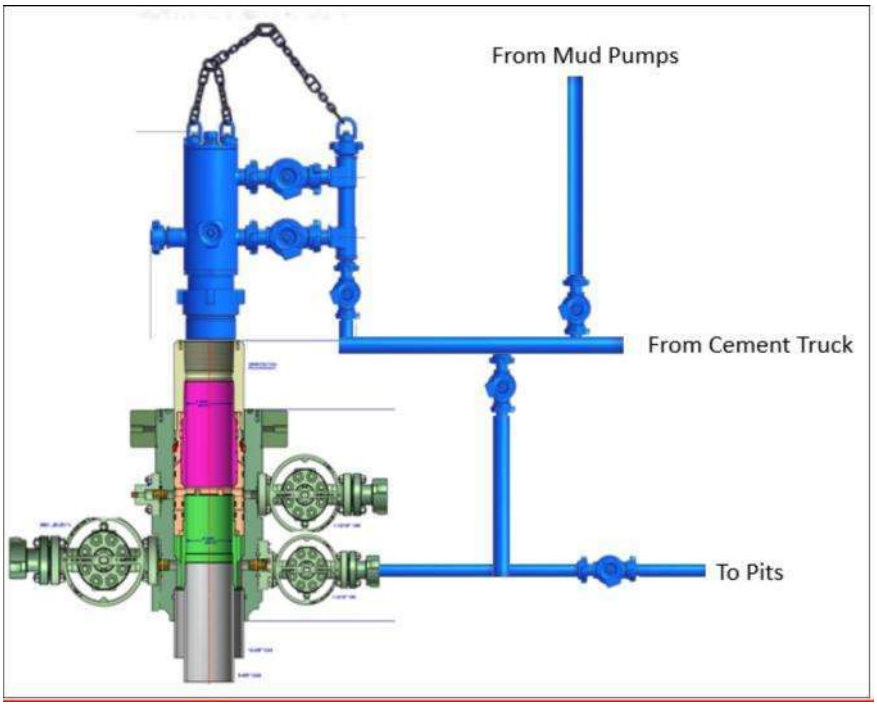
Annular packoff with both external and internal seals





Wellhead diagram during skidding operations

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 nippled 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 nippling 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 3rd 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 in the OXY/BLM meeting on September 5, 2019.

BOP break test under the following conditions:
- After a full BOP test is conducted
- When skidding to drill an intermediate section where ICP is set into the third Bone Spring or shallower.
- When skidding to drill a production section that does not penetrate into the third Bone Spring or deeper.

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

See supporting information below:

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 procldure.

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 to submit the break testing plan in the APD or Sundry Notice (SN) and receive approval prior to implementing (See Appendix for examples)
2) OXY would perform BOP break testing on multi-well pads where multiple intermediate sections can be drilled and cased within the 30-day BOP test window
3) 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
4) The BOP is then lifted and removed from the wellhead by the hydraulic winch system
5) After skidding to the next well, the BOP is moved to the wellhead by the hydraulic winch system and installed
6) The choke line and kill line are reconnected
7) A test plug is installed in the wellhead with a joint of drill pipe and the internal parts of the check valve are removed
8) A shell teit is performed against the upper pipe rams testing all thl¯ee breaks
9) The internal parts of the check valve are reinstalled and the HCR valve is closed. A second test is performed on them
10) 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)
11) Perform a function test of components not pressure tested to include the lower pipe rams, the blind rams and the annular
12) 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
13) A second break test would only be done if the third hole section could be completed within the 30-day BOP test window
14) 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:

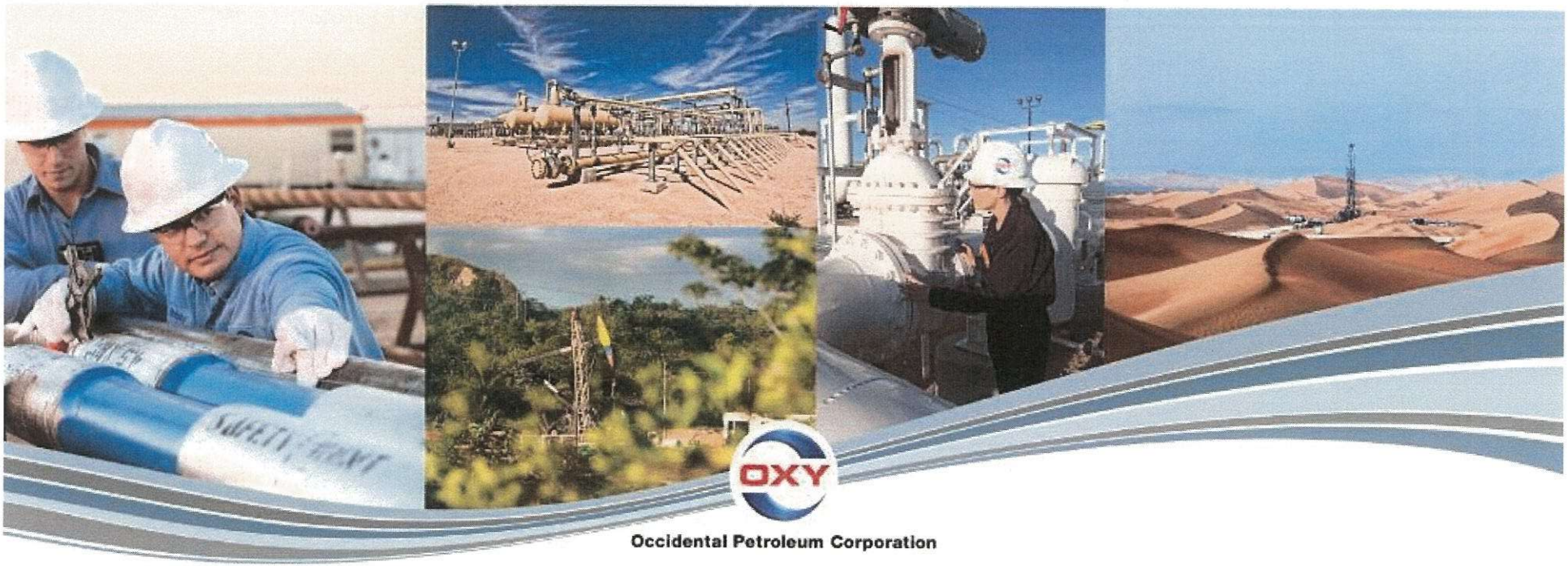
a. If any parts of the BOP are changed out or any additional breaks are made during the skidding operation, these affected components would also be tested as in step 10.
b. As the choke manifold remains stationary during the skidding operation and the only break to the manifold is tested in step 8 above, 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

REQUEST FOR A VARIANCE TO BREAK TEST THE BOP

Permian Resources New Mexico



Occidental Petroleum Corporation

Request for Variance

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.
- As the choke manifold remains stationary during the skidding operation and the only break to the manifold is tested, no further testing of the manifold is done until the next full BOP test.
- This request is being made as per Section IV of the *Onshore Oil and Gas Order (OOGO) No. 2*

Rationale for Allowing BOP Break Testing

American Petroleum Institute (API) standards, specifications and recommended practices are considered industry standards and are consistently utilized and referenced by the industry

- 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."

Rationale for Allowing BOP Break Testing

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 in July 2016 under 30 CFR Part 250, *Oil and Gas and Sulphur Operations in the Outer Continental Shelf - Blowout Preventer Systems and Well Control.* Within these regulations is language adopted from API Standard 53 which also supports break testing.
- Specifically, Section 250.737(d.8) states "Pressure test affected BOP components following the disconnection or repair of any well-pressure containment seal in the wellhead or BOP stack assembly."

Rationale for Allowing BOP Break Testing

Break testing has been approved by the BLM in the past

- The Farmington Field Office approved a Sundry Notice (SN) to allow break testing in 2015
- This SN 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 or exceed the intent of OOGO No. 2

- 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
- Oxy's standard requires complete BOP tests more often than that of OOGO No. 2
- Oxy 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 OOGO No. 2

Break Testing Procedures

1) OXY to submit the break testing plan in the APD or Sundry Notice (SN) and receive approval prior to implementing

2) OXY would perform BOP break testing on multi-well pads where multiple intermediate sections can be drilled and cased within the full BOP test window

3) 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

4) The BOP is then lifted and removed from the wellhead by the hydraulic winch system

5) After skidding to the next well, the BOP is moved to the wellhead by the hydraulic winch system and installed

6) The choke line and kill line are reconnected

7) A test plug is installed in the wellhead with a joint of drill pipe and the internal parts of the check valve are removed

Break Testing Procedures

8) A shell test is performed against the upper pipe rams testing all three breaks

9) The internal parts of the check valve are reinstalled and the HCR valve is closed. A second test is performed on them

10) 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)

11) Perform a function test of components not pressure tested to include the lower pipe rams, the blind rams and the annular

12) 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

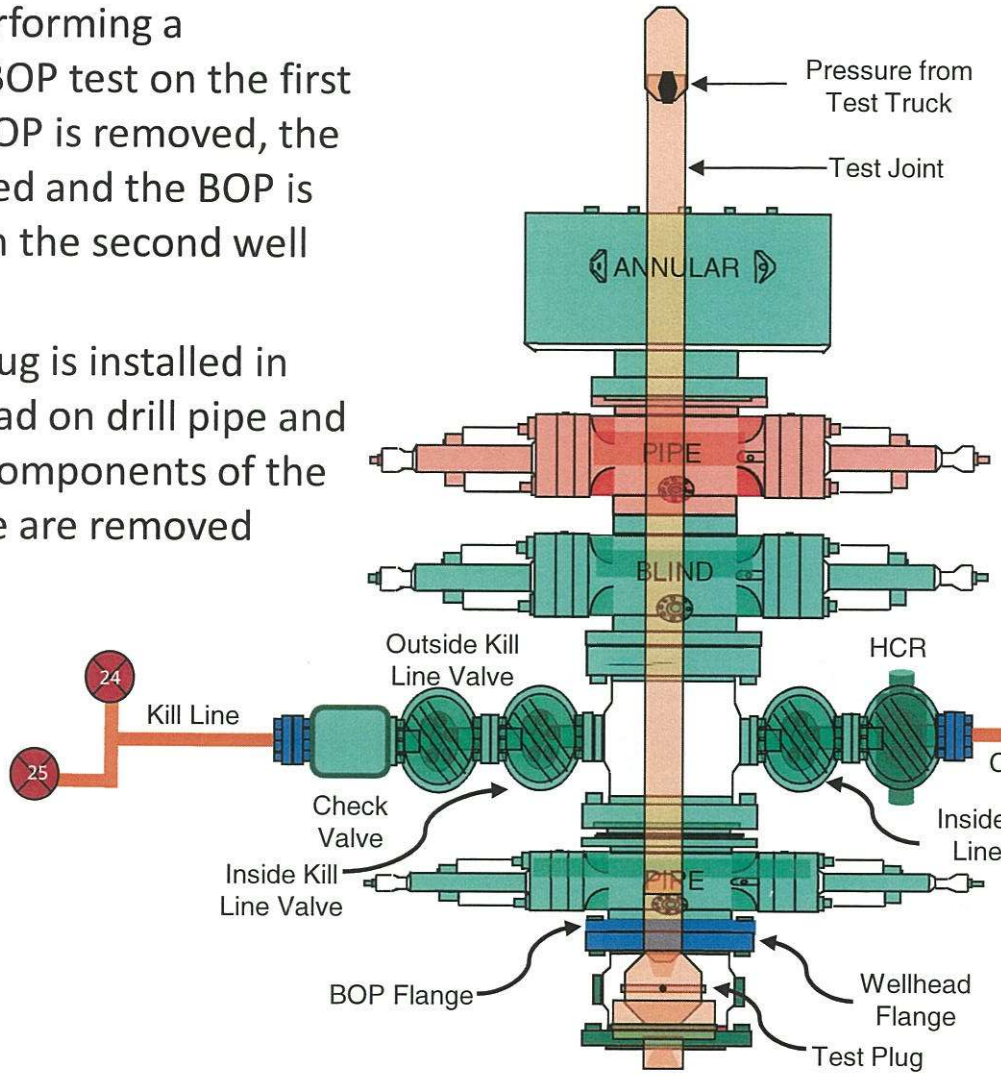
13) A second break test would only be done if the third hole section could be completed within the 30-day BOP test window

14) If a second break test is performed, additional components that were not tested on the first break test will be tested

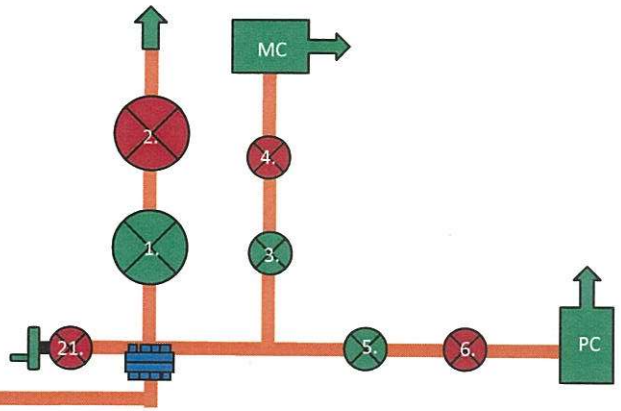
Break Testing Procedures and Tests

1. After performing a complete BOP test on the first well, the BOP is removed, the rig is skidded and the BOP is installed on the second well

2. A test plug is installed in the wellhead on drill pipe and the inner components of the check valve are removed



Test #1
BOP-Wellhead flange, choke line and kill line connections and upper pipe rams

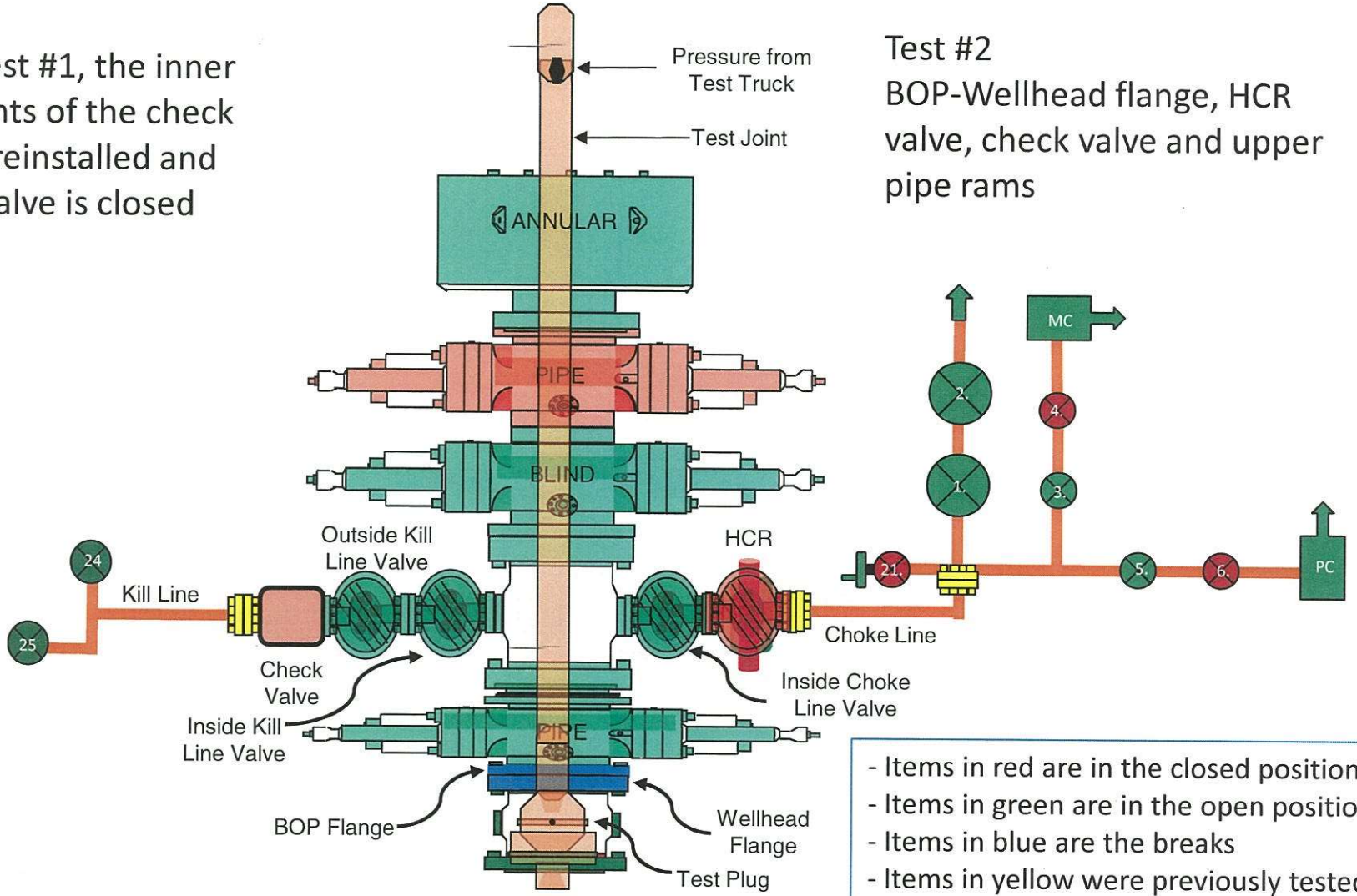


- Items in red are in the closed position
- Items in green are in the open position
- Items in blue are the breaks
- Items in yellow were previously tested

Break Testing Procedures and Tests

3. After Test #1, the inner components of the check valve are reinstalled and the HCR valve is closed

Test #2
BOP-Wellhead flange, HCR valve, check valve and upper pipe rams

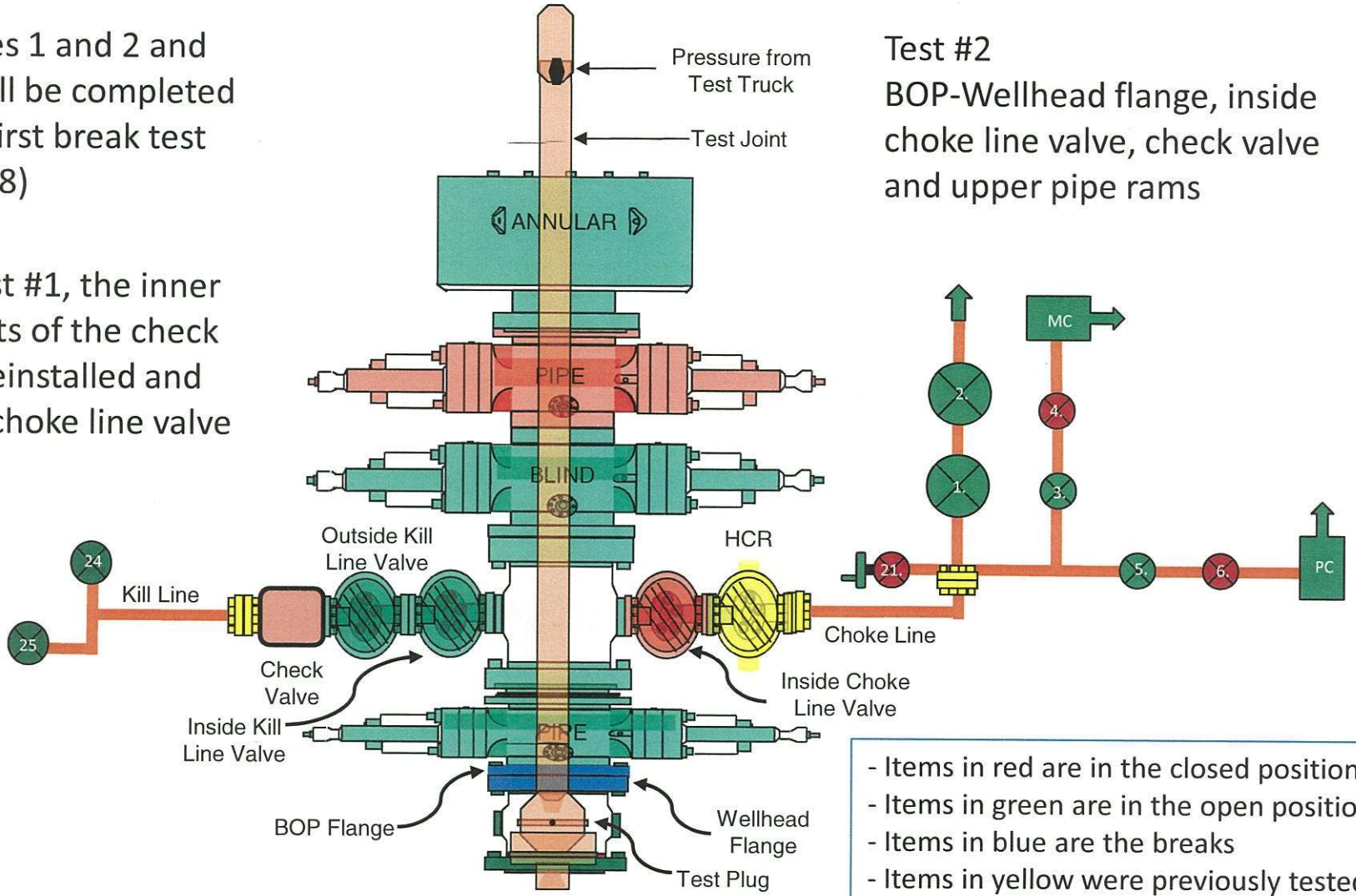


- Items in red are in the closed position
- Items in green are in the open position
- Items in blue are the breaks
- Items in yellow were previously tested

Second Break Testing Procedures and Tests

Procedures 1 and 2 and Test #1 will be completed as in the first break test (see slide 8)

3. After Test #1, the inner components of the check valve are reinstalled and the inside choke line valve is closed



Test #2
BOP-Wellhead flange, inside choke line valve, check valve and upper pipe rams

- Items in red are in the closed position
- Items in green are in the open position
- Items in blue are the breaks
- Items in yellow were previously tested

BOP Handling System

Hydraulic winch system which moves the BOP from its carrier to the wellhead

BOP standing in its carrier

BOP Handling System

Hydraulic winch system moving the BOP over to the wellhead

Wellhead

Summary for Variance Request for Break Testing

- API standards, specifications and recommended practices are considered industry standards
  - *OOGO No. 2* recognized API Recommended Practices (RP) 53 in its original development
  - API Standard 53 recognizes break testing as an acceptable practice
  - The Bureau of Safety and Environmental Enforcement has utilized API standards, specifications and best practices in the development of its offshore oil and gas regulations
  - API Standard 53 recognizes break testing as an acceptable practice

- OXY feels break testing meets the intent of *OOGO No. 2* to protect public health and safety and the environment

OXY USA WTP LP

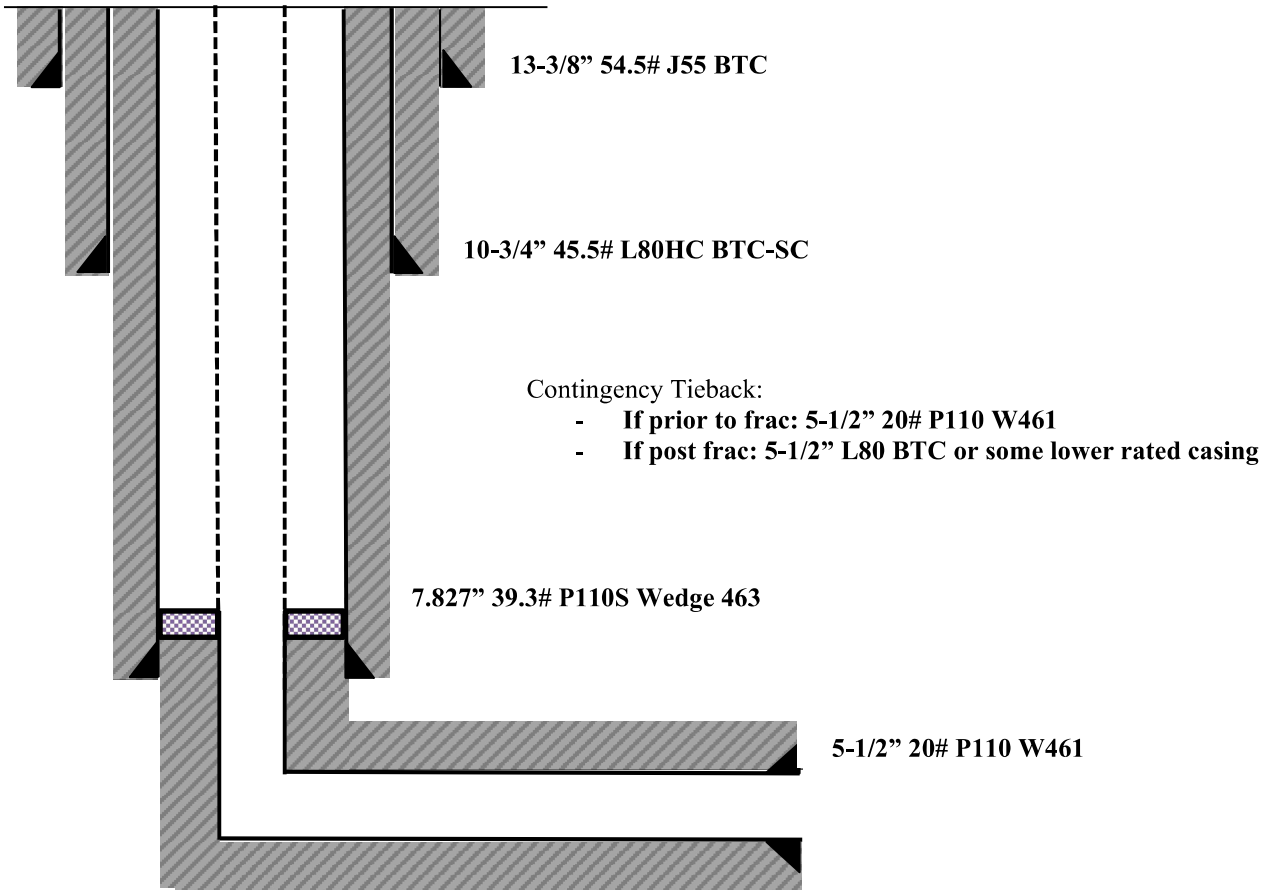
4S Falcon SL1 Contingnecy Tieback Details

Below is a summary that describes the general operational steps to drill and complete the well.

- Drill 17-1/2” hole x 13-3/8” casing for surface section. Cement to surface.
- Drill 12-1/4” hole x 10-3/4” casing for intermediate #1 section. Cement to surface.
- Drill 9-7/8” hole x 7.827” casing for intermediate #2 section. Cement to surface.
- Drill 6-3/4” hole x 5-1/2” liner for production section. Cement to top of liner, 200’ inside 7.827” shoe.
- Release drilling rig from location.

- If contingency tieback required pre-frac:
    - Move in workover rig and run a 5-1/2” 20# P110 Wedge 461 tie-back frac string and seal assembly. Tie into liner hanger Polished Bore Receptacle (PBR) with seal assembly.
    - Pump hydraulic fracture job.
    - Flowback and produce well.
- If contingency tieback required post-frac:
    - Move in workover rig and run a 5-1/2” L80 BTC or lesser rated tie-back string and seal assembly. Tie into liner hanger Polished Bore Receptacle (PBR) with seal assembly.
    - Return well to production.

General well schematic:



Tenaris

API BTC -Special Clearance

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

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

Pipe Body Data

Geometry

Nominal OD	10.750 in.	**Drift**	9.875 in.
Wall Thickness	0.400 in.	**Plain End Weight**	44.26 lb/ft
Nominal Weight	45.500 lb/ft	**OD Tolerance**	API
Nominal ID	9.950 in.		

Performance

SMYS	80,000 psi
Min UTS	95,000 psi
Body Yield Strength	1040 x1000 lb
Min. Internal Yield Pressure	5210 psi
Collapse Pressure	2950 psi
Max. Allowed Bending	34 °/100 ft

Connection Data

Geometry

Thread per In	5
Connection OD	11.250 in.
Hand Tight Stand Off	1 in.

Performance

Joint Strength	1041 x1000 lb
Coupling Face Load	478 x1000 lb
Internal Pressure Capacity	4150 psi

Notes

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

Tenaris

TenarisHydril Wedge 463®

Coupling	Pipe Body
Grade: **P110-S**	Grade: **P110-S**
Body: **White**	1st Band: **White**
1st Band: **Orange**	2nd Band: **Orange**
2nd Band: **-**	3rd Band: **-**
3rd Band: **-**	4th Band: **-**
	5th Band: **-**
	6th Band: **-**

Outside Diameter	7.827 in.	**Wall Thickness**	0.500 in.	**Grade**	P110-S
Min. Wall Thickness	87.50 %	**Pipe Body Drift**	Special Drift	**Type**	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry				Performance	
Nominal OD	7.827 in.	**Wall Thickness**	0.500 in.	**Body Yield Strength**	1266 x1000 lb
Nominal Weight	39.30 lb/ft	**Plain End Weight**	39.16 lb/ft	**Min. Internal Yield Pressure**	12,300 psi
Drift	6.750 in.	**OD Tolerance**	API	**SMYS**	110,000 psi
Nominal ID	6.827 in.			**Collapse Pressure**	10,490 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	8.500 in.	**Tension Efficiency**	100 %	**Minimum**	22,000 ft-lb
Coupling Length	10.950 in.	**Joint Yield Strength**	1266 x1000 lb	**Optimum**	23,000 ft-lb
Connection ID	6.814 in.	**Internal Pressure Capacity**	12,300 psi	**Maximum**	27,000 ft-lb
Make-up Loss	4.520 in.	**Compression Efficiency**	100 %		
Threads per inch	3.25	**Compression Strength**	1266 x1000 lb	**Operation Limit Torques**	
Connection OD Option	Regular	**Max. Allowable Bending**	64.42 °/100 ft	**Operating Torque**	61,000 ft-lb
		External Pressure Capacity	10,490 psi	**Yield Torque**	70,000 ft-lb
		Coupling Face Load	414,177 lb	**Buck-On**	
				Minimum	26,000 ft-lb
				Maximum	29,000 ft-lb

Notes

For the lastest performance data, always visit our website: www.tenaris.com
For further information on concepts indicated in this datasheet, download the Datasheet Manual from www.tenaris.com

PII/CII

TenarisHydril

5.500" 20.00 lb/ft P110-CY TenarisHydril Wedge 461™ Matched Strength

Special Data Sheet
TH DS-20.0359
12 August 2020
Rev 00

Nominal OD	5.500 in.	**Wall Thickness**	0.361 in.	**Grade**	P110-CY
Min Wall Thickness	87.5%	**Type**	CASING	**Connection OD Option**	MATCHED STRENGTH

Pipe Body Data

Geometry				Performance	
Nominal OD	5.500 in.	**Nominal ID**	4.778 in.	**Body Yield Strength**	641 x 1000 lbs
Nominal Weight	20.00 lbs/ft	**Wall Thickness**	0.361 in.	**Internal Yield**	12640 psi
Standard Drift Diameter	4.653 in.	**Plain End Weight**	19.83 lbs/ft	**SMYS**	110000 psi
Special Drift Diameter	N/A	**OD Tolerance**	API	**Collapse Pressure**	11110 psi

Connection Data

Geometry		Performance		Make-up Torques	
Matched Strength OD	6.050 in.	**Tension Efficiency**	100%	**Minimum**	17000 ft-lbs
Make-up Loss	3.775 in.	**Joint Yield Strength**	641 x 1000 lbs	**Optimum**	18000 ft-lbs
Threads per in.	3.40	**Internal Yield**	12640 psi	**Maximum**	21600 ft-lbs
Connection OD Option	MATCHED STRENGTH	**Compression Efficiency**	100%	Operational Limit Torques	
Coupling Length	7.714 in.	**Compression Strength**	641 x 1000 lbs	**Operating Torque**	32000 ft-lbs
		Bending	92 °/100 ft	**Yield Torque**	38000 ft-lbs
		Collapse	11110 psi	Buck-On Torques	
				Minimum	21600 ft-lbs
				Maximum	23100 ft-lbs

Notes

*If you need to use torque values that are higher than the maximum indicated, please contact a local Tenaris technical sales representative

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 350274

CONDITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 350274
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	All original COA's still apply. Additionally, if cement is not circulated to surface during cementing operations, then a CBL is required.	6/4/2024