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

Sundry Print Report

03/22/2024

Well Name: LOST TANK 30-19 FEDERAL COM

Well Location: T22S / R32E / SEC 19 / LOT 1 /

County or Parish/State:

Well Number: 33H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM90587

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002548464

Well Status: Unapproved Application for Permit to Drill

Operator: OXY USA INCORPORATED

Notice of Intent

Sundry ID: 2758996

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 11/01/2023

Time Sundry Submitted: 07:37

Date proposed operation will begin: 12/01/2023

Procedure Description: OXY USA INC. Respectfully requests approval to make changes to our approved APD, see the following change requests below: Changes to our casing design, to run a 3 string casing design with the option to run a contingency 4 string design, depending on hole conditions while drilling. Please see the attached drill plans for both the 3 string design and the 4 string contingency, along with specs for the casing strings.

NOI Attachments

Procedure Description

LostTank30_19FedCom33H_OfflineCementVariance_20240124145908.pdf

LostTank30_19FedCom33H_FalconSL1AnnClearanceVariance_20240124145904.pdf

LostTank30_19FedCom33H_BradenheadCBLVariance_20240124145856.pdf

LostTank30_19FedCom33H_BOPBreakTestingVariance_20240124145846.pdf

LostTank30_19FedCom33H_5MAnnBOPVariance_20240124145839.pdf

Casingspecsheets_20240124145833.pdf

tiebackdetails_20240124145824.pdf

LostTank30_19FedCom33H_DirectPlan_20240124145817.pdf

LostTank30_19FedCom33H_DrillPlan_4S_Cont_20240124145809.pdf

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Operator: OXY USA INCORPORATED

LostTank30_19FedCom33H_DrillPlan_3S_20240124145801.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: LESLIE REEVES

Signed on: JAN 24, 2024 02:54 PM

Name: OXY USA INCORPORATED

Title: Advisor Regulatory

Street Address: 5 GREENWAY PLAZA, SUITE 110

City: HOUSTON **State:** TX

Phone: (713) 497-2492

Email address: LESLIE_REEVES@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: 03/09/2024

Signature: KEITH IMMATTY

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.

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.

2. Name of Operator

9. API Well No.

3a. Address

3b. Phone No. *(include area code)*

10. Field and Pool or Exploratory Area

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*

11. Country or Parish, State

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ 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.)

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

Title

Signature

Date

THE SPACE FOR FEDERAL OR STATE OFICE USE

Approved by

Title

Date

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

Office

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

(Instructions on page 2)

GENERAL INSTRUCTIONS

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

SPECIFIC INSTRUCTIONS

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

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

NOTICES

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

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

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect 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: LOT 1 / 128 FNL / 1370 FWL / TWSP: 22S / RANGE: 32E / SECTION: 19 / LAT: 32.3839097 / LONG: -103.7185101 (TVD: 0 feet, MD: 0 feet)

PPP: NENW / 6 FNL / 2304 FWL / TWSP: 22S / RANGE: 32E / SECTION: 30 / LAT: 32.369778 / LONG: -103.715489 (TVD: 11840 feet, MD: 17438 feet)

PPP: NENW / 100 FNL / 2300 FWL / TWSP: 22S / RANGE: 32E / SECTION: 30 / LAT: 32.3839993 / LONG: -103.7154972 (TVD: 11840 feet, MD: 12275 feet)

PPP: NESW / 2635 FNL / 2302 FWL / TWSP: 22S / RANGE: 32E / SECTION: 19 / LAT: 32.377034 / LONG: -103.715493 (TVD: 11840 feet, MD: 14800 feet)

BHL: SESW / 20 FSL / 2300 FWL / TWSP: 22S / RANGE: 32E / SECTION: 30 / LAT: 32.3553107 / LONG: -103.7154803 (TVD: 11840 feet, MD: 22703 feet)

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

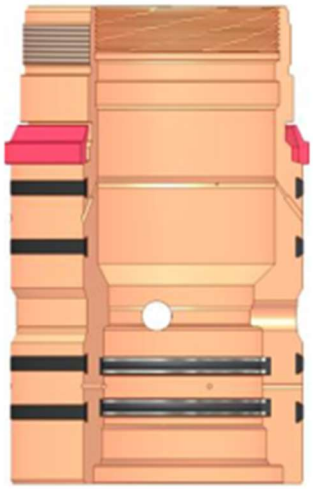
No changes to the cement program will take place for offline cementing.

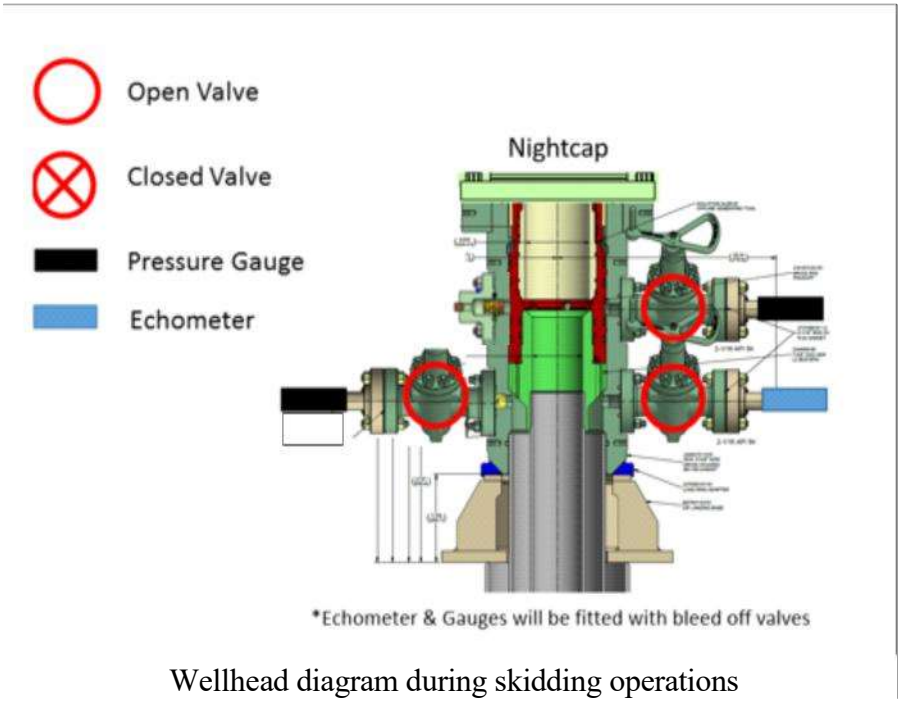
2. Offline Cementing Procedure

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

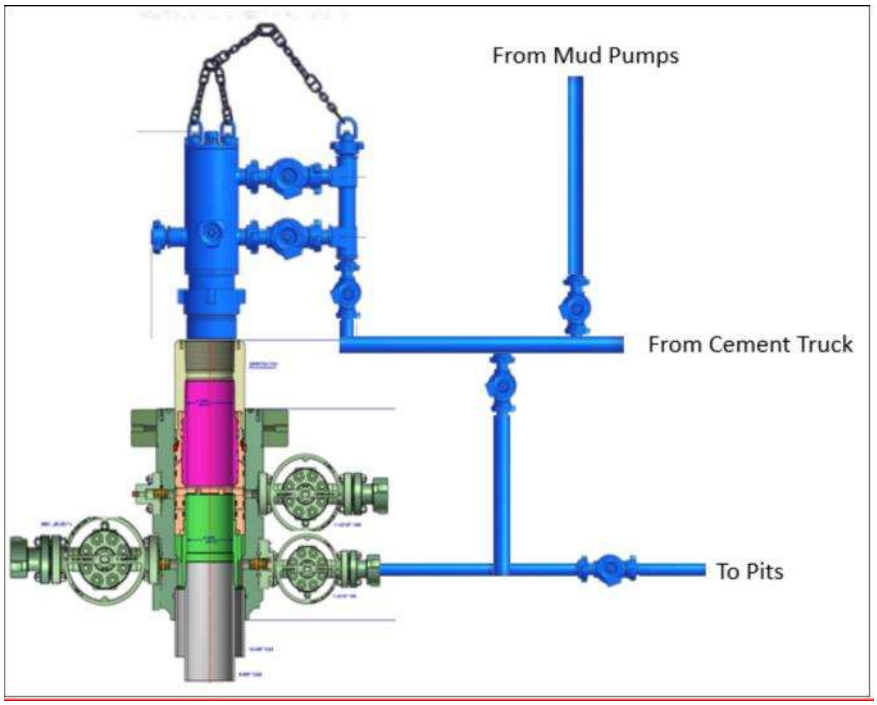
Annular packoff with both external and internal seals





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.

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.

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:

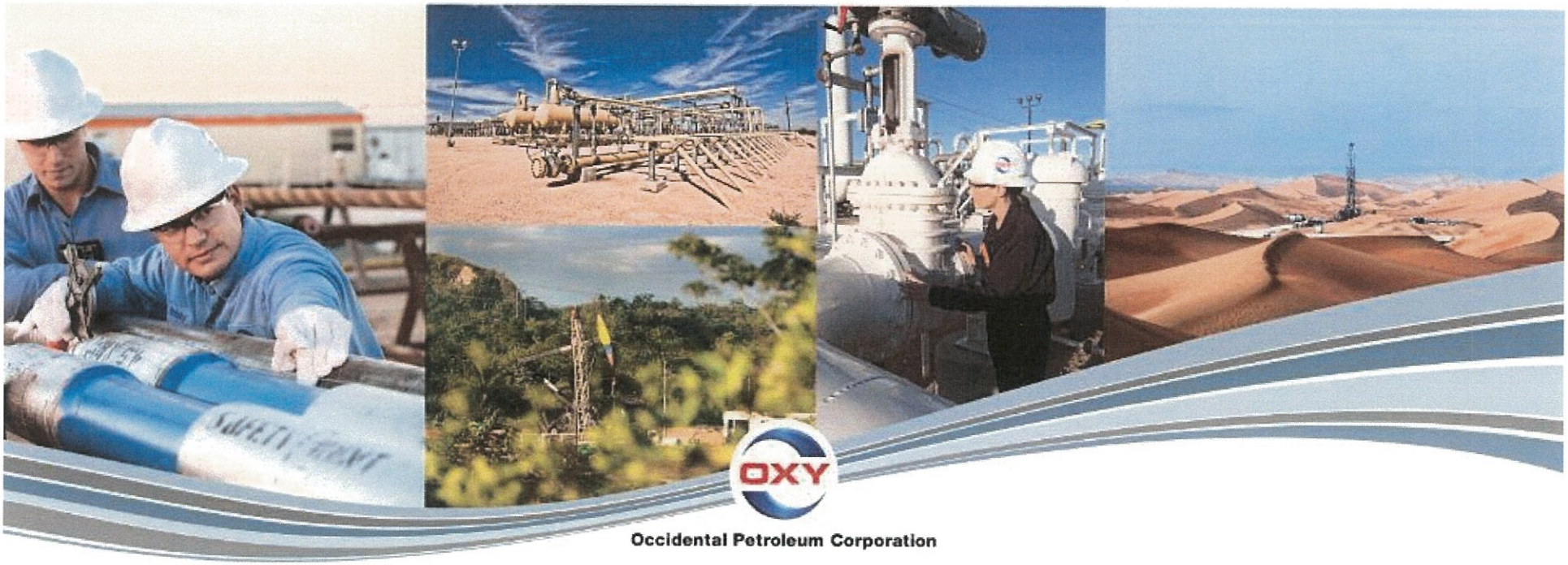
a. If any parts of the BOP are changed out or any additional breaks are made during the skidding operation, these affected components would also be tested as in step 10.
b. As the choke manifold remains stationary during the skidding operation and the only break to the manifold is tested in step 8 above,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

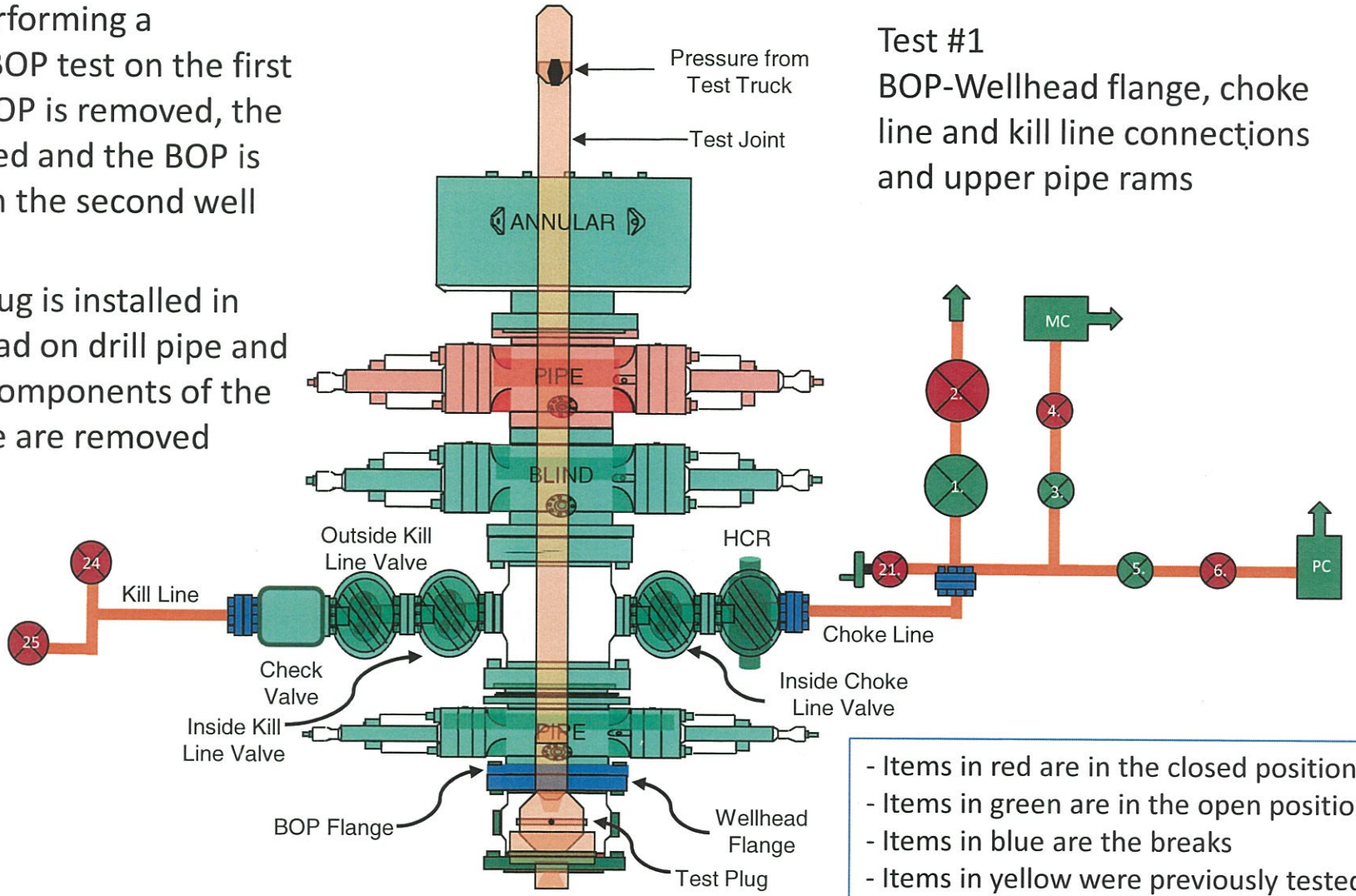
13) A second break test would only be done if the third hole section could be completed within the 30-day BOP test window

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



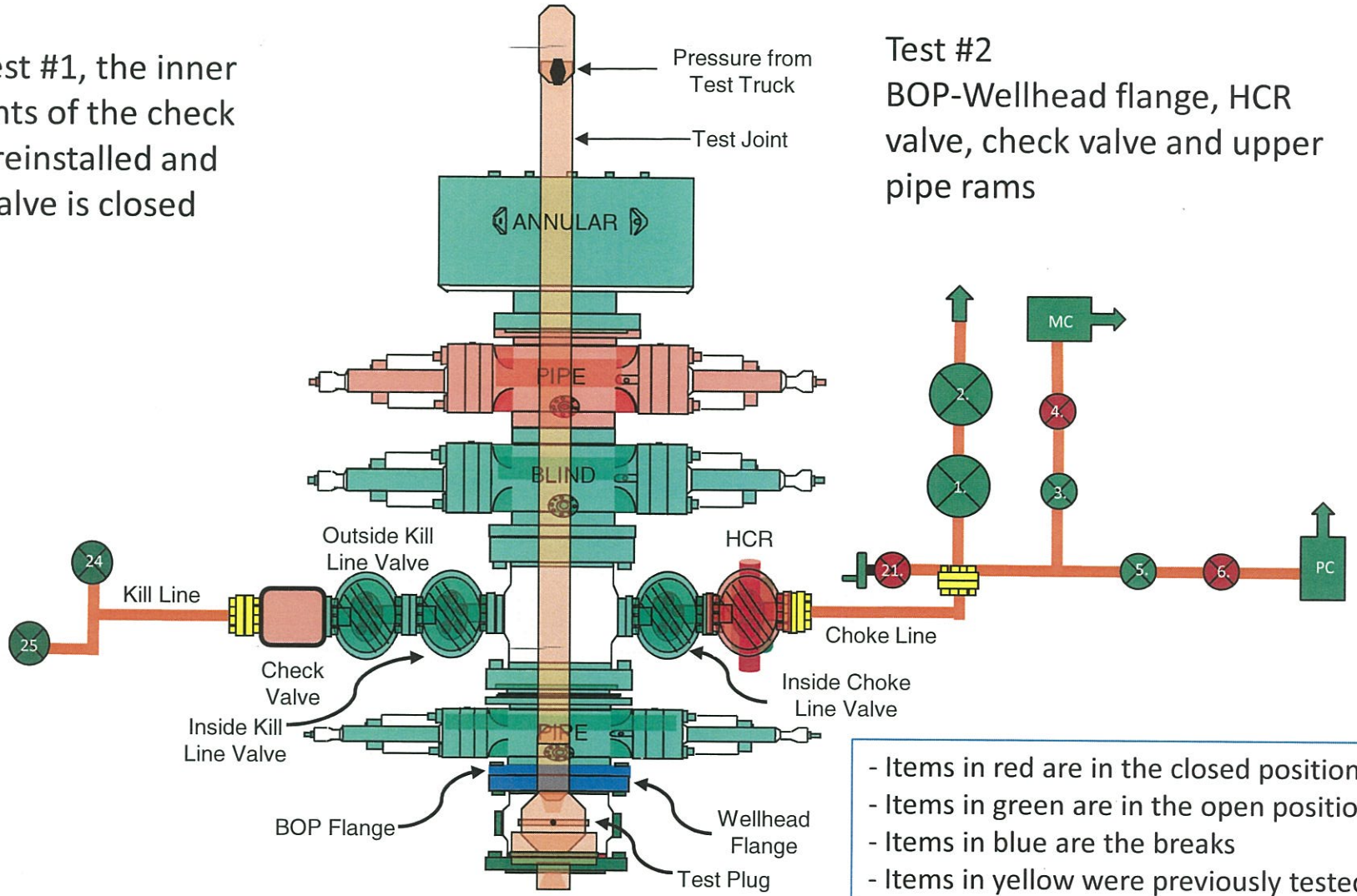
Test #1
BOP-Wellhead flange, choke line and kill line connections and upper pipe rams

- 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

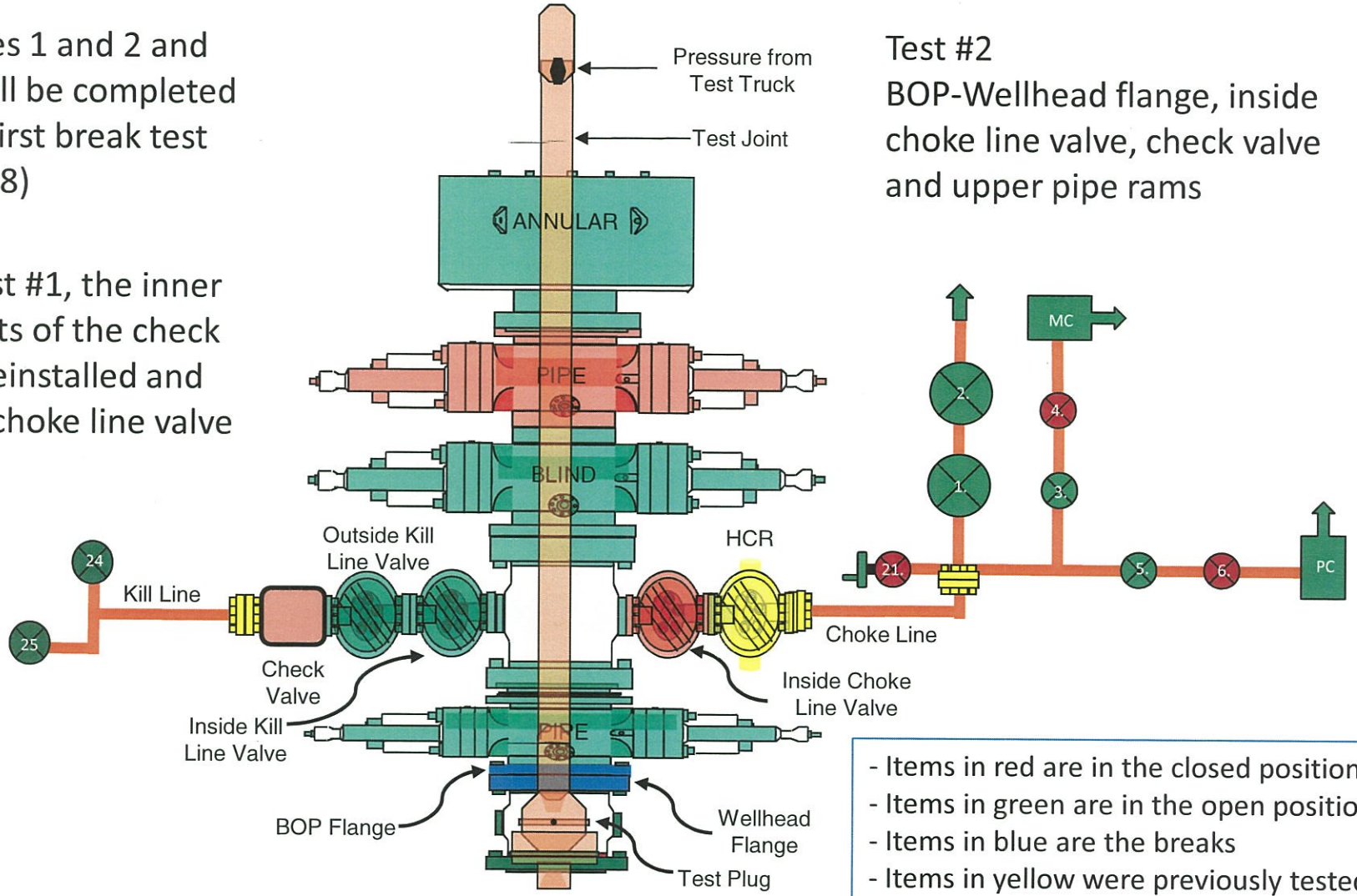


- Items in red are in the closed position
- Items in green are in the open position
- Items in blue are the breaks
- Items in yellow were previously tested

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

5M Annluar BOP Variance Request

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

Oxy Well Control Plan

A. Component and Preventer Compatibility Table

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

Pilot hole and Lateral sections, 10M requirement

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

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

B. Well Control Procedures

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

General Procedure While Drilling

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

General Procedure While Tripping

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

General Procedure While Running Casing

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

General Procedure With No Pipe In Hole (Open Hole)

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

General Procedures While Pulling BHA thru Stack

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

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

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

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

j. Regroup and identify forward plan

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

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

Tenaris

API BTC -Special Clearance

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

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

Pipe Body Data

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

Connection Data

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

Notes

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

OXY USA WTP LP

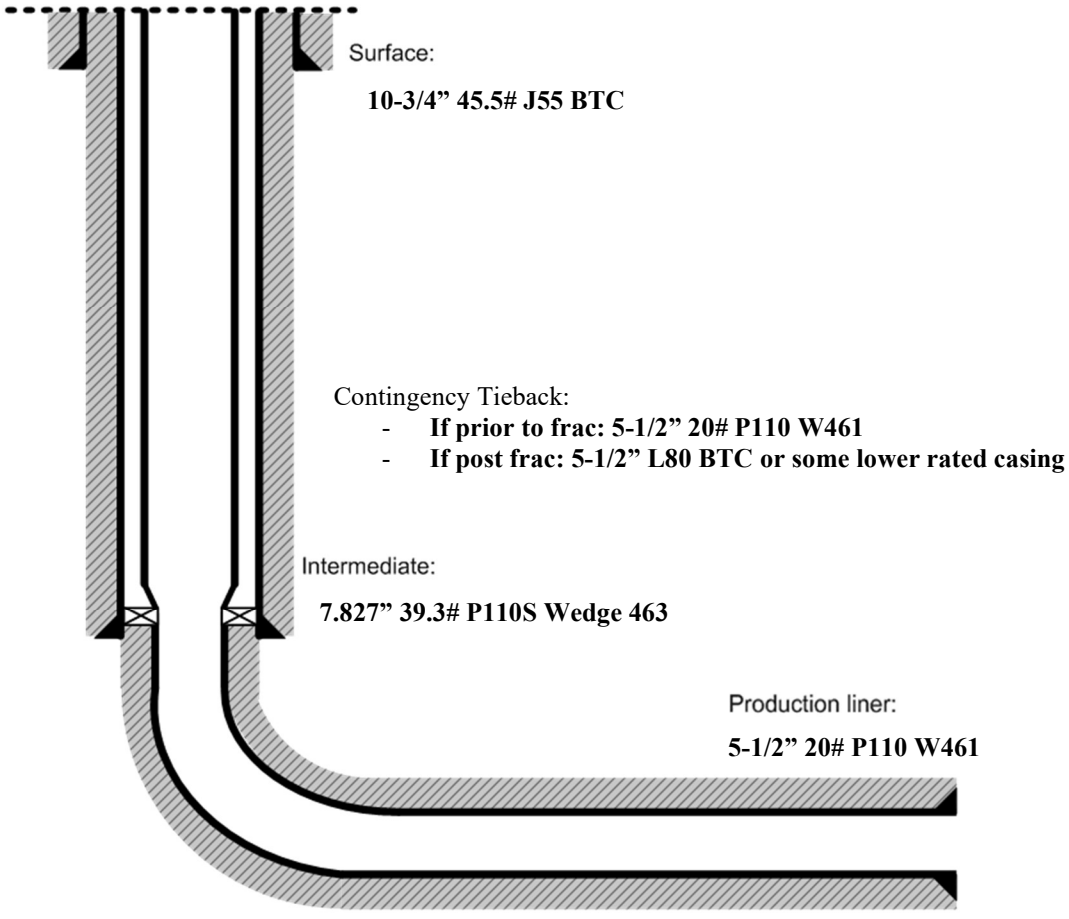
Falcon SL1 Contingnecy Tieback Details

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

- Drill 14-3/4” hole x 10-3/4” casing for surface section. Cement to surface.
- Drill 9-7/8” hole x 7.827” casing for intermediate section. Cement to surface.
- Drill 6-3/4” hole x 5-1/2” liner for production section. Cement to top of liner, 100’ 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:



OXY USA WTP LP

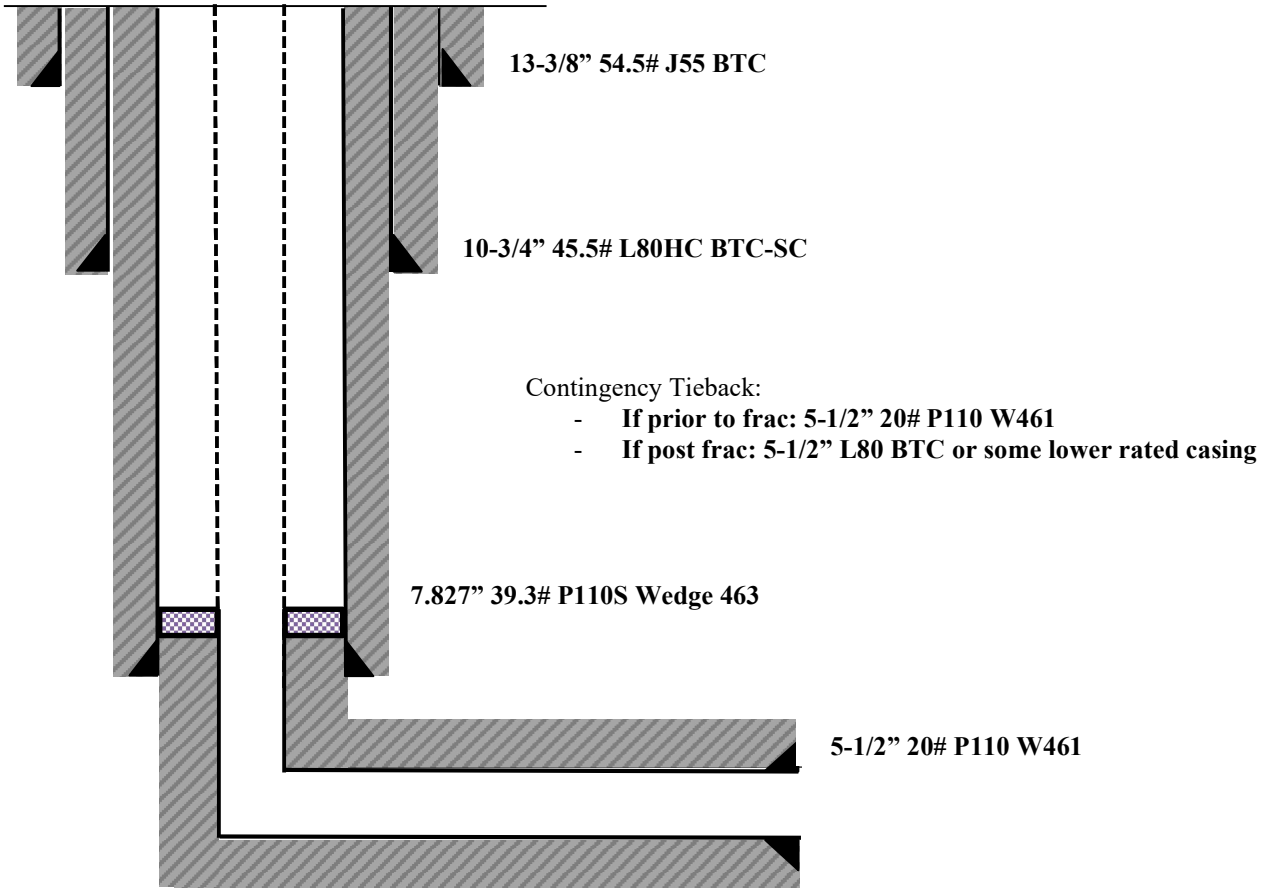
4S Falcon SL1 Contingnecy Tieback Details

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:



OXY

PRD NM DIRECTIONAL PLANS (NAD 1983)
LOST TANK 30-19 FED
Lost Tank 30_19 Fed Com 33H

Wellbore #1

Plan: Permitting Plan

Standard Planning Report

24 October, 2023

OXY
Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Lost Tank 30_19 Fed Com 33H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	25' RKB @ 3640.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	25' RKB @ 3640.00ft
Site:	LOST TANK 30-19 FED	**North Reference:**	Grid
Well:	Lost Tank 30_19 Fed Com 33H	**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 LOST TANK 30-19 FED

Site Position:		**Northing:**	503,826.03 usft	**Latitude:**	32.372894
From:	Lat/Long	**Easting:**	0.00 usft	**Longitude:**	-106.086667
Position Uncertainty:	44.72 ft	**Slot Radius:**	13.200 in		

Well Lost Tank 30_19 Fed Com 33H

Well Position	**+N/-S**	0.00 ft	**Northing:**	503,943.92 usf	**Latitude:**	32.383912
	+E/-W	0.00 ft	**Easting:**	731,128.32 usf	**Longitude:**	-103.718511
Position Uncertainty		1.79 ft	**Wellhead Elevation:**	0.00 ft	**Ground Level:**	3,615.00 ft
Grid Convergence:		0.33 °				

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM_FILE	10/24/2023	6.37	59.98	47,607.70000000

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	174.53

Plan Survey Tool Program **Date** 10/24/2023

	Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	22,546.99	Permitting Plan (Wellbore #1)	B001Mb_MWD+HRGM	
				OWSG 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	
4,142.00	0.00	0.00	4,142.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,942.31	8.00	63.67	4,939.71	24.75	50.01	1.00	1.00	0.00	63.67	
11,362.03	8.00	63.67	11,296.90	421.25	851.05	0.00	0.00	0.00	0.00	
12,296.99	90.00	179.64	11,900.00	-150.16	930.86	10.00	8.77	12.40	115.76	
22,546.99	90.00	179.64	11,900.00	-10,399.96	995.01	0.00	0.00	0.00	0.00	PBHL (Lost Tank

OXY
Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Lost Tank 30_19 Fed Com 33H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	25' RKB @ 3640.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	25' RKB @ 3640.00ft
Site:	LOST TANK 30-19 FED	**North Reference:**	Grid
Well:	Lost Tank 30_19 Fed Com 33H	**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
4,142.00	0.00	0.00	4,142.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.58	63.67	4,200.00	0.13	0.26	-0.10	1.00	1.00	0.00
4,300.00	1.58	63.67	4,299.98	0.97	1.95	-0.78	1.00	1.00	0.00
4,400.00	2.58	63.67	4,399.91	2.58	5.21	-2.07	1.00	1.00	0.00
4,500.00	3.58	63.67	4,499.77	4.96	10.02	-3.98	1.00	1.00	0.00
4,600.00	4.58	63.67	4,599.51	8.12	16.40	-6.52	1.00	1.00	0.00
4,700.00	5.58	63.67	4,699.12	12.04	24.33	-9.67	1.00	1.00	0.00
4,800.00	6.58	63.67	4,798.55	16.74	33.83	-13.44	1.00	1.00	0.00
4,900.00	7.58	63.67	4,897.79	22.21	44.87	-17.84	1.00	1.00	0.00
4,942.31	8.00	63.67	4,939.71	24.75	50.01	-19.88	1.00	1.00	0.00
5,000.00	8.00	63.67	4,996.84	28.32	57.21	-22.74	0.00	0.00	0.00
5,100.00	8.00	63.67	5,095.86	34.49	69.69	-27.70	0.00	0.00	0.00
5,200.00	8.00	63.67	5,194.89	40.67	82.17	-32.66	0.00	0.00	0.00

OXY

Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Lost Tank 30_19 Fed Com 33H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	25' RKB @ 3640.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	25' RKB @ 3640.00ft
Site:	LOST TANK 30-19 FED	**North Reference:**	Grid
Well:	Lost Tank 30_19 Fed Com 33H	**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)
5,300.00	8.00	63.67	5,293.92	46.85	94.64	-37.62	0.00	0.00	0.00
5,400.00	8.00	63.67	5,392.94	53.02	107.12	-42.58	0.00	0.00	0.00
5,500.00	8.00	63.67	5,491.97	59.20	119.60	-47.54	0.00	0.00	0.00
5,600.00	8.00	63.67	5,590.99	65.37	132.08	-52.50	0.00	0.00	0.00
5,700.00	8.00	63.67	5,690.02	71.55	144.56	-57.46	0.00	0.00	0.00
5,800.00	8.00	63.67	5,789.05	77.73	157.03	-62.42	0.00	0.00	0.00
5,900.00	8.00	63.67	5,888.07	83.90	169.51	-67.38	0.00	0.00	0.00
6,000.00	8.00	63.67	5,987.10	90.08	181.99	-72.34	0.00	0.00	0.00
6,100.00	8.00	63.67	6,086.12	96.25	194.47	-77.30	0.00	0.00	0.00
6,200.00	8.00	63.67	6,185.15	102.43	206.94	-82.26	0.00	0.00	0.00
6,300.00	8.00	63.67	6,284.18	108.61	219.42	-87.22	0.00	0.00	0.00
6,400.00	8.00	63.67	6,383.20	114.78	231.90	-92.18	0.00	0.00	0.00
6,500.00	8.00	63.67	6,482.23	120.96	244.38	-97.14	0.00	0.00	0.00
6,600.00	8.00	63.67	6,581.26	127.14	256.86	-102.09	0.00	0.00	0.00
6,700.00	8.00	63.67	6,680.28	133.31	269.33	-107.05	0.00	0.00	0.00
6,800.00	8.00	63.67	6,779.31	139.49	281.81	-112.01	0.00	0.00	0.00
6,900.00	8.00	63.67	6,878.33	145.66	294.29	-116.97	0.00	0.00	0.00
7,000.00	8.00	63.67	6,977.36	151.84	306.77	-121.93	0.00	0.00	0.00
7,100.00	8.00	63.67	7,076.39	158.02	319.24	-126.89	0.00	0.00	0.00
7,200.00	8.00	63.67	7,175.41	164.19	331.72	-131.85	0.00	0.00	0.00
7,300.00	8.00	63.67	7,274.44	170.37	344.20	-136.81	0.00	0.00	0.00
7,400.00	8.00	63.67	7,373.46	176.54	356.68	-141.77	0.00	0.00	0.00
7,500.00	8.00	63.67	7,472.49	182.72	369.16	-146.73	0.00	0.00	0.00
7,600.00	8.00	63.67	7,571.52	188.90	381.63	-151.69	0.00	0.00	0.00
7,700.00	8.00	63.67	7,670.54	195.07	394.11	-156.65	0.00	0.00	0.00
7,800.00	8.00	63.67	7,769.57	201.25	406.59	-161.61	0.00	0.00	0.00
7,900.00	8.00	63.67	7,868.59	207.43	419.07	-166.57	0.00	0.00	0.00
8,000.00	8.00	63.67	7,967.62	213.60	431.54	-171.53	0.00	0.00	0.00
8,100.00	8.00	63.67	8,066.65	219.78	444.02	-176.49	0.00	0.00	0.00
8,200.00	8.00	63.67	8,165.67	225.95	456.50	-181.45	0.00	0.00	0.00
8,300.00	8.00	63.67	8,264.70	232.13	468.98	-186.41	0.00	0.00	0.00
8,400.00	8.00	63.67	8,363.72	238.31	481.46	-191.37	0.00	0.00	0.00
8,500.00	8.00	63.67	8,462.75	244.48	493.93	-196.33	0.00	0.00	0.00
8,600.00	8.00	63.67	8,561.78	250.66	506.41	-201.29	0.00	0.00	0.00
8,700.00	8.00	63.67	8,660.80	256.83	518.89	-206.25	0.00	0.00	0.00
8,800.00	8.00	63.67	8,759.83	263.01	531.37	-211.21	0.00	0.00	0.00
8,900.00	8.00	63.67	8,858.85	269.19	543.85	-216.17	0.00	0.00	0.00
9,000.00	8.00	63.67	8,957.88	275.36	556.32	-221.13	0.00	0.00	0.00
9,100.00	8.00	63.67	9,056.91	281.54	568.80	-226.09	0.00	0.00	0.00
9,200.00	8.00	63.67	9,155.93	287.72	581.28	-231.05	0.00	0.00	0.00
9,300.00	8.00	63.67	9,254.96	293.89	593.76	-236.01	0.00	0.00	0.00
9,400.00	8.00	63.67	9,353.98	300.07	606.23	-240.97	0.00	0.00	0.00
9,500.00	8.00	63.67	9,453.01	306.24	618.71	-245.93	0.00	0.00	0.00
9,600.00	8.00	63.67	9,552.04	312.42	631.19	-250.89	0.00	0.00	0.00
9,700.00	8.00	63.67	9,651.06	318.60	643.67	-255.85	0.00	0.00	0.00
9,800.00	8.00	63.67	9,750.09	324.77	656.15	-260.80	0.00	0.00	0.00
9,900.00	8.00	63.67	9,849.12	330.95	668.62	-265.76	0.00	0.00	0.00
10,000.00	8.00	63.67	9,948.14	337.12	681.10	-270.72	0.00	0.00	0.00
10,100.00	8.00	63.67	10,047.17	343.30	693.58	-275.68	0.00	0.00	0.00
10,200.00	8.00	63.67	10,146.19	349.48	706.06	-280.64	0.00	0.00	0.00
10,300.00	8.00	63.67	10,245.22	355.65	718.53	-285.60	0.00	0.00	0.00
10,400.00	8.00	63.67	10,344.25	361.83	731.01	-290.56	0.00	0.00	0.00
10,500.00	8.00	63.67	10,443.27	368.01	743.49	-295.52	0.00	0.00	0.00
10,600.00	8.00	63.67	10,542.30	374.18	755.97	-300.48	0.00	0.00	0.00
10,700.00	8.00	63.67	10,641.32	380.36	768.45	-305.44	0.00	0.00	0.00

OXY
Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Lost Tank 30_19 Fed Com 33H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	25' RKB @ 3640.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	25' RKB @ 3640.00ft
Site:	LOST TANK 30-19 FED	**North Reference:**	Grid
Well:	Lost Tank 30_19 Fed Com 33H	**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)
10,800.00	8.00	63.67	10,740.35	386.53	780.92	-310.40	0.00	0.00	0.00
10,900.00	8.00	63.67	10,839.38	392.71	793.40	-315.36	0.00	0.00	0.00
11,000.00	8.00	63.67	10,938.40	398.89	805.88	-320.32	0.00	0.00	0.00
11,100.00	8.00	63.67	11,037.43	405.06	818.36	-325.28	0.00	0.00	0.00
11,200.00	8.00	63.67	11,136.45	411.24	830.83	-330.24	0.00	0.00	0.00
11,300.00	8.00	63.67	11,235.48	417.41	843.31	-335.20	0.00	0.00	0.00
11,362.03	8.00	63.67	11,296.90	421.25	851.05	-338.28	0.00	0.00	0.00
11,400.00	7.21	92.04	11,334.55	422.33	855.80	-338.91	10.00	-2.09	74.73
11,500.00	12.55	145.04	11,433.22	413.18	868.33	-328.61	10.00	5.34	53.00
11,600.00	21.49	160.92	11,528.79	386.90	880.58	-301.28	10.00	8.94	15.88
11,700.00	31.07	167.53	11,618.37	344.29	892.17	-257.76	10.00	9.58	6.61
11,800.00	40.83	171.23	11,699.23	286.64	902.75	-199.36	10.00	9.77	3.70
11,900.00	50.68	173.70	11,768.93	215.71	912.00	-127.87	10.00	9.84	2.47
12,000.00	60.56	175.55	11,825.33	133.64	919.64	-45.45	10.00	9.88	1.85
12,100.00	70.46	177.07	11,866.73	42.94	925.44	45.39	10.00	9.90	1.52
12,200.00	80.38	178.41	11,891.88	-53.64	929.23	141.90	10.00	9.92	1.34
12,296.99	90.00	179.64	11,900.00	-150.16	930.86	238.13	10.00	9.92	1.27
12,300.00	90.00	179.64	11,900.00	-153.17	930.88	241.13	0.00	0.00	0.00
12,400.00	90.00	179.64	11,900.00	-253.17	931.50	340.73	0.00	0.00	0.00
12,500.00	90.00	179.64	11,900.00	-353.17	932.13	440.34	0.00	0.00	0.00
12,600.00	90.00	179.64	11,900.00	-453.17	932.75	539.94	0.00	0.00	0.00
12,700.00	90.00	179.64	11,900.00	-553.16	933.38	639.54	0.00	0.00	0.00
12,800.00	90.00	179.64	11,900.00	-653.16	934.01	739.15	0.00	0.00	0.00
12,900.00	90.00	179.64	11,900.00	-753.16	934.63	838.75	0.00	0.00	0.00
13,000.00	90.00	179.64	11,900.00	-853.16	935.26	938.35	0.00	0.00	0.00
13,100.00	90.00	179.64	11,900.00	-953.16	935.88	1,037.96	0.00	0.00	0.00
13,200.00	90.00	179.64	11,900.00	-1,053.15	936.51	1,137.56	0.00	0.00	0.00
13,300.00	90.00	179.64	11,900.00	-1,153.15	937.14	1,237.16	0.00	0.00	0.00
13,400.00	90.00	179.64	11,900.00	-1,253.15	937.76	1,336.77	0.00	0.00	0.00
13,500.00	90.00	179.64	11,900.00	-1,353.15	938.39	1,436.37	0.00	0.00	0.00
13,600.00	90.00	179.64	11,900.00	-1,453.15	939.01	1,535.97	0.00	0.00	0.00
13,700.00	90.00	179.64	11,900.00	-1,553.14	939.64	1,635.57	0.00	0.00	0.00
13,800.00	90.00	179.64	11,900.00	-1,653.14	940.26	1,735.18	0.00	0.00	0.00
13,900.00	90.00	179.64	11,900.00	-1,753.14	940.89	1,834.78	0.00	0.00	0.00
14,000.00	90.00	179.64	11,900.00	-1,853.14	941.52	1,934.38	0.00	0.00	0.00
14,100.00	90.00	179.64	11,900.00	-1,953.14	942.14	2,033.99	0.00	0.00	0.00
14,200.00	90.00	179.64	11,900.00	-2,053.13	942.77	2,133.59	0.00	0.00	0.00
14,300.00	90.00	179.64	11,900.00	-2,153.13	943.39	2,233.19	0.00	0.00	0.00
14,400.00	90.00	179.64	11,900.00	-2,253.13	944.02	2,332.80	0.00	0.00	0.00
14,500.00	90.00	179.64	11,900.00	-2,353.13	944.65	2,432.40	0.00	0.00	0.00
14,600.00	90.00	179.64	11,900.00	-2,453.13	945.27	2,532.00	0.00	0.00	0.00
14,700.00	90.00	179.64	11,900.00	-2,553.12	945.90	2,631.61	0.00	0.00	0.00
14,800.00	90.00	179.64	11,900.00	-2,653.12	946.52	2,731.21	0.00	0.00	0.00
14,900.00	90.00	179.64	11,900.00	-2,753.12	947.15	2,830.81	0.00	0.00	0.00
15,000.00	90.00	179.64	11,900.00	-2,853.12	947.78	2,930.42	0.00	0.00	0.00
15,100.00	90.00	179.64	11,900.00	-2,953.12	948.40	3,030.02	0.00	0.00	0.00
15,200.00	90.00	179.64	11,900.00	-3,053.11	949.03	3,129.62	0.00	0.00	0.00
15,300.00	90.00	179.64	11,900.00	-3,153.11	949.65	3,229.22	0.00	0.00	0.00
15,400.00	90.00	179.64	11,900.00	-3,253.11	950.28	3,328.83	0.00	0.00	0.00
15,500.00	90.00	179.64	11,900.00	-3,353.11	950.91	3,428.43	0.00	0.00	0.00
15,600.00	90.00	179.64	11,900.00	-3,453.11	951.53	3,528.03	0.00	0.00	0.00
15,700.00	90.00	179.64	11,900.00	-3,553.10	952.16	3,627.64	0.00	0.00	0.00
15,800.00	90.00	179.64	11,900.00	-3,653.10	952.78	3,727.24	0.00	0.00	0.00
15,900.00	90.00	179.64	11,900.00	-3,753.10	953.41	3,826.84	0.00	0.00	0.00
16,000.00	90.00	179.64	11,900.00	-3,853.10	954.03	3,926.45	0.00	0.00	0.00

OXY
Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Lost Tank 30_19 Fed Com 33H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	25' RKB @ 3640.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	25' RKB @ 3640.00ft
Site:	LOST TANK 30-19 FED	**North Reference:**	Grid
Well:	Lost Tank 30_19 Fed Com 33H	**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	179.64	11,900.00	-3,953.10	954.66	4,026.05	0.00	0.00	0.00
16,200.00	90.00	179.64	11,900.00	-4,053.10	955.29	4,125.65	0.00	0.00	0.00
16,300.00	90.00	179.64	11,900.00	-4,153.09	955.91	4,225.26	0.00	0.00	0.00
16,400.00	90.00	179.64	11,900.00	-4,253.09	956.54	4,324.86	0.00	0.00	0.00
16,500.00	90.00	179.64	11,900.00	-4,353.09	957.16	4,424.46	0.00	0.00	0.00
16,600.00	90.00	179.64	11,900.00	-4,453.09	957.79	4,524.06	0.00	0.00	0.00
16,700.00	90.00	179.64	11,900.00	-4,553.09	958.42	4,623.67	0.00	0.00	0.00
16,800.00	90.00	179.64	11,900.00	-4,653.08	959.04	4,723.27	0.00	0.00	0.00
16,900.00	90.00	179.64	11,900.00	-4,753.08	959.67	4,822.87	0.00	0.00	0.00
17,000.00	90.00	179.64	11,900.00	-4,853.08	960.29	4,922.48	0.00	0.00	0.00
17,100.00	90.00	179.64	11,900.00	-4,953.08	960.92	5,022.08	0.00	0.00	0.00
17,200.00	90.00	179.64	11,900.00	-5,053.08	961.55	5,121.68	0.00	0.00	0.00
17,300.00	90.00	179.64	11,900.00	-5,153.07	962.17	5,221.29	0.00	0.00	0.00
17,400.00	90.00	179.64	11,900.00	-5,253.07	962.80	5,320.89	0.00	0.00	0.00
17,500.00	90.00	179.64	11,900.00	-5,353.07	963.42	5,420.49	0.00	0.00	0.00
17,600.00	90.00	179.64	11,900.00	-5,453.07	964.05	5,520.10	0.00	0.00	0.00
17,700.00	90.00	179.64	11,900.00	-5,553.07	964.67	5,619.70	0.00	0.00	0.00
17,800.00	90.00	179.64	11,900.00	-5,653.06	965.30	5,719.30	0.00	0.00	0.00
17,900.00	90.00	179.64	11,900.00	-5,753.06	965.93	5,818.91	0.00	0.00	0.00
18,000.00	90.00	179.64	11,900.00	-5,853.06	966.55	5,918.51	0.00	0.00	0.00
18,100.00	90.00	179.64	11,900.00	-5,953.06	967.18	6,018.11	0.00	0.00	0.00
18,200.00	90.00	179.64	11,900.00	-6,053.06	967.80	6,117.71	0.00	0.00	0.00
18,300.00	90.00	179.64	11,900.00	-6,153.05	968.43	6,217.32	0.00	0.00	0.00
18,400.00	90.00	179.64	11,900.00	-6,253.05	969.06	6,316.92	0.00	0.00	0.00
18,500.00	90.00	179.64	11,900.00	-6,353.05	969.68	6,416.52	0.00	0.00	0.00
18,600.00	90.00	179.64	11,900.00	-6,453.05	970.31	6,516.13	0.00	0.00	0.00
18,700.00	90.00	179.64	11,900.00	-6,553.05	970.93	6,615.73	0.00	0.00	0.00
18,800.00	90.00	179.64	11,900.00	-6,653.04	971.56	6,715.33	0.00	0.00	0.00
18,900.00	90.00	179.64	11,900.00	-6,753.04	972.19	6,814.94	0.00	0.00	0.00
19,000.00	90.00	179.64	11,900.00	-6,853.04	972.81	6,914.54	0.00	0.00	0.00
19,100.00	90.00	179.64	11,900.00	-6,953.04	973.44	7,014.14	0.00	0.00	0.00
19,200.00	90.00	179.64	11,900.00	-7,053.04	974.06	7,113.75	0.00	0.00	0.00
19,300.00	90.00	179.64	11,900.00	-7,153.03	974.69	7,213.35	0.00	0.00	0.00
19,400.00	90.00	179.64	11,900.00	-7,253.03	975.31	7,312.95	0.00	0.00	0.00
19,500.00	90.00	179.64	11,900.00	-7,353.03	975.94	7,412.55	0.00	0.00	0.00
19,600.00	90.00	179.64	11,900.00	-7,453.03	976.57	7,512.16	0.00	0.00	0.00
19,700.00	90.00	179.64	11,900.00	-7,553.03	977.19	7,611.76	0.00	0.00	0.00
19,800.00	90.00	179.64	11,900.00	-7,653.02	977.82	7,711.36	0.00	0.00	0.00
19,900.00	90.00	179.64	11,900.00	-7,753.02	978.44	7,810.97	0.00	0.00	0.00
20,000.00	90.00	179.64	11,900.00	-7,853.02	979.07	7,910.57	0.00	0.00	0.00
20,100.00	90.00	179.64	11,900.00	-7,953.02	979.70	8,010.17	0.00	0.00	0.00
20,200.00	90.00	179.64	11,900.00	-8,053.02	980.32	8,109.78	0.00	0.00	0.00
20,300.00	90.00	179.64	11,900.00	-8,153.01	980.95	8,209.38	0.00	0.00	0.00
20,400.00	90.00	179.64	11,900.00	-8,253.01	981.57	8,308.98	0.00	0.00	0.00
20,500.00	90.00	179.64	11,900.00	-8,353.01	982.20	8,408.59	0.00	0.00	0.00
20,600.00	90.00	179.64	11,900.00	-8,453.01	982.83	8,508.19	0.00	0.00	0.00
20,700.00	90.00	179.64	11,900.00	-8,553.01	983.45	8,607.79	0.00	0.00	0.00
20,800.00	90.00	179.64	11,900.00	-8,653.01	984.08	8,707.39	0.00	0.00	0.00
20,900.00	90.00	179.64	11,900.00	-8,753.00	984.70	8,807.00	0.00	0.00	0.00
21,000.00	90.00	179.64	11,900.00	-8,853.00	985.33	8,906.60	0.00	0.00	0.00
21,100.00	90.00	179.64	11,900.00	-8,953.00	985.95	9,006.20	0.00	0.00	0.00
21,200.00	90.00	179.64	11,900.00	-9,053.00	986.58	9,105.81	0.00	0.00	0.00
21,300.00	90.00	179.64	11,900.00	-9,153.00	987.21	9,205.41	0.00	0.00	0.00
21,400.00	90.00	179.64	11,900.00	-9,252.99	987.83	9,305.01	0.00	0.00	0.00
21,500.00	90.00	179.64	11,900.00	-9,352.99	988.46	9,404.62	0.00	0.00	0.00

OXY
Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Lost Tank 30_19 Fed Com 33H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	25' RKB @ 3640.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	25' RKB @ 3640.00ft
Site:	LOST TANK 30-19 FED	**North Reference:**	Grid
Well:	Lost Tank 30_19 Fed Com 33H	**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)
21,600.00	90.00	179.64	11,900.00	-9,452.99	989.08	9,504.22	0.00	0.00	0.00
21,700.00	90.00	179.64	11,900.00	-9,552.99	989.71	9,603.82	0.00	0.00	0.00
21,800.00	90.00	179.64	11,900.00	-9,652.99	990.34	9,703.43	0.00	0.00	0.00
21,900.00	90.00	179.64	11,900.00	-9,752.98	990.96	9,803.03	0.00	0.00	0.00
22,000.00	90.00	179.64	11,900.00	-9,852.98	991.59	9,902.63	0.00	0.00	0.00
22,100.00	90.00	179.64	11,900.00	-9,952.98	992.21	10,002.24	0.00	0.00	0.00
22,200.00	90.00	179.64	11,900.00	-10,052.98	992.84	10,101.84	0.00	0.00	0.00
22,300.00	90.00	179.64	11,900.00	-10,152.98	993.47	10,201.44	0.00	0.00	0.00
22,400.00	90.00	179.64	11,900.00	-10,252.97	994.09	10,301.04	0.00	0.00	0.00
22,500.00	90.00	179.64	11,900.00	-10,352.97	994.72	10,400.65	0.00	0.00	0.00
22,546.99	90.00	179.64	11,900.00	-10,399.96	995.01	10,447.45	0.00	0.00	0.00

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
PBHL (Lost Tank - plan hits target center - Point	0.00	0.00	11,900.00	-10,399.96	995.01	493,544.50	732,123.28	32.355311	-103.715483
FTP (Lost Tank 30_19 - plan misses target center by 30.26ft at 12113.03ft MD (11870.95 TVD, 30.63 N, 926.05 E) - Point	0.00	0.00	11,900.00	38.31	929.68	503,982.23	732,057.95	32.384002	-103.715499

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
844.00	844.00	RUSTLER			
1,136.00	1,136.00	SALADO			
2,835.00	2,835.00	CASTILE			
4,610.52	4,610.00	DELAWARE			
4,676.78	4,676.00	BELL CANYON			
5,533.36	5,525.00	CHERRY CANYON			
6,763.34	6,743.00	BRUSHY CANYON			
8,543.68	8,506.00	BONE SPRING			
9,633.29	9,585.00	BONE SPRING 1ST			
10,280.59	10,226.00	BONE SPRING 2ND			
11,299.52	11,235.00	BONE SPRING 3RD			
11,798.37	11,698.00	WOLFCAMP			
11,825.28	11,718.00	WOLFCAMP			

OXY
Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Lost Tank 30_19 Fed Com 33H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	25' RKB @ 3640.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	25' RKB @ 3640.00ft
Site:	LOST TANK 30-19 FED	**North Reference:**	Grid
Well:	Lost Tank 30_19 Fed Com 33H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
4,142.00	4,142.00	0.00	0.00	Build 1°/100'
4,942.31	4,939.71	24.75	50.01	Hold 8° Tangent
11,362.03	11,296.91	421.25	851.05	KOP, Build & Turn 10°/100'
12,296.99	11,900.00	-150.16	930.86	Landing Point
22,546.98	11,900.00	-10,399.95	995.01	TD at 22546.99' MD

Oxy USA Inc. - Lost Tank 30_19 Fed Com 33H
Drill Plan

1. Geologic Formations

TVD of Target (ft):	11900	Pilot Hole Depth (ft):	
Total Measured Depth (ft):	22547	Deepest Expected Fresh Water (ft):	844

Delaware Basin

Formation	MD-RKB (ft)	TVD-RKB (ft)	Expected Fluids
Rustler	844	844	
Salado	1136	1136	Salt
Castile	2835	2835	Salt
Delaware	4611	4610	Oil/Gas/Brine
Bell Canyon	4677	4676	Oil/Gas/Brine
Cherry Canyon	5533	5525	Oil/Gas/Brine
Brushy Canyon	6763	6743	Losses
Bone Spring	8544	8506	Oil/Gas
Bone Spring 1st	9633	9585	Oil/Gas
Bone Spring 2nd	10281	10226	Oil/Gas
Bone Spring 3rd	11300	11235	Oil/Gas
Wolfcamp	11825	11718	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	904	0	904	13.375	54.5	J-55	BTC
Salt	12.25	0	4710	0	4709	10.75	45.5	L-80 HC	BTC-SC
Intermediate	9.875	0	11262	0	11197	7.827	39.3	P110S	Wedge 463
Production	6.75	11062	22547	10997	11900	5.5	20	P-110	Wedge 461

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

*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.

	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?	N
If yes, are the first three strings cemented to surface?	
Is 2nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

3. Cementing Program

Section	Stage	Slurry:	Sacks	Yield (ft^3/ft)	Density (lb/gal)	Excess:	TOC	Placement	Description
Surface	1	Surface - Tail	944	1.33	14.8	100%	-	Circulate	Class C+Accel.
Int.1	1	Intermediate - Tail	85	1.33	14.8	20%	4,210	Circulate	Class C+Accel.
Int.1	1	Intermediate - Lead	664	1.73	12.9	50%	-	Circulate	Class Pozz+Ret.
Int. 2	1	Intermediate 1S - Tail	535	1.65	13.2	5%	7,013	Circulate	Class H+Accel., Disper., Salt
Int. 2	2	Intermediate 2S - Tail BH	900	1.71	13.3	25%	-	Bradenhead	Class C+Accel.
Prod.	1	Production - Tail	867	1.38	13.2	25%	11,062	Circulate	Class H+Ret., Disper., Salt

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.

Cement Top and Liner Overlap

- Oxy is requesting permission to have minimum fill of cement behind the 5-1/2” production liner to be 200 ft into previous casing string
  The reason for this is so that we can come back and develop shallower benches from the same 7.625”/7.827" mainbore in the future
- Cement will be brought to the top of this liner hanger

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	4709
		5M	Blind Ram	✓	250 psi / 5000 psi	
			Pipe Ram			
			Double Ram	✓		
			Other*			
9.875" Hole	13-5/8"	5M	Annular	✓	70% of working pressure	11197
		5M	Blind Ram	✓	250 psi / 5000 psi	
			Pipe Ram			
			Double Ram	✓		
			Other*			
6.75" Hole	13-5/8"	5M	Annular	✓	100% of working pressure	11900
		10M	Blind Ram	✓	250 psi / 10000 psi	
			Pipe Ram			
			Double Ram	✓		
			Other*			

*Specify if additional ram is utilized

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

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

5M Annular BOP Request

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

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

BOP Break Testing Request

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

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

5. Mud Program

Section	Depth		Depth - TVD		Type	Weight (ppg)	Viscosity	Water Loss
	From (ft)	To (ft)	From (ft)	To (ft)				
Surface	0	904	0	904	Water-Based Mud	8.6 - 8.8	40-60	N/C
Intermediate 1	904	4710	904	4709	Saturated Brine-Based or Oil-Based Mud	8.0 - 10.0	35-45	N/C
Intermediate 2	4710	11262	4709	11197	Water-Based or Oil-Based Mud	8.0 - 10.0	38-50	N/C
Production	11262	22547	11197	11900	Water-Based or Oil-Based Mud	9.5 - 12.5	38-50	N/C

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

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

6. Logging and Testing Procedures

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

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

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	7735 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	176°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: 1944 bbls

Oxy USA Inc. - Lost Tank 30_19 Fed Com 33H
Drill Plan

1. Geologic Formations

TVD of Target (ft):	11900	Pilot Hole Depth (ft):	
Total Measured Depth (ft):	22547	Deepest Expected Fresh Water (ft):	844

Delaware Basin

Formation	MD-RKB (ft)	TVD-RKB (ft)	Expected Fluids
Rustler	844	844	
Salado	1136	1136	Salt
Castile	2835	2835	Salt
Delaware	4611	4610	Oil/Gas/Brine
Bell Canyon	4677	4676	Oil/Gas/Brine
Cherry Canyon	5533	5525	Oil/Gas/Brine
Brushy Canyon	6763	6743	Losses
Bone Spring	8544	8506	Oil/Gas
Bone Spring 1st	9633	9585	Oil/Gas
Bone Spring 2nd	10281	10226	Oil/Gas
Bone Spring 3rd	11300	11235	Oil/Gas
Wolfcamp	11825	11718	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	904	0	904	13.375	54.5	J-55	BTC
Intermediate	12.25	0	11262	0	11197	7.827	39.3	P110S	Wedge 463
Production	6.75	11062	22547	10997	11900	5.5	20	P-110	Wedge 461

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

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

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

*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.

	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?	N
If yes, are the first three strings cemented to surface?	
Is 2nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

3. Cementing Program

Section	Stage	Slurry:	Sacks	Yield (ft^3/ft)	Density (lb/gal)	Excess:	TOC	Placement	Description
Surface	1	Surface - Tail	944	1.33	14.8	100%	-	Circulate	Class C+Accel.
Int.	1	Intermediate 1S - Tail	1310	1.65	13.2	5%	7,013	Circulate	Class H+Accel., Disper., Salt
Int.	2	Intermediate 2S - Tail BH	2445	1.71	13.3	25%	-	Bradenhead	Class C+Accel.
Prod.	1	Production - Tail	867	1.38	13.2	25%	11,062	Circulate	Class H+Ret., Disper., Salt

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.

Cement Top and Liner Overlap

- Oxy is requesting permission to have minimum fill of cement behind the 5-1/2” production liner to be 200 ft into previous casing string
  The reason for this is so that we can come back and develop shallower benches from the same 7.625”/7.827" mainbore in the future
- Cement will be brought to the top of this liner hanger

4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	✓	Tested to:	Deepest TVD Depth (ft) per Section:
12.25" Hole	13-5/8"	5M	Annular	✓	70% of working pressure	11197
		5M	Blind Ram	✓	250 psi / 5000 psi	
			Pipe Ram			
			Double Ram	✓		
			Other*			
6.75" Hole	13-5/8"	5M	Annular	✓	100% of working pressure	11900
		10M	Blind Ram	✓	250 psi / 10000 psi	
			Pipe Ram			
			Double Ram	✓		
			Other*			

*Specify if additional ram is utilized

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

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

5M Annular BOP Request

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

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

BOP Break Testing Request

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

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

5. Mud Program

Section	Depth - MD		Depth - TVD		Type	Weight (ppg)	Viscosity	Water Loss
	From (ft)	To (ft)	From (ft)	To (ft)				
Surface	0	904	0	904	Water-Based Mud	8.6 - 8.8	40-60	N/C
Intermediate	904	11262	904	11197	Saturated Brine-Based or Oil-Based Mud	8.0 - 10.0	35-45	N/C
Production	11262	22547	11197	11900	Water-Based or Oil-Based Mud	9.5 - 12.5	38-50	N/C

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

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

6. Logging and Testing Procedures

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

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

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	7735 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	176°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: 2279 bbls

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 325928

CONDITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 325928
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	IF ON ANY STRING CEMENT DOES NOT CIRCULATE, A CBL MUST BE RUN ON THAT STRING OF CASING.	4/1/2024