

Well Name: REGAL LAGER 31-19 FEDERAL COM	Well Location: T21S / R32E / SEC 31 / SESW / 32.4283036 / -103.7142143	County or Parish/State: LEA / NM
Well Number: 1H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM109757	Unit or CA Name:	Unit or CA Number:
US Well Number:	Operator: OXY USA INCORPORATED	

Notice of Intent

Sundry ID: 2860833

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 06/30/2025

Time Sundry Submitted: 03:40

Date proposed operation will begin: 08/15/2025

Procedure Description: OXY USA Inc., respectfully requests to amend the subject AAPD to revise the BHL, HSU, TVD and Drill Plan. Old BHL: 20' FSL 330' FWL New BHL: 20' FNL 1165' FWL Old HSU: 522.32 acres New HSU: 1002.32 acres Old TVD: 9641' New TVD: 10897' *THERE IS NO ADDITIONAL SURFACE DISTURBANCE RELATED TO THIS SUNDRY" Attached is the updated C102, drill plan, directional and APD Change Worksheet.

*Per 19.15.14.9 NMAC, OXY USA Inc. certifies no addition of PFAS chemicals to fluids used in the completion of recompletion of the subject well.

NOI Attachments

Procedure Description

RegalLager31_19FedCom1H_C102_20250630153948.pdf

RegalLager31_19FedCom1H_VAM_SPRINT_TC_SC_5.5in_20ppf_F110EC_20250630153746.pdf

RegalLager31_19FedCom1H_VAM_DWC_C_HT_IS_5.500in_20ppf_P110RY_20250630153731.pdf

RegalLager31_19FedCom1H_API_BTC_SC_10.750_40.5ppf_J55_20250630153718.pdf

RegalLager31_19FedCom1H_13inADAPT_4S_10x15_20250630153704.pdf

RegalLager31_19FedCom1H_5MAnnBOPVariance_20250630153641.pdf

RegalLager31_19FedCom1H_BOPBreakTestingVariance2025_20250630153623.pdf

RegalLager31_19FedCom1H_2024_KPLA_Addendum_WellboreSchematics_20250630153608.pdf

RegalLager31_19FedCom1H_DirectPlan_20250630153553.pdf

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FEDERAL COM

Well Location: T21S / R32E / SEC 31 /
SESW / 32.4283036 / -103.7142143

County or Parish/State: LEA /
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RegalLager31_19FedCom1H_DrillPlan_20250630153537.pdf

RegalLager31_19FedCom1H_APDCHGSUNDRYWORKSHEET_20250630153445.pdf

Conditions of Approval

Additional

REGAL_LAGER_31_19_FEDERAL_COM_1H___SUNDRY_COA___7_15_2025_20250721131314.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: JUN 30, 2025 03:40 PM

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: 07/22/2025

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

5. Lease Serial No.
NMNM109757

6. If Indian, Allottee or Tribe Name

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

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

2. Name of Operator
OXY USA INCORPORATED

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

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

4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)
SEC 31/T21S/R32E/NMP

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

8. Well Name and No.
REGAL LAGER 31-19 FEDERAL COM/1H

9. API Well No.

10. Field and Pool or Exploratory Area
Livingston Ridge/BONE SPRING

11. Country or Parish, State
LEA/NM

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

TYPE OF SUBMISSION	TYPE OF ACTION				
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off	
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity	
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other	
	☒ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon		
	☐ 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 recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

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

Old BHL: 20' FSL 330' FWL
New BHL: 20' FNL 1165' FWL

Old HSU: 522.32 acres
New HSU: 1002.32 acres

Old TVD: 9641'
New TVD: 10897'

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

*Per 19.15.14.9 NMAC, OXY USA Inc. certifies no addition of PFAS chemicals to fluids used in the completion of recompletion of the subject well.

Continued on page 3 additional information

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

Advisor Regulatory Sr.

Signature (Electronic Submission)

Date
06/30/2025

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by
KEITH P IMMATTY / Ph: (575) 988-4722 / Approved

ENGINEER

Date
07/22/2025

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

Office
CARLSBAD

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

(Instructions on page 2)

GENERAL INSTRUCTIONS

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

SPECIFIC INSTRUCTIONS

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

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

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

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

Additional Information

Additional Remarks

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

Location of Well

0. SHL: SESW / 178 FSL / 2689 FWL / TWSP: 21S / RANGE: 32E / SECTION: 31 / LAT: 32.4283036 / LONG: -103.7142143 (TVD: 0 feet, MD: 0 feet)
PPP: LOT 2 / 2640 FSL / 330 FWL / TWSP: 21S / RANGE: 32E / SECTION: 19 / LAT: 32.4640896 / LONG: -103.7218443 (TVD: 9664 feet, MD: 22930 feet)
PPP: LOT 4 / 0 FSL / 330 FWL / TWSP: 21S / RANGE: 32E / SECTION: 19 / LAT: 32.4568331 / LONG: -103.7218457 (TVD: 9688 feet, MD: 20290 feet)
PPP: LOT 4 / 0 FSL / 330 FWL / TWSP: 21S / RANGE: 32E / SECTION: 30 / LAT: 32.4423056 / LONG: -103.72185 (TVD: 9734 feet, MD: 15004 feet)
PPP: LOT 2 / 2641 FNL / 330 FWL / TWSP: 21S / RANGE: 32E / SECTION: 31 / LAT: 32.4350468 / LONG: -103.7218546 (TVD: 9758 feet, MD: 12364 feet)
PPP: LOT 4 / 100 FSL / 330 FWL / TWSP: 21S / RANGE: 32E / SECTION: 31 / LAT: 32.4280632 / LONG: -103.7218591 (TVD: 9774 feet, MD: 10501 feet)
BHL: LOT 1 / 20 FNL / 330 FWL / TWSP: 21S / RANGE: 32E / SECTION: 19 / LAT: 32.4712938 / LONG: -103.7218429 (TVD: 9641 feet, MD: 25552 feet)

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: OXY USA INC.
WELL NAME & NO.: REGAL LAGER 31_19 FED COM 1H
LOCATION: SEC31 T21S R32E -NMP
COUNTY: Lea County, New Mexico

Create COAs

H₂S Present	Cave / Karst Low	Waste Prevention Rule Waste Minimization Plan
Potash R-111-Q	R-111-Q Design 4-String: Open 1st Int x 2nd Annulus (ICP 2 below Relief Zone)	
Wellhead Multibowl	Casing 4-String Well	
☒ Flex Hose ☒ Break Testing	☐ Liner ☐ DV Tool ☒ Offline Cement ☐ Fluid Filled ☒ Bradenhead ☒ Open Annulus ☐ Casing Clearance ☐ Echometer ☐ Pilot Hole	
Special Requirements		
☐ Capitan Reef	☐ Water Disposal	☒ COM ☐ Unit

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H₂S) Drilling Plan shall be activated AT SPUD. As a result, the Hydrogen Sulfide area must meet all requirements from 43 CFR 3176, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

APD is within the R-111-Q defined boundary. Operator must follow all procedures and requirements listed within the updated order.

B. CASING

1. The 13-3/8 inch surface casing shall be set at approximately 864 feet (a minimum of 70' 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** or **500 pounds compressive strength**, whichever is greater (including 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 minimum required fill of cement behind the **10-3/4** inch 1st 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 the presence of cave/karst, Capitan Reef, or potash features.
 3. The minimum required fill of cement behind the **7-5/8** inch 2nd intermediate casing is **500 feet** into the previous casing but not higher than USGS Marker Bed No. 126 (base of the McNutt Potash ore zone.)
 - Operator must verify top of cement per R-111-Q requirements. Submit results to the BLM. If cement does not circulate, contact the appropriate BLM office.
 - **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry** due to the presence of cave/karst, Capitan Reef, or potash features.

Bradenhead Squeeze: 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 to squeeze and top-out. Cement to meet requirements listed for this casing string. If cement does not circulate see B.1.a, c-d above.

Operator has proposed to pump down **Intermediate 1 X Intermediate 2** annulus. Submit results to the 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.

- Operator shall run a CBL from TD of the **Intermediate 2** casing to tieback requirements listed above after the second stage BH to verify TOC.
- **A monitored open annulus will be incorporated during completion by leaving the above annulus un-cemented and monitored.** Operator must follow **all** monitoring requirements listed within R-111-Q. Tieback shall be met within **180 days**.
- Operator has proposed an open annulus completion in R-111-Q. Operator shall provide a method of verification pre-completion top of cement. **Submit results to the BLM.**

- Pressure monitoring device and Pressure Safety Valves must be installed at surface on both the intermediate annulus and the production annulus for the life of the well.
 - **In the event of a casing failure during completion**, the operator **must** contact the BLM at engineers (575-706-2779) and inspection staff (575-361-2822 Eddy County).
4. The minimum required fill of cement behind the **5-1/2** inch production casing is **500 feet** into the previous casing but not higher than USGS Marker Bed No. 126 (base of the McNutt Potash ore zone.)
- Operator must verify top of cement per R-111-Q requirements. Submit results to the BLM. If cement does not circulate, contact the appropriate BLM office.
 - **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry** due to the presence of cave/karst, Capitan Reef, or potash features.

C. PRESSURE CONTROL

1. Operator has proposed a multi-bowl wellhead assembly. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M) psi** and intermediate casing shoe shall be **10,000 (10M) psi**. **Variance is approved to use a 5000 (5M) annular which shall be tested to 3500 psi.**
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.
2. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).

BOPE Break Testing Variance

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

- BOPE Break Testing is ONLY permitted for hole sections with 5M MASP or less.
- The break test should involve a shell test that includes testing the upper pipe rams as proposed.

- Variance only pertains to the hole-sections in and shallower than the Wolfcamp formation. Break testing is NOT allowed when planning to penetrate the Penn group.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle in accordance with API STD 53.
- Any well control event while drilling require notification to the BLM Petroleum Engineer.
- A full BOPE test is required prior to drilling the first intermediate section.
- If a hole section tends to show more background gas than normal, please notify BLM Engineer prior to proceeding with break testing on the next well.
- The BLM PET is to be contacted 4 hours prior to BOPE tests.
 - Eddy County Petroleum Engineering Inspection Staff: (575) 361-2822
 - Lea County Petroleum Engineering Inspection Staff: (575) 689-5981
- 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 3172. Function test is NOT adequate when repairs or replacement of BOPE is needed.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

D. SPECIAL REQUIREMENT(S)

Communitization Agreement:

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR 3171 and 3172.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

Offline Cementing

Offline cementing has been approved for **all hole sections, excluding production**. Contact the BLM prior to the commencement of any offline cementing procedure.

GENERAL REQUIREMENTS

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

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

Contact Lea County Petroleum Engineering Inspection Staff:

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 689-5981

Contact Eddy County Petroleum Engineering Inspection Staff:

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

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - i. Notify the BLM when moving in and removing the Spudder Rig.
 - ii. Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - iii. BOP/BOPE test to be conducted per **43 CFR 3172** as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e.

- changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
 8. Whenever a casing string is cemented in the R-111-Q potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR 3172**.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if

- exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - ii. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - iii. Manufacturer representative shall install the test plug for the initial BOP test.
 - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
 - v. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - i. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - ii. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)

- iii. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- iv. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- v. The results of the test shall be reported to the appropriate BLM office.
- vi. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- vii. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- viii. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR 3172**.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

KPI 7/21/2025

C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals, & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024 PAGE 1 OF 2
		Submittal Type: ☐ Initial Submittal ☒ Amended Report ☐ As Drilled

WELL LOCATION INFORMATION

API Number 30-025-54950	Pool Code 5695	Pool Name BILBREY BASIN; BONE SPRING
Property Code	Property Name REGAL LAGER 31_19 FED COM	Well Number 1H
OGRID No. 16696	Operator Name OXY USA INC.	Ground Level Elevation 3621'
Surface Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal		Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
N	31	21S	32E		178' FSL	2689' FWL	32.42830369	-103.71421437	LEA

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
D	19	21S	32E	1	20' FNL	1165' FWL	32.47130347	-103.71913549	LEA

Dedicated Acres 1002.32	Infill or Defining Well DEFINING	Defining Well API PENDING	Overlapping Spacing Unit (Y/N) N	Consolidation Code N/A
Order Numbers: N/A			Well setbacks are under Common Ownership: ☐ Yes ☒ No	

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
D	06	22S	32E	4	300' FNL	1165' FWL	32.42697329	-103.71915372	LEA

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
M	31	21S	32E	4	100' FSL	1165' FWL	32.42807278	-103.71915288	LEA

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
D	19	21S	32E	1	100' FNL	1165' FWL	32.47108357	-103.71913553	LEA

Unitized Area or Area of Uniform Interest N/A	Spacing Unit Type: ☒ Horizontal ☐ Vertical	Ground Floor Elevation 3621'
--	---	---------------------------------

OPERATOR CERTIFICATIONS

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

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

Melissa Guidry 06/20/25
Signature Date

Melissa Guidry
Printed Name

melissa_guidry@oxy.com
Email Address

SURVEYOR CERTIFICATIONS

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



Signature and Seal of Professional Surveyor

Certificate Number

Date of Survey

21653

JUNE 24, 2025

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

ACREAGE DEDICATION PLATS

REGAL LAGER 31_19 FED COM 1H

PAGE 2 OF 2

BHL (NAD83) X:730752.70' / Y:535736.15' LAT:32.47130347 / LON:-103.71913549
BHL (NAD27) X:689571.22' / Y:535674.88' LAT:32.47118119 / LON:-103.71864369
LTP (NAD83) X:730753.15' / Y:535656.15' LAT:32.47108357 / LON:-103.71913553
LTP (NAD27) X:689571.67' / Y:535594.88' LAT:32.47096128 / LON:-103.71864373
PPP-5 (NAD83) X:730766.90' / Y:533115.03' LAT:32.46409871 / LON:-103.71913837
PPP-5 (NAD27) X:689585.34' / Y:533053.83' LAT:32.46397639 / LON:-103.71864685
PPP-4 (NAD83) X:730781.16' / Y:530477.29' LAT:32.45684828 / LON:-103.71914131
PPP-4 (NAD27) X:689599.54' / Y:530416.16' LAT:32.45672593 / LON:-103.71865007
PPP-3 (NAD83) X:730809.76' / Y:525190.76' LAT:32.44231701 / LON:-103.71914718
PPP-3 (NAD27) X:689627.99' / Y:525129.77' LAT:32.44219458 / LON:-103.71865651
PPP-2 (NAD83) X:730824.05' / Y:522550.11' LAT:32.43505856 / LON:-103.71915009
PPP-2 (NAD27) X:689642.19' / Y:522489.20' LAT:32.43493610 / LON:-103.71865970
FTP (NAD83) X:730837.80' / Y:520008.67' LAT:32.42807278 / LON:-103.71915288
FTP (NAD27) X:689655.87' / Y:519947.82' LAT:32.42795029 / LON:-103.71866276
PPP-1 (NAD83) X:730838.31' / Y:519908.67' LAT:32.42779791 / LON:-103.71915309
PPP-1 (NAD27) X:689656.38' / Y:519847.82' LAT:32.42767542 / LON:-103.71866299
KOP (NAD83) X:730839.84' / Y:519608.67' LAT:32.42697329 / LON:-103.71915372
KOP (NAD27) X:689657.90' / Y:519547.83' LAT:32.42685079 / LON:-103.71866364
SHL (NAD83) X:732361.08' / Y:520101.47' LAT:32.42830369 / LON:-103.71421437
SHL (NAD27) X:691179.14' / Y:520040.61' LAT:32.42818117 / LON:-103.71372439

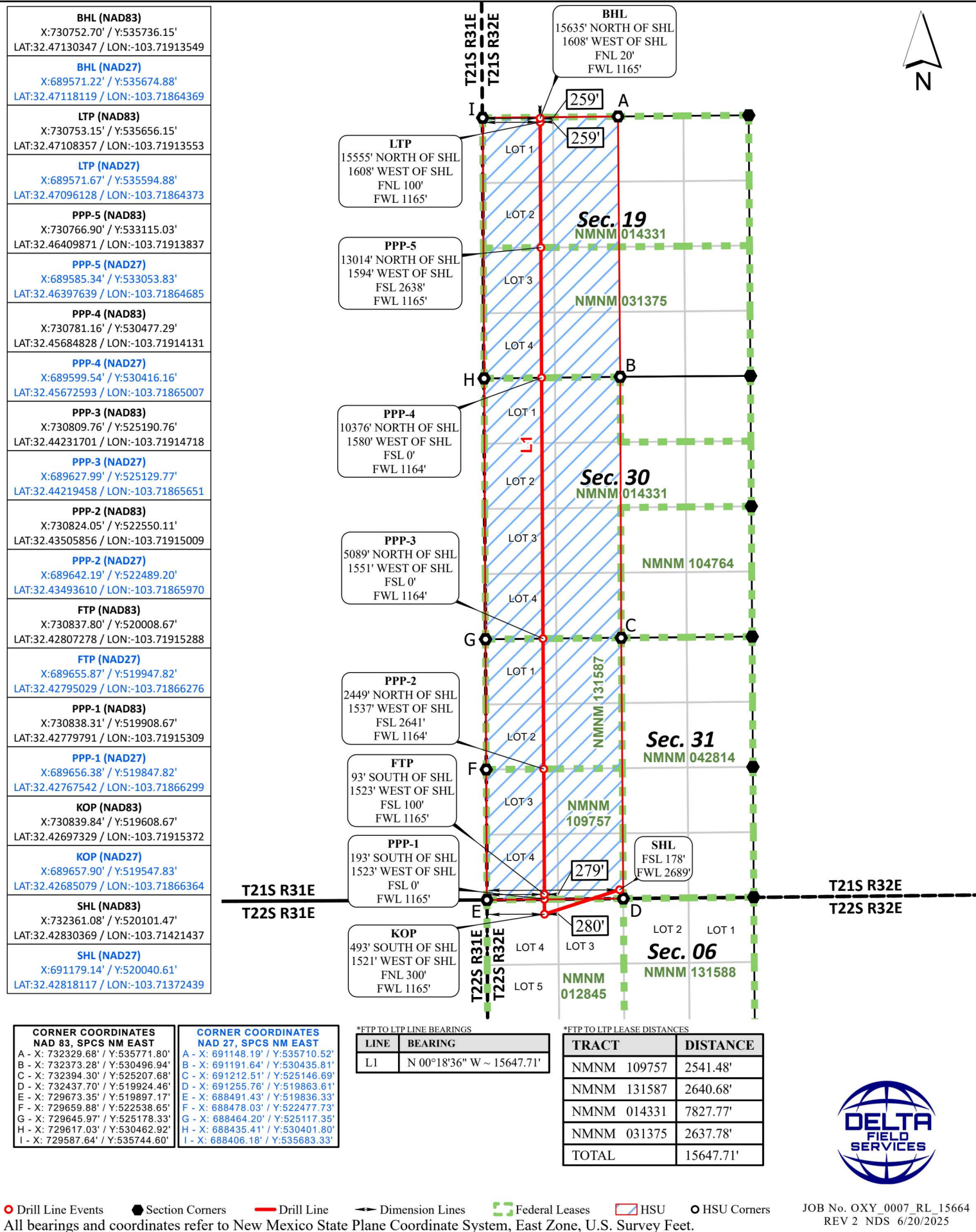
CORNER COORDINATES NAD 83, SPCS NM EAST	CORNER COORDINATES NAD 27, SPCS NM EAST
A - X: 732329.68' / Y:535771.80'	A - X: 691148.19' / Y:535710.52'
B - X: 732373.28' / Y:530496.94'	B - X: 691191.64' / Y:530435.81'
C - X: 732394.30' / Y:525207.68'	C - X: 691212.51' / Y:525146.69'
D - X: 732437.70' / Y:519924.46'	D - X: 691255.76' / Y:519863.61'
E - X: 729673.35' / Y:519897.17'	E - X: 688491.43' / Y:519836.33'
F - X: 729659.88' / Y:522538.65'	F - X: 688478.03' / Y:522477.73'
G - X: 729645.97' / Y:525178.33'	G - X: 688464.20' / Y:525117.35'
H - X: 729617.03' / Y:530462.92'	H - X: 688435.41' / Y:530401.80'
I - X: 729587.64' / Y:535744.60'	I - X: 688406.18' / Y:535683.33'

*FTP to LTP LINE BEARINGS

LINE	BEARING
L1	N 00°18'36" W ~ 15647.71'

*FTP to LTP LEASE DISTANCES

TRACT	DISTANCE
NMNM 109757	2541.48'
NMNM 131587	2640.68'
NMNM 014331	7827.77'
NMNM 031375	2637.78'
TOTAL	15647.71'



○ Drill Line Events ● Section Corners — Drill Line — Dimension Lines □ Federal Leases □ HSU ○ HSU Corners

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

JOB No. OXY_0007_RL_15664
REV 2 NDS 6/20/2025

Distances/areas relative to NAD 83 grid measurements. Combined Scale Factor: 0.99977642 and a Convergence Angle: 0.32750833°

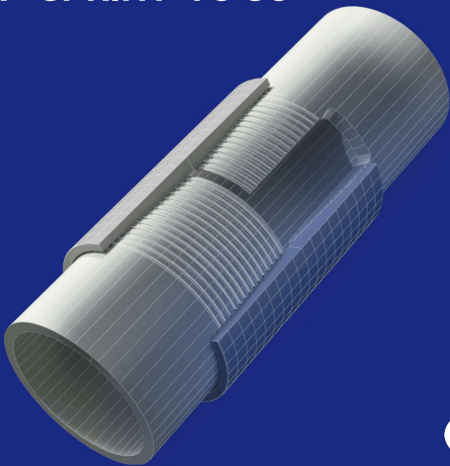




CONNECTION DATA SHEET

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

VAM® SPRINT-TC SC



T&C

Field Torque Values

Make-up Torque (ft-lb)

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

Torque with Sealability (ft-lb)

- 39,200 MTS

Locked Flank Torque (ft-lb)

- 1,200 MIN
- 16,800 MAX

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

PIPE BODY PROPERTIES

Nominal OD	5.500	in.
Nominal ID	4.778	in.
Nominal Wall Thickness	0.361	in.
Minimum Wall Thickness	87.5	%
Nominal Weight (API)	20.00	lb/ft
Plain End Weight	19.83	lb/ft
Drift	4.653	in.
Grade Type	High Yield	
Minimum Yield Strength	125	ksi
Maximum Yield Strength	140	ksi
Minimum Ultimate Tensile Strength	135	ksi
Pipe Body Yield Strength	729	klb
Internal Yield Pressure	14,360	psi
Collapse Pressure	12,090	psi

CONNECTION PROPERTIES

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

JOINT PERFORMANCES

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

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



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

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API BTC -Special Clearance

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

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

Pipe Body Data

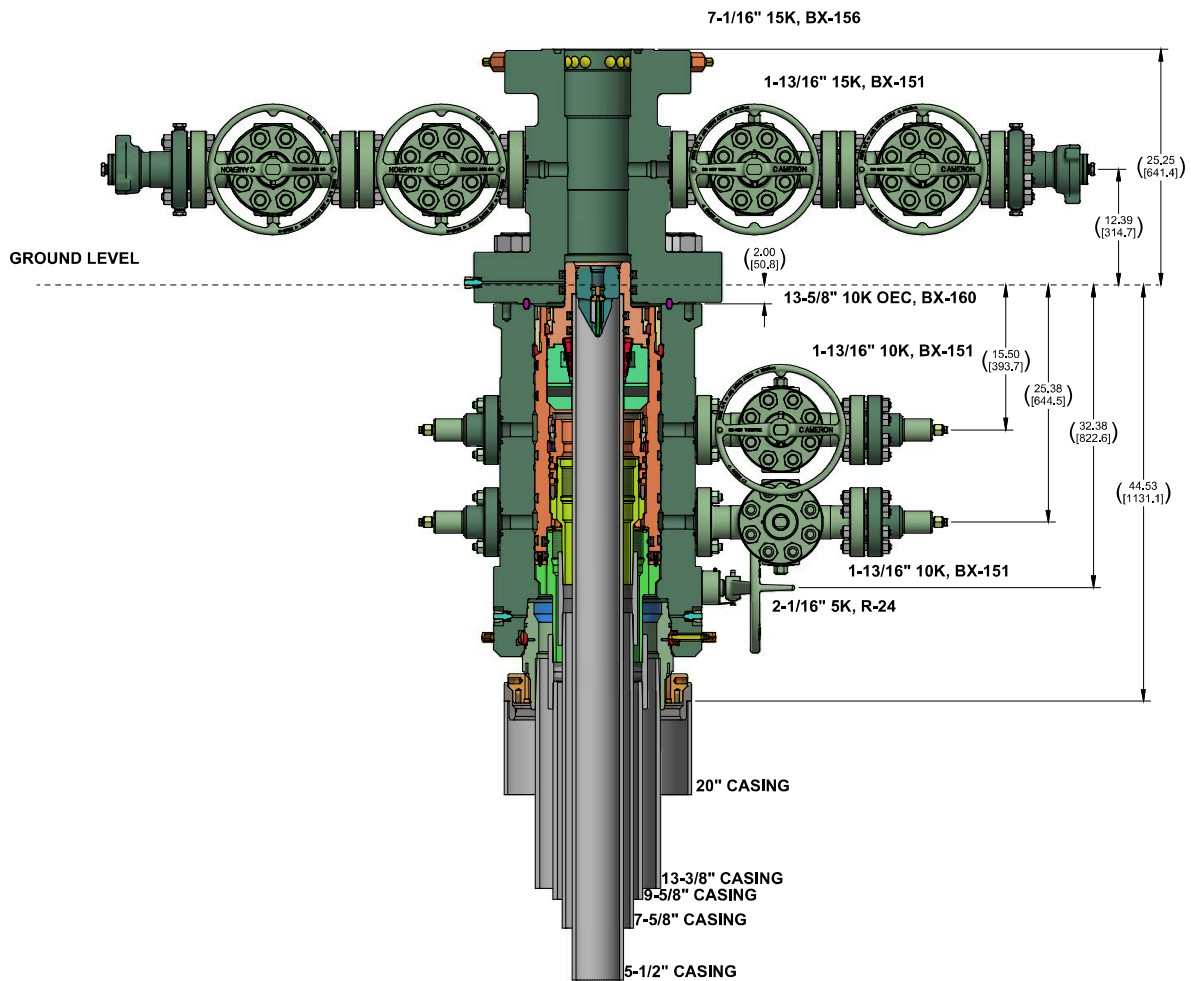
Geometry		Performance	
Nominal OD	10.750 in.	Drift	9.894 in.
Wall Thickness	0.350 in.	Plain End Weight	38.91 lb/ft
Nominal Weight	40.500 lb/ft	OD Tolerance	API
Nominal ID	10.050 in.		
		SMYS	55,000 psi
		Min UTS	75,000 psi
		Body Yield Strength	629 x1000 lb
		Min. Internal Yield Pressure	3130 psi
		Collapse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

Connection Data

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

Notes

For products according to API Standards 5CT & 5B; Performance calculated considering API Technical Report 5C3 (Sections 9 & 10) equations.
For geometrical and steel grades combinations not considered in the API Standards 5CT and/or 5B; Performance calculations indirectly derived from API Technical Report 5C3 (Sections 9 & 10) equations.
Couplings OD are shown according to current API 5CT 10th Edition.
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CONFIDENTIAL				
SURFACE TREATMENT	DO NOT SCALE		 CAMERON A Schlumberger Company	SURFACE SYSTEMS
	DESIGNED BY	DATE		
	A. SKLENKA	26 Apr 22		
MATERIAL & HEAT TREAT	CHECKED BY	DATE		
	A. SKLENKA	26 Apr 22		
	DRAWN BY	DATE		
	A. SKLENKA	26 Apr 22		
	APPROVED BY	DATE		
	A. SKLENKA	26 Apr 22		
ESTIMATED WEIGHT:	7568.4 LBS (3439.4 KG) USE BULK 3614.4 KG (174 7336394)		SHEET	
			1 of 1	
ADAPT NST 10K 3 STAGE WELLHEAD STANDARD / EMERGENCY SYSTEM			LO-096232-62	
			REV 01	

5M Annular 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

BOP Break Testing Request

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

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

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

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

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

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

Background

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

Supporting Rationale

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

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

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

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

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

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

Procedures

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

Notes:

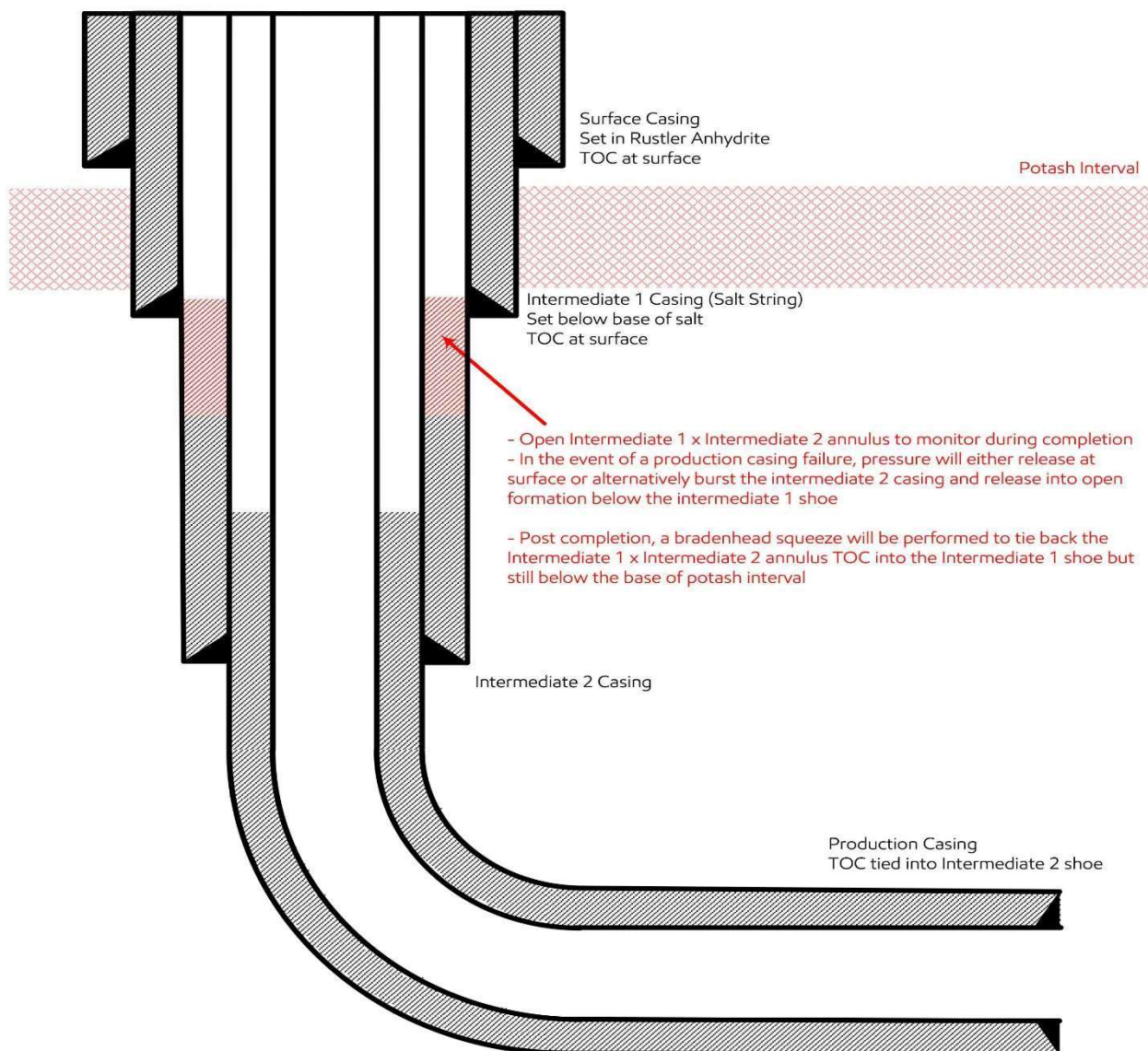
- a. If any parts of the BOP are changed out or any additional breaks are made during the skidding operation, these affected components would also be tested as in step 9.
- b. As the choke manifold remains stationary during the skidding operation and the only break to the manifold is tested in step 8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

Summary

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

Revision Date – May 21, 2024

4-String Design – Open Int 1 x Int 2 Annulus



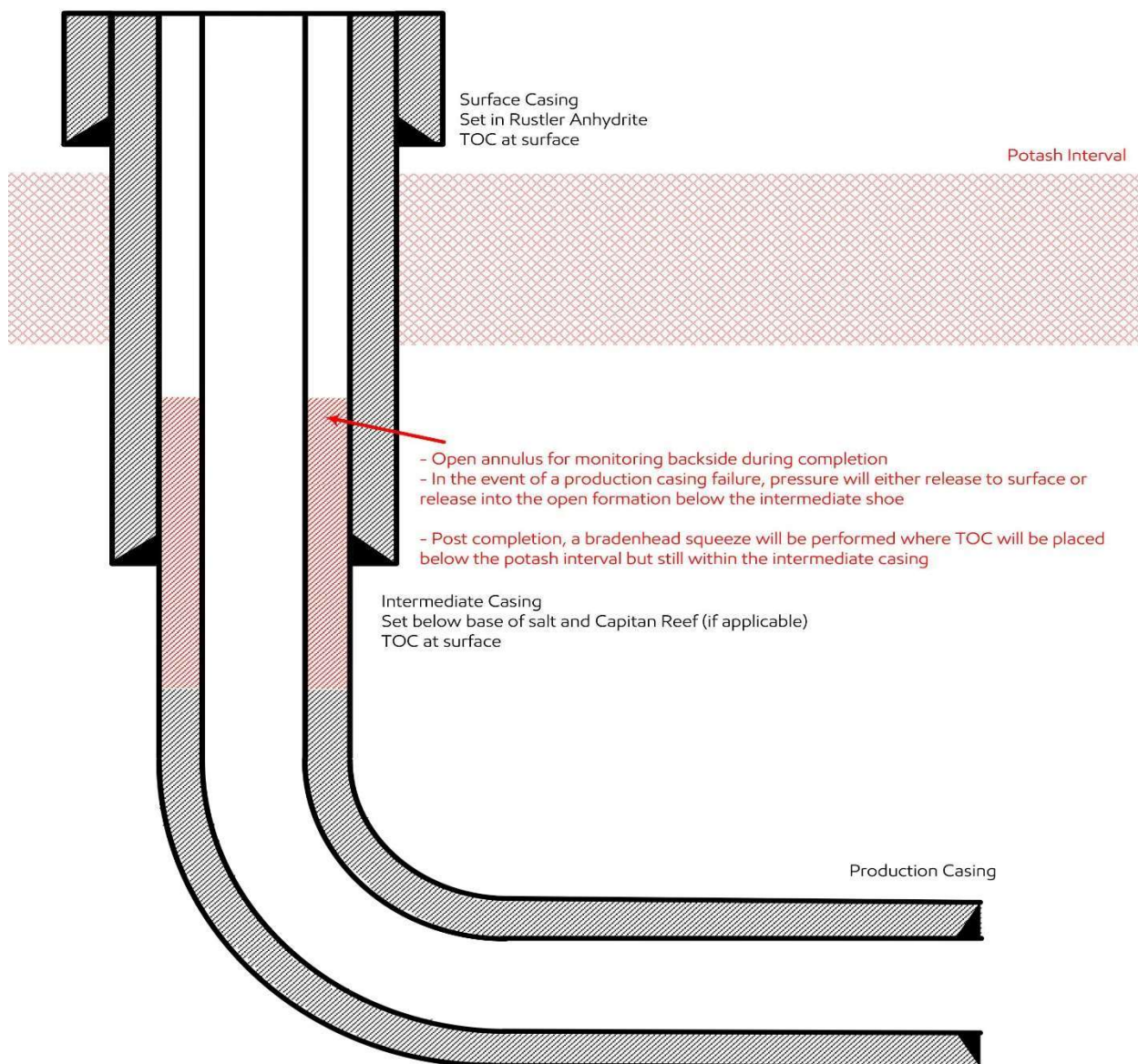
Update May 2024:

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
- 5) While drilling salt interval, separation distance to any active/inactive producing offset well will be ensured such that $SF > 1.0$; Anti-Collision Reports will be provided with APD Packages for review where $SF < 1.5$ against any applicable offset well, or where center-to-center separation against a blind or inclination only surveyed offset well is less than 500ft

Revision Date – May 21, 2024

3-String Design – Open Production Casing Annulus



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 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
- 4) While drilling salt interval, separation distance to any active/inactive producing offset well will be ensured such that $SF > 1.0$; Anti-Collision Reports will be provided with APD Packages for review where $SF < 1.5$ against any applicable offset well, or where center-to-center separation against a blind or inclination only surveyed offset well is less than 500ft

OXY

PRD NM DIRECTIONAL PLANS (NAD 1983)

Regal Lager 31_19 Fed Com

Regal Lager 31_19 Fed Com 1H

ORIG HOLE

Plan: Permitting Plan

Standard Planning Report

26 June, 2025

OXY

Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well Regal Lager 31_19 Fed Com 1H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=25' @ 3646.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=25' @ 3646.00ft
Site:	Regal Lager 31_19 Fed Com	North Reference:	Grid
Well:	Regal Lager 31_19 Fed Com 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIG HOLE		
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	Regal Lager 31_19 Fed Com		
Site Position:		Northing:	520,226.48 usft
From:	Map	Easting:	732,271.10 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in
		Latitude:	32.428649
		Longitude:	-103.714504

Well	Regal Lager 31_19 Fed Com 1H		
Well Position	+N/-S	0.00 ft	Northing:
	+E/-W	0.00 ft	Easting:
Position Uncertainty	1.79 ft	Wellhead Elevation:	ft
Grid Convergence:	0.33 °		
		Latitude:	32.428304
		Longitude:	-103.714215
		Ground Level:	3,621.00 ft

Wellbore	ORIG HOLE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM_FILE	5/3/2023	6.43	60.08	47,700.20000000

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	354.13

Plan Survey Tool Program	Date	6/26/2025
Depth From (ft)	Depth To (ft)	Survey (Wellbore)
1	0.00	26,929.65
		Permitting Plan (ORIG HOLE)
		Tool Name
		B001Mc_MWD+HRGM_R5
		MWD+HRGM
		Remarks

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	
2,065.00	0.00	0.00	2,065.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,164.79	11.00	250.82	3,158.05	-34.56	-99.39	1.00	1.00	0.00	250.82	
10,438.89	11.00	250.82	10,298.55	-490.37	-1,410.10	0.00	0.00	0.00	0.00	
11,379.83	90.57	359.69	10,896.59	86.47	-1,524.33	10.00	8.46	11.57	108.44	
26,929.83	90.57	359.69	10,742.63	15,635.48	-1,608.46	0.00	0.00	0.00	0.00	PBHL (Regal Lager

OXY

Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well Regal Lager 31_19 Fed Com 1H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=25' @ 3646.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=25' @ 3646.00ft
Site:	Regal Lager 31_19 Fed Com	North Reference:	Grid
Well:	Regal Lager 31_19 Fed Com 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIG HOLE		
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
2,065.00	0.00	0.00	2,065.00	0.00	0.00	0.00	0.00	0.00	0.00
Build 1°/100'									
2,100.00	0.35	250.82	2,100.00	-0.04	-0.10	-0.02	1.00	1.00	0.00
2,200.00	1.35	250.82	2,199.99	-0.52	-1.50	-0.37	1.00	1.00	0.00
2,300.00	2.35	250.82	2,299.93	-1.58	-4.55	-1.11	1.00	1.00	0.00
2,400.00	3.35	250.82	2,399.81	-3.22	-9.25	-2.25	1.00	1.00	0.00
2,500.00	4.35	250.82	2,499.58	-5.42	-15.59	-3.80	1.00	1.00	0.00
2,600.00	5.35	250.82	2,599.22	-8.20	-23.57	-5.74	1.00	1.00	0.00
2,700.00	6.35	250.82	2,698.70	-11.55	-33.20	-8.09	1.00	1.00	0.00
2,800.00	7.35	250.82	2,797.99	-15.46	-44.47	-10.83	1.00	1.00	0.00
2,900.00	8.35	250.82	2,897.05	-19.95	-57.37	-13.97	1.00	1.00	0.00
3,000.00	9.35	250.82	2,995.86	-25.00	-71.90	-17.51	1.00	1.00	0.00
3,100.00	10.35	250.82	3,094.38	-30.62	-88.06	-21.45	1.00	1.00	0.00
3,164.79	11.00	250.82	3,158.05	-34.56	-99.39	-24.21	1.00	1.00	0.00
Hold 11° Tangent									
3,200.00	11.00	250.82	3,192.61	-36.77	-105.73	-25.76	0.00	0.00	0.00
3,300.00	11.00	250.82	3,290.78	-43.04	-123.75	-30.15	0.00	0.00	0.00
3,400.00	11.00	250.82	3,388.94	-49.30	-141.77	-34.53	0.00	0.00	0.00
3,500.00	11.00	250.82	3,487.10	-55.57	-159.79	-38.92	0.00	0.00	0.00
3,600.00	11.00	250.82	3,585.27	-61.83	-177.81	-43.31	0.00	0.00	0.00
3,700.00	11.00	250.82	3,683.43	-68.10	-195.83	-47.70	0.00	0.00	0.00
3,800.00	11.00	250.82	3,781.59	-74.37	-213.85	-52.09	0.00	0.00	0.00
3,900.00	11.00	250.82	3,879.76	-80.63	-231.87	-56.48	0.00	0.00	0.00
4,000.00	11.00	250.82	3,977.92	-86.90	-249.89	-60.87	0.00	0.00	0.00
4,100.00	11.00	250.82	4,076.08	-93.16	-267.90	-65.26	0.00	0.00	0.00
4,200.00	11.00	250.82	4,174.25	-99.43	-285.92	-69.65	0.00	0.00	0.00
4,300.00	11.00	250.82	4,272.41	-105.70	-303.94	-74.04	0.00	0.00	0.00
4,400.00	11.00	250.82	4,370.57	-111.96	-321.96	-78.43	0.00	0.00	0.00
4,500.00	11.00	250.82	4,468.74	-118.23	-339.98	-82.82	0.00	0.00	0.00
4,600.00	11.00	250.82	4,566.90	-124.50	-358.00	-87.21	0.00	0.00	0.00
4,700.00	11.00	250.82	4,665.06	-130.76	-376.02	-91.60	0.00	0.00	0.00
4,800.00	11.00	250.82	4,763.23	-137.03	-394.04	-95.99	0.00	0.00	0.00
4,900.00	11.00	250.82	4,861.39	-143.29	-412.06	-100.37	0.00	0.00	0.00
5,000.00	11.00	250.82	4,959.55	-149.56	-430.07	-104.76	0.00	0.00	0.00

OXY

Planning Report

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Site:	Regal Lager 31_19 Fed Com	North Reference:	Grid
Well:	Regal Lager 31_19 Fed Com 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIG HOLE		
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)
5,100.00	11.00	250.82	5,057.72	-155.83	-448.09	-109.15	0.00	0.00	0.00
5,200.00	11.00	250.82	5,155.88	-162.09	-466.11	-113.54	0.00	0.00	0.00
5,300.00	11.00	250.82	5,254.04	-168.36	-484.13	-117.93	0.00	0.00	0.00
5,400.00	11.00	250.82	5,352.21	-174.62	-502.15	-122.32	0.00	0.00	0.00
5,500.00	11.00	250.82	5,450.37	-180.89	-520.17	-126.71	0.00	0.00	0.00
5,600.00	11.00	250.82	5,548.53	-187.16	-538.19	-131.10	0.00	0.00	0.00
5,700.00	11.00	250.82	5,646.70	-193.42	-556.21	-135.49	0.00	0.00	0.00
5,800.00	11.00	250.82	5,744.86	-199.69	-574.23	-139.88	0.00	0.00	0.00
5,900.00	11.00	250.82	5,843.02	-205.95	-592.25	-144.27	0.00	0.00	0.00
6,000.00	11.00	250.82	5,941.19	-212.22	-610.26	-148.66	0.00	0.00	0.00
6,100.00	11.00	250.82	6,039.35	-218.49	-628.28	-153.05	0.00	0.00	0.00
6,200.00	11.00	250.82	6,137.51	-224.75	-646.30	-157.44	0.00	0.00	0.00
6,300.00	11.00	250.82	6,235.68	-231.02	-664.32	-161.82	0.00	0.00	0.00
6,400.00	11.00	250.82	6,333.84	-237.29	-682.34	-166.21	0.00	0.00	0.00
6,500.00	11.00	250.82	6,432.00	-243.55	-700.36	-170.60	0.00	0.00	0.00
6,600.00	11.00	250.82	6,530.17	-249.82	-718.38	-174.99	0.00	0.00	0.00
6,700.00	11.00	250.82	6,628.33	-256.08	-736.40	-179.38	0.00	0.00	0.00
6,800.00	11.00	250.82	6,726.50	-262.35	-754.42	-183.77	0.00	0.00	0.00
6,900.00	11.00	250.82	6,824.66	-268.62	-772.43	-188.16	0.00	0.00	0.00
7,000.00	11.00	250.82	6,922.82	-274.88	-790.45	-192.55	0.00	0.00	0.00
7,100.00	11.00	250.82	7,020.99	-281.15	-808.47	-196.94	0.00	0.00	0.00
7,200.00	11.00	250.82	7,119.15	-287.41	-826.49	-201.33	0.00	0.00	0.00
7,300.00	11.00	250.82	7,217.31	-293.68	-844.51	-205.72	0.00	0.00	0.00
7,400.00	11.00	250.82	7,315.48	-299.95	-862.53	-210.11	0.00	0.00	0.00
7,500.00	11.00	250.82	7,413.64	-306.21	-880.55	-214.50	0.00	0.00	0.00
7,600.00	11.00	250.82	7,511.80	-312.48	-898.57	-218.89	0.00	0.00	0.00
7,700.00	11.00	250.82	7,609.97	-318.74	-916.59	-223.27	0.00	0.00	0.00
7,800.00	11.00	250.82	7,708.13	-325.01	-934.60	-227.66	0.00	0.00	0.00
7,900.00	11.00	250.82	7,806.29	-331.28	-952.62	-232.05	0.00	0.00	0.00
8,000.00	11.00	250.82	7,904.46	-337.54	-970.64	-236.44	0.00	0.00	0.00
8,100.00	11.00	250.82	8,002.62	-343.81	-988.66	-240.83	0.00	0.00	0.00
8,200.00	11.00	250.82	8,100.78	-350.08	-1,006.68	-245.22	0.00	0.00	0.00
8,300.00	11.00	250.82	8,198.95	-356.34	-1,024.70	-249.61	0.00	0.00	0.00
8,400.00	11.00	250.82	8,297.11	-362.61	-1,042.72	-254.00	0.00	0.00	0.00
8,500.00	11.00	250.82	8,395.27	-368.87	-1,060.74	-258.39	0.00	0.00	0.00
8,600.00	11.00	250.82	8,493.44	-375.14	-1,078.76	-262.78	0.00	0.00	0.00
8,700.00	11.00	250.82	8,591.60	-381.41	-1,096.77	-267.17	0.00	0.00	0.00
8,800.00	11.00	250.82	8,689.76	-387.67	-1,114.79	-271.56	0.00	0.00	0.00
8,900.00	11.00	250.82	8,787.93	-393.94	-1,132.81	-275.95	0.00	0.00	0.00
9,000.00	11.00	250.82	8,886.09	-400.20	-1,150.83	-280.34	0.00	0.00	0.00
9,100.00	11.00	250.82	8,984.25	-406.47	-1,168.85	-284.72	0.00	0.00	0.00
9,200.00	11.00	250.82	9,082.42	-412.74	-1,186.87	-289.11	0.00	0.00	0.00
9,300.00	11.00	250.82	9,180.58	-419.00	-1,204.89	-293.50	0.00	0.00	0.00
9,400.00	11.00	250.82	9,278.74	-425.27	-1,222.91	-297.89	0.00	0.00	0.00
9,500.00	11.00	250.82	9,376.91	-431.53	-1,240.93	-302.28	0.00	0.00	0.00
9,600.00	11.00	250.82	9,475.07	-437.80	-1,258.94	-306.67	0.00	0.00	0.00
9,700.00	11.00	250.82	9,573.23	-444.07	-1,276.96	-311.06	0.00	0.00	0.00
9,800.00	11.00	250.82	9,671.40	-450.33	-1,294.98	-315.45	0.00	0.00	0.00
9,900.00	11.00	250.82	9,769.56	-456.60	-1,313.00	-319.84	0.00	0.00	0.00
10,000.00	11.00	250.82	9,867.72	-462.87	-1,331.02	-324.23	0.00	0.00	0.00
10,100.00	11.00	250.82	9,965.89	-469.13	-1,349.04	-328.62	0.00	0.00	0.00
10,200.00	11.00	250.82	10,064.05	-475.40	-1,367.06	-333.01	0.00	0.00	0.00
10,300.00	11.00	250.82	10,162.21	-481.66	-1,385.08	-337.40	0.00	0.00	0.00
10,400.00	11.00	250.82	10,260.38	-487.93	-1,403.10	-341.79	0.00	0.00	0.00
10,438.89	11.00	250.82	10,298.55	-490.37	-1,410.10	-343.49	0.00	0.00	0.00

OXY

Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well Regal Lager 31_19 Fed Com 1H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=25' @ 3646.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=25' @ 3646.00ft
Site:	Regal Lager 31_19 Fed Com	North Reference:	Grid
Well:	Regal Lager 31_19 Fed Com 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIG HOLE		
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)
KOP, Build & Turn 10°/100'									
10,500.00	10.74	283.64	10,358.62	-490.94	-1,421.15	-342.93	10.00	-0.42	53.69
10,600.00	16.30	320.58	10,455.99	-477.87	-1,439.16	-328.09	10.00	5.55	36.94
10,700.00	24.77	336.08	10,549.62	-447.81	-1,456.61	-296.40	10.00	8.47	15.51
10,800.00	34.04	343.78	10,636.67	-401.66	-1,472.97	-248.82	10.00	9.28	7.70
10,900.00	43.61	348.45	10,714.50	-340.84	-1,487.73	-186.81	10.00	9.57	4.67
11,000.00	53.31	351.71	10,780.74	-267.19	-1,500.45	-112.24	10.00	9.70	3.26
11,088.60	61.97	353.96	10,828.12	-193.00	-1,509.71	-37.49	10.00	9.77	2.55
PPP-1 Cross									
11,100.00	63.08	354.22	10,833.38	-182.94	-1,510.75	-27.38	10.00	9.79	2.30
11,200.00	72.89	356.34	10,870.82	-90.66	-1,518.30	65.19	10.00	9.81	2.11
11,300.00	82.72	358.24	10,891.92	6.85	-1,522.89	162.66	10.00	9.83	1.90
11,379.83	90.57	359.69	10,896.59	86.47	-1,524.33	242.00	10.00	9.83	1.82
Landing Point									
11,400.00	90.57	359.69	10,896.39	106.64	-1,524.44	262.08	0.00	0.00	0.00
11,500.00	90.57	359.69	10,895.40	206.63	-1,524.98	361.60	0.00	0.00	0.00
11,600.00	90.57	359.69	10,894.41	306.62	-1,525.52	461.12	0.00	0.00	0.00
11,700.00	90.57	359.69	10,893.42	406.62	-1,526.06	560.65	0.00	0.00	0.00
11,800.00	90.57	359.69	10,892.43	506.61	-1,526.60	660.17	0.00	0.00	0.00
11,900.00	90.57	359.69	10,891.44	606.60	-1,527.14	759.70	0.00	0.00	0.00
12,000.00	90.57	359.69	10,890.45	706.60	-1,527.68	859.22	0.00	0.00	0.00
12,100.00	90.57	359.69	10,889.46	806.59	-1,528.22	958.74	0.00	0.00	0.00
12,200.00	90.57	359.69	10,888.47	906.58	-1,528.77	1,058.27	0.00	0.00	0.00
12,300.00	90.57	359.69	10,887.48	1,006.58	-1,529.31	1,157.79	0.00	0.00	0.00
12,400.00	90.57	359.69	10,886.49	1,106.57	-1,529.85	1,257.32	0.00	0.00	0.00
12,500.00	90.57	359.69	10,885.50	1,206.57	-1,530.39	1,356.84	0.00	0.00	0.00
12,600.00	90.57	359.69	10,884.51	1,306.56	-1,530.93	1,456.36	0.00	0.00	0.00
12,700.00	90.57	359.69	10,883.52	1,406.55	-1,531.47	1,555.89	0.00	0.00	0.00
12,800.00	90.57	359.69	10,882.53	1,506.55	-1,532.01	1,655.41	0.00	0.00	0.00
12,900.00	90.57	359.69	10,881.54	1,606.54	-1,532.55	1,754.94	0.00	0.00	0.00
13,000.00	90.57	359.69	10,880.55	1,706.53	-1,533.09	1,854.46	0.00	0.00	0.00
13,100.00	90.57	359.69	10,879.56	1,806.53	-1,533.64	1,953.98	0.00	0.00	0.00
13,200.00	90.57	359.69	10,878.57	1,906.52	-1,534.18	2,053.51	0.00	0.00	0.00
13,300.00	90.57	359.69	10,877.58	2,006.51	-1,534.72	2,153.03	0.00	0.00	0.00
13,400.00	90.57	359.69	10,876.59	2,106.51	-1,535.26	2,252.56	0.00	0.00	0.00
13,500.00	90.57	359.69	10,875.60	2,206.50	-1,535.80	2,352.08	0.00	0.00	0.00
13,600.00	90.57	359.69	10,874.61	2,306.50	-1,536.34	2,451.60	0.00	0.00	0.00
13,700.00	90.57	359.69	10,873.62	2,406.49	-1,536.88	2,551.13	0.00	0.00	0.00
13,742.51	90.57	359.69	10,873.20	2,449.00	-1,537.11	2,593.44	0.00	0.00	0.00
PPP-2 Cross									
13,800.00	90.57	359.69	10,872.63	2,506.48	-1,537.42	2,650.65	0.00	0.00	0.00
13,900.00	90.57	359.69	10,871.64	2,606.48	-1,537.96	2,750.18	0.00	0.00	0.00
14,000.00	90.57	359.69	10,870.65	2,706.47	-1,538.50	2,849.70	0.00	0.00	0.00
14,100.00	90.57	359.69	10,869.66	2,806.46	-1,539.05	2,949.23	0.00	0.00	0.00
14,200.00	90.57	359.69	10,868.67	2,906.46	-1,539.59	3,048.75	0.00	0.00	0.00
14,300.00	90.57	359.69	10,867.68	3,006.45	-1,540.13	3,148.27	0.00	0.00	0.00
14,400.00	90.57	359.69	10,866.69	3,106.44	-1,540.67	3,247.80	0.00	0.00	0.00
14,500.00	90.57	359.69	10,865.70	3,206.44	-1,541.21	3,347.32	0.00	0.00	0.00
14,600.00	90.57	359.69	10,864.71	3,306.43	-1,541.75	3,446.85	0.00	0.00	0.00
14,700.00	90.57	359.69	10,863.72	3,406.43	-1,542.29	3,546.37	0.00	0.00	0.00
14,800.00	90.57	359.69	10,862.73	3,506.42	-1,542.83	3,645.89	0.00	0.00	0.00
14,900.00	90.57	359.69	10,861.74	3,606.41	-1,543.37	3,745.42	0.00	0.00	0.00
15,000.00	90.57	359.69	10,860.75	3,706.41	-1,543.92	3,844.94	0.00	0.00	0.00
15,100.00	90.57	359.69	10,859.76	3,806.40	-1,544.46	3,944.47	0.00	0.00	0.00
15,200.00	90.57	359.69	10,858.77	3,906.39	-1,545.00	4,043.99	0.00	0.00	0.00

OXY

Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well Regal Lager 31_19 Fed Com 1H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=25' @ 3646.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=25' @ 3646.00ft
Site:	Regal Lager 31_19 Fed Com	North Reference:	Grid
Well:	Regal Lager 31_19 Fed Com 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIG HOLE		
Design:	Permitting Plan		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
15,300.00	90.57	359.69	10,857.78	4,006.39	-1,545.54	4,143.51	0.00	0.00	0.00
15,400.00	90.57	359.69	10,856.79	4,106.38	-1,546.08	4,243.04	0.00	0.00	0.00
15,500.00	90.57	359.69	10,855.80	4,206.37	-1,546.62	4,342.56	0.00	0.00	0.00
15,600.00	90.57	359.69	10,854.81	4,306.37	-1,547.16	4,442.09	0.00	0.00	0.00
15,700.00	90.57	359.69	10,853.82	4,406.36	-1,547.70	4,541.61	0.00	0.00	0.00
15,800.00	90.57	359.69	10,852.83	4,506.36	-1,548.24	4,641.13	0.00	0.00	0.00
15,900.00	90.57	359.69	10,851.84	4,606.35	-1,548.78	4,740.66	0.00	0.00	0.00
16,000.00	90.57	359.69	10,850.85	4,706.34	-1,549.33	4,840.18	0.00	0.00	0.00
16,100.00	90.57	359.69	10,849.86	4,806.34	-1,549.87	4,939.71	0.00	0.00	0.00
16,200.00	90.57	359.69	10,848.87	4,906.33	-1,550.41	5,039.23	0.00	0.00	0.00
16,300.00	90.57	359.69	10,847.88	5,006.32	-1,550.95	5,138.75	0.00	0.00	0.00
16,382.68	90.57	359.69	10,847.06	5,089.00	-1,551.40	5,221.04	0.00	0.00	0.00
PPP-3 Cross									
16,400.00	90.57	359.69	10,846.89	5,106.32	-1,551.49	5,238.28	0.00	0.00	0.00
16,500.00	90.57	359.69	10,845.90	5,206.31	-1,552.03	5,337.80	0.00	0.00	0.00
16,600.00	90.57	359.69	10,844.91	5,306.30	-1,552.57	5,437.33	0.00	0.00	0.00
16,700.00	90.57	359.69	10,843.92	5,406.30	-1,553.11	5,536.85	0.00	0.00	0.00
16,800.00	90.57	359.69	10,842.93	5,506.29	-1,553.65	5,636.37	0.00	0.00	0.00
16,900.00	90.57	359.69	10,841.94	5,606.29	-1,554.20	5,735.90	0.00	0.00	0.00
17,000.00	90.57	359.69	10,840.95	5,706.28	-1,554.74	5,835.42	0.00	0.00	0.00
17,100.00	90.57	359.69	10,839.96	5,806.27	-1,555.28	5,934.95	0.00	0.00	0.00
17,200.00	90.57	359.69	10,838.97	5,906.27	-1,555.82	6,034.47	0.00	0.00	0.00
17,300.00	90.57	359.69	10,837.97	6,006.26	-1,556.36	6,134.00	0.00	0.00	0.00
17,400.00	90.57	359.69	10,836.98	6,106.25	-1,556.90	6,233.52	0.00	0.00	0.00
17,500.00	90.57	359.69	10,835.99	6,206.25	-1,557.44	6,333.04	0.00	0.00	0.00
17,600.00	90.57	359.69	10,835.00	6,306.24	-1,557.98	6,432.57	0.00	0.00	0.00
17,700.00	90.57	359.69	10,834.01	6,406.23	-1,558.52	6,532.09	0.00	0.00	0.00
17,800.00	90.57	359.69	10,833.02	6,506.23	-1,559.06	6,631.62	0.00	0.00	0.00
17,900.00	90.57	359.69	10,832.03	6,606.22	-1,559.61	6,731.14	0.00	0.00	0.00
18,000.00	90.57	359.69	10,831.04	6,706.22	-1,560.15	6,830.66	0.00	0.00	0.00
18,100.00	90.57	359.69	10,830.05	6,806.21	-1,560.69	6,930.19	0.00	0.00	0.00
18,200.00	90.57	359.69	10,829.06	6,906.20	-1,561.23	7,029.71	0.00	0.00	0.00
18,300.00	90.57	359.69	10,828.07	7,006.20	-1,561.77	7,129.24	0.00	0.00	0.00
18,400.00	90.57	359.69	10,827.08	7,106.19	-1,562.31	7,228.76	0.00	0.00	0.00
18,500.00	90.57	359.69	10,826.09	7,206.18	-1,562.85	7,328.28	0.00	0.00	0.00
18,600.00	90.57	359.69	10,825.10	7,306.18	-1,563.39	7,427.81	0.00	0.00	0.00
18,700.00	90.57	359.69	10,824.11	7,406.17	-1,563.93	7,527.33	0.00	0.00	0.00
18,800.00	90.57	359.69	10,823.12	7,506.16	-1,564.48	7,626.86	0.00	0.00	0.00
18,900.00	90.57	359.69	10,822.13	7,606.16	-1,565.02	7,726.38	0.00	0.00	0.00
19,000.00	90.57	359.69	10,821.14	7,706.15	-1,565.56	7,825.90	0.00	0.00	0.00
19,100.00	90.57	359.69	10,820.15	7,806.15	-1,566.10	7,925.43	0.00	0.00	0.00
19,200.00	90.57	359.69	10,819.16	7,906.14	-1,566.64	8,024.95	0.00	0.00	0.00
19,300.00	90.57	359.69	10,818.17	8,006.13	-1,567.18	8,124.48	0.00	0.00	0.00
19,400.00	90.57	359.69	10,817.18	8,106.13	-1,567.72	8,224.00	0.00	0.00	0.00
19,500.00	90.57	359.69	10,816.19	8,206.12	-1,568.26	8,323.52	0.00	0.00	0.00
19,600.00	90.57	359.69	10,815.20	8,306.11	-1,568.80	8,423.05	0.00	0.00	0.00
19,700.00	90.57	359.69	10,814.21	8,406.11	-1,569.34	8,522.57	0.00	0.00	0.00
19,800.00	90.57	359.69	10,813.22	8,506.10	-1,569.89	8,622.10	0.00	0.00	0.00
19,900.00	90.57	359.69	10,812.23	8,606.09	-1,570.43	8,721.62	0.00	0.00	0.00
20,000.00	90.57	359.69	10,811.24	8,706.09	-1,570.97	8,821.14	0.00	0.00	0.00
20,100.00	90.57	359.69	10,810.25	8,806.08	-1,571.51	8,920.67	0.00	0.00	0.00
20,200.00	90.57	359.69	10,809.26	8,906.08	-1,572.05	9,020.19	0.00	0.00	0.00
20,300.00	90.57	359.69	10,808.27	9,006.07	-1,572.59	9,119.72	0.00	0.00	0.00
20,400.00	90.57	359.69	10,807.28	9,106.06	-1,573.13	9,219.24	0.00	0.00	0.00
20,500.00	90.57	359.69	10,806.29	9,206.06	-1,573.67	9,318.77	0.00	0.00	0.00

OXY

Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well Regal Lager 31_19 Fed Com 1H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=25' @ 3646.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=25' @ 3646.00ft
Site:	Regal Lager 31_19 Fed Com	North Reference:	Grid
Well:	Regal Lager 31_19 Fed Com 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIG HOLE		
Design:	Permitting Plan		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
20,600.00	90.57	359.69	10,805.30	9,306.05	-1,574.21	9,418.29	0.00	0.00	0.00
20,700.00	90.57	359.69	10,804.31	9,406.04	-1,574.76	9,517.81	0.00	0.00	0.00
20,800.00	90.57	359.69	10,803.32	9,506.04	-1,575.30	9,617.34	0.00	0.00	0.00
20,900.00	90.57	359.69	10,802.33	9,606.03	-1,575.84	9,716.86	0.00	0.00	0.00
21,000.00	90.57	359.69	10,801.34	9,706.02	-1,576.38	9,816.39	0.00	0.00	0.00
21,100.00	90.57	359.69	10,800.35	9,806.02	-1,576.92	9,915.91	0.00	0.00	0.00
21,200.00	90.57	359.69	10,799.36	9,906.01	-1,577.46	10,015.43	0.00	0.00	0.00
21,300.00	90.57	359.69	10,798.37	10,006.01	-1,578.00	10,114.96	0.00	0.00	0.00
21,400.00	90.57	359.69	10,797.38	10,106.00	-1,578.54	10,214.48	0.00	0.00	0.00
21,500.00	90.57	359.69	10,796.39	10,205.99	-1,579.08	10,314.01	0.00	0.00	0.00
21,600.00	90.57	359.69	10,795.40	10,305.99	-1,579.62	10,413.53	0.00	0.00	0.00
21,670.02	90.57	359.69	10,794.71	10,376.00	-1,580.00	10,483.22	0.00	0.00	0.00
PPP-4 Cross									
21,700.00	90.57	359.69	10,794.41	10,405.98	-1,580.17	10,513.05	0.00	0.00	0.00
21,800.00	90.57	359.69	10,793.42	10,505.97	-1,580.71	10,612.58	0.00	0.00	0.00
21,900.00	90.57	359.69	10,792.43	10,605.97	-1,581.25	10,712.10	0.00	0.00	0.00
22,000.00	90.57	359.69	10,791.44	10,705.96	-1,581.79	10,811.63	0.00	0.00	0.00
22,100.00	90.57	359.69	10,790.45	10,805.95	-1,582.33	10,911.15	0.00	0.00	0.00
22,200.00	90.57	359.69	10,789.46	10,905.95	-1,582.87	11,010.67	0.00	0.00	0.00
22,300.00	90.57	359.69	10,788.47	11,005.94	-1,583.41	11,110.20	0.00	0.00	0.00
22,400.00	90.57	359.69	10,787.48	11,105.94	-1,583.95	11,209.72	0.00	0.00	0.00
22,500.00	90.57	359.69	10,786.49	11,205.93	-1,584.49	11,309.25	0.00	0.00	0.00
22,600.00	90.57	359.69	10,785.50	11,305.92	-1,585.04	11,408.77	0.00	0.00	0.00
22,700.00	90.57	359.69	10,784.51	11,405.92	-1,585.58	11,508.29	0.00	0.00	0.00
22,800.00	90.57	359.69	10,783.52	11,505.91	-1,586.12	11,607.82	0.00	0.00	0.00
22,900.00	90.57	359.69	10,782.53	11,605.90	-1,586.66	11,707.34	0.00	0.00	0.00
23,000.00	90.57	359.69	10,781.54	11,705.90	-1,587.20	11,806.87	0.00	0.00	0.00
23,100.00	90.57	359.69	10,780.55	11,805.89	-1,587.74	11,906.39	0.00	0.00	0.00
23,200.00	90.57	359.69	10,779.56	11,905.88	-1,588.28	12,005.91	0.00	0.00	0.00
23,300.00	90.57	359.69	10,778.57	12,005.88	-1,588.82	12,105.44	0.00	0.00	0.00
23,400.00	90.57	359.69	10,777.58	12,105.87	-1,589.36	12,204.96	0.00	0.00	0.00
23,500.00	90.57	359.69	10,776.59	12,205.87	-1,589.90	12,304.49	0.00	0.00	0.00
23,600.00	90.57	359.69	10,775.60	12,305.86	-1,590.45	12,404.01	0.00	0.00	0.00
23,700.00	90.57	359.69	10,774.61	12,405.85	-1,590.99	12,503.54	0.00	0.00	0.00
23,800.00	90.57	359.69	10,773.62	12,505.85	-1,591.53	12,603.06	0.00	0.00	0.00
23,900.00	90.57	359.69	10,772.63	12,605.84	-1,592.07	12,702.58	0.00	0.00	0.00
24,000.00	90.57	359.69	10,771.64	12,705.83	-1,592.61	12,802.11	0.00	0.00	0.00
24,100.00	90.57	359.69	10,770.65	12,805.83	-1,593.15	12,901.63	0.00	0.00	0.00
24,200.00	90.57	359.69	10,769.66	12,905.82	-1,593.69	13,001.16	0.00	0.00	0.00
24,300.00	90.57	359.69	10,768.67	13,005.81	-1,594.23	13,100.68	0.00	0.00	0.00
24,308.19	90.57	359.69	10,768.58	13,014.00	-1,594.28	13,108.83	0.00	0.00	0.00
PPP-5 Cross									
24,400.00	90.57	359.69	10,767.68	13,105.81	-1,594.77	13,200.20	0.00	0.00	0.00
24,500.00	90.57	359.69	10,766.69	13,205.80	-1,595.32	13,299.73	0.00	0.00	0.00
24,600.00	90.57	359.69	10,765.70	13,305.80	-1,595.86	13,399.25	0.00	0.00	0.00
24,700.00	90.57	359.69	10,764.70	13,405.79	-1,596.40	13,498.78	0.00	0.00	0.00
24,800.00	90.57	359.69	10,763.71	13,505.78	-1,596.94	13,598.30	0.00	0.00	0.00
24,900.00	90.57	359.69	10,762.72	13,605.78	-1,597.48	13,697.82	0.00	0.00	0.00
25,000.00	90.57	359.69	10,761.73	13,705.77	-1,598.02	13,797.35	0.00	0.00	0.00
25,100.00	90.57	359.69	10,760.74	13,805.76	-1,598.56	13,896.87	0.00	0.00	0.00
25,200.00	90.57	359.69	10,759.75	13,905.76	-1,599.10	13,996.40	0.00	0.00	0.00
25,300.00	90.57	359.69	10,758.76	14,005.75	-1,599.64	14,095.92	0.00	0.00	0.00
25,400.00	90.57	359.69	10,757.77	14,105.74	-1,600.19	14,195.44	0.00	0.00	0.00
25,500.00	90.57	359.69	10,756.78	14,205.74	-1,600.73	14,294.97	0.00	0.00	0.00
25,600.00	90.57	359.69	10,755.79	14,305.73	-1,601.27	14,394.49	0.00	0.00	0.00

OXY
Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well Regal Lager 31_19 Fed Com 1H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=25' @ 3646.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=25' @ 3646.00ft
Site:	Regal Lager 31_19 Fed Com	North Reference:	Grid
Well:	Regal Lager 31_19 Fed Com 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIG HOLE		
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)
25,700.00	90.57	359.69	10,754.80	14,405.73	-1,601.81	14,494.02	0.00	0.00	0.00
25,800.00	90.57	359.69	10,753.81	14,505.72	-1,602.35	14,593.54	0.00	0.00	0.00
25,900.00	90.57	359.69	10,752.82	14,605.71	-1,602.89	14,693.06	0.00	0.00	0.00
26,000.00	90.57	359.69	10,751.83	14,705.71	-1,603.43	14,792.59	0.00	0.00	0.00
26,100.00	90.57	359.69	10,750.84	14,805.70	-1,603.97	14,892.11	0.00	0.00	0.00
26,200.00	90.57	359.69	10,749.85	14,905.69	-1,604.51	14,991.64	0.00	0.00	0.00
26,300.00	90.57	359.69	10,748.86	15,005.69	-1,605.05	15,091.16	0.00	0.00	0.00
26,400.00	90.57	359.69	10,747.87	15,105.68	-1,605.60	15,190.68	0.00	0.00	0.00
26,500.00	90.57	359.69	10,746.88	15,205.67	-1,606.14	15,290.21	0.00	0.00	0.00
26,600.00	90.57	359.69	10,745.89	15,305.67	-1,606.68	15,389.73	0.00	0.00	0.00
26,700.00	90.57	359.69	10,744.90	15,405.66	-1,607.22	15,489.26	0.00	0.00	0.00
26,800.00	90.57	359.69	10,743.91	15,505.66	-1,607.76	15,588.78	0.00	0.00	0.00
26,900.00	90.57	359.69	10,742.92	15,605.65	-1,608.30	15,688.31	0.00	0.00	0.00
26,929.83	90.57	359.69	10,742.63	15,635.48	-1,608.46	15,718.00	0.00	0.00	0.00
TD at 26929.83' MD									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target - Shape									
KOP (Regal Lager - plan misses target center by 1599.15ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E) - Point	0.00	0.00	0.00	-492.83	-1,521.32	519,608.67	730,839.84	32.426973	-103.719154
PBHL (Regal Lager - plan hits target center - Point	0.00	0.01	10,742.63	15,635.48	-1,608.46	535,736.15	730,752.70	32.471304	-103.719136
FTP (Regal Lager - plan misses target center by 27.48ft at 11203.96ft MD (10871.97 TVD, -86.87 N, -1518.54 E) - Point	0.00	0.01	10,898.37	-92.80	-1,523.36	520,008.67	730,837.80	32.428073	-103.719153

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
794.00	794.00	RUSTLER		0.00		
1,054.00	1,054.00	SALADO				
2,000.00	2,000.00	MARKER BED 126				
2,597.77	2,597.00	CASTILE				
4,544.07	4,512.00	DELAWARE				
4,624.55	4,591.00	BELL CANYON				
5,498.60	5,449.00	CHERRY CANYON				
6,774.03	6,701.00	BRUSHY CANYON				
8,590.39	8,484.00	BONE SPRING				
9,650.86	9,525.00	BONE SPRING 1ST				
10,318.12	10,180.00	BONE SPRING 2ND				

OXY

Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well Regal Lager 31_19 Fed Com 1H
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Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=25' @ 3646.00ft
Site:	Regal Lager 31_19 Fed Com	North Reference:	Grid
Well:	Regal Lager 31_19 Fed Com 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIG HOLE		
Design:	Permitting Plan		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
2,065.00	2,065.00	0.00	0.00	Build 1°/100'
3,164.79	3,158.05	-34.56	-99.39	Hold 11° Tangent
10,438.89	10,298.55	-490.37	-1,410.10	KOP, Build & Turn 10°/100'
11,088.60	10,828.12	-193.00	-1,509.71	PPP-1 Cross
11,379.83	10,896.59	86.47	-1,524.33	Landing Point
13,742.51	10,873.20	2,449.00	-1,537.11	PPP-2 Cross
16,382.68	10,847.06	5,089.00	-1,551.40	PPP-3 Cross
21,670.02	10,794.71	10,376.00	-1,580.00	PPP-4 Cross
24,308.19	10,768.58	13,014.00	-1,594.28	PPP-5 Cross
26,929.83	10,742.63	15,635.48	-1,608.46	TD at 26929.83' MD

Oxy USA Inc. - Regal Lager 31_19 Fed Com 1H

Drill Plan

1. Geologic Formations

TVD of Target (ft):	10897	Pilot Hole Depth (ft):	
Total Measured Depth (ft):	26930	Deepest Expected Fresh Water (ft):	794

Delaware Basin

Formation	MD-RKB (ft)	TVD-RKB (ft)	Expected Fluids
Rustler	794	794	
Salado	1054	1054	Salt
Marker Bed 126	2000	2000	Salt
Castile	2598	2597	Salt
Delaware	4544	4512	Oil/Gas/Brine
Bell Canyon	4625	4591	Oil/Gas/Brine
Cherry Canyon	5499	5449	Oil/Gas/Brine
Brushy Canyon	6774	6701	Losses
Bone Spring	8590	8484	Oil/Gas
Bone Spring 1st	9651	9525	Oil/Gas
Bone Spring 2nd	10318	10180	Oil/Gas
Bone Spring 3rd			Oil/Gas
Wolfcamp			Oil/Gas
Penn			Oil/Gas
Strawn			Oil/Gas

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

2. Casing Program

Section	Hole Size (in)	MD		TVD		Csg. OD (in)	Csg Wt. (ppf)	Grade	Conn.
		From (ft)	To (ft)	From (ft)	To (ft)				
Surface	17.5	0	854	0	854	13.375	54.5	J-55	BTC
Salt	12.25	0	4512	0	4481	10.75	40.5	J-55	BTC-SC
Intermediate	9.875	0	10339	0	10199	7.625	26.4	L-80 HC	BTC
Production	6.75	0	16439	0	10897	5.5	20	P-110	Sprint-TC SC
Production	6.75	16439	26930	10897	10897	5.5	20	P-110	DWC/C-HT-IS

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

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

Annular Clearance Variance Request

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

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

As you see there were 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	892	1.33	14.8	100%	-	Circulate	Class C+Accel.
Int.1	1	Intermediate - Tail	85	1.33	14.8	20%	4,012	Circulate	Class C+Accel.
Int.1	1	Intermediate - Lead	633	1.73	12.9	50%	-	Circulate	Class Pozz+Ret.
Int. 2	1	Intermediate 1S - Tail	445	1.68	13.2	5%	7,024	Circulate	Class C+Ret., Disper.
Int. 2	2	Intermediate 2S - Tail BH	463	1.71	13.3	25%	4,012	Bradenhead Post-Frac	Class C+Accel.
Prod.	1	Production - Tail	968	1.84	13.3	25%	9,839	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

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	4481
		5M	Blind Ram		✓	250 psi / 5000 psi	
			Pipe Ram				
			Double Ram		✓		
			Other*				
9.875" Hole	13-5/8"	5M	Annular		✓	70% of working pressure	10199
		5M	Blind Ram		✓	250 psi / 5000 psi	
			Pipe Ram				
			Double Ram		✓		
			Other*				
6.75" Hole	13-5/8"	5M	Annular		✓	100% of working pressure	10897
		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

	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 (intermediate and production) requirements as per the agreement reached in the OXY/BLM meeting on April 4th, 2025. Please see BOP Break Testing Variance attachment for further details.

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

5. Mud Program

Section	Depth		Depth - TVD		Type	Weight (ppg)	Viscosity	Water Loss
	From (ft)	To (ft)	From (ft)	To (ft)				
Surface	0	854	0	854	Water-Based Mud	8.6 - 8.8	40-60	N/C
Intermediate 1	854	4512	854	4481	Saturated Brine-Based or Oil-Based Mud	8.0 - 10.0	35-45	N/C
Intermediate 2	4512	10339	4481	10199	Water-Based or Oil-Based Mud	8.0 - 10.0	38-50	N/C
Production	10339	26930	10199	10897	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
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6. Logging and Testing Procedures

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

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	7084 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	168°F

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

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

N	H2S is present
Y	H2S Plan attached

8. Other facets of operation

	Yes/No
Will the well be drilled with a walking/skidding operation? If yes, describe. We plan to drill the 4 well pad in batch by section: all surface sections, intermediate sections and production sections. The wellhead will be secured with a night cap whenever the rig is not over the well.	Yes
Will more than one drilling rig be used for drilling operations? If yes, describe. Oxy requests the option to contract a Surface Rig to drill, set surface casing, and cement for this well. If the timing between rigs is such that Oxy would not be able to preset surface, the Primary Rig will MIRU and drill the well in its entirety per the APD. Please see the attached document for information on the secondary rig.	Yes
Total Estimated Cuttings Volume: 2074 bbls	

OKV APD CHANGE SUNDRY LIST FORM

DATE SUNDRY WORKSHEET CREATED		6/30/2025	
WELL NAME NUMBER		REGAL LAGER 31, 19 FEDERAL COM 1H	
AP NUMBER		PENDING	
ESTIMATED SPD DATE		8/15/2025	

ITEM	APD BASE LINE (For Regulatory Use Complete)										SUNDRY PLAN (Groups to complete the latest plan)									
NAME	Date APD/BASE LINE APPROVED: 06/30/25										DATE Sundry Worksheet: 06/30/25									
NSL	REGAL LAGER 31, 19 FEDERAL COM 1H										REGAL LAGER 31, 19 FEDERAL COM 1H									
SHL	NO										NO									
SHL	178 TRL 12687 FWL										178 TRL 12687 FWL									
SHL	178 TRL 12687 FWL										178 TRL 12687 FWL									
BHL	207 FHL 1105 FWL										207 FHL 1105 FWL									
BSU SIZE ACRES	522.32										1092.32									
POOL	BLURET BASIN, BONESPRING										BLURET BASIN, BONESPRING									
TVD	9641										10897									
TARGET FORMATION	BONESPRING										BONESPRING									

Surface Planning	CASING PROGRAM	Section	Hole Size (in.)	MD	TVD	CS	CD (in)	Cut WT	Grade	Comp		
		Surface	12.25	854	4443	9.625	40	L-80-HC	J-55	BTC		
		Salt	8.75	9462	9150	7.625	26.4	L-80-HC	J-55	BTC		
		Int	6.75	23552	9775	5.5	20	P-110	P-110	Wedge 461		
		Prod										
		Liner										
		Section/Stage	Slurry	Surface - Tail	892	1.33	14.8	100%	Excess	TOC	Placement	Description
		Int/1	Interm - Tail	141	1.33	14.8	20%	4006	Circulate			
		Int/1	Interm - Lead	1035	1.73	12.9	50%	7143	Circulate			
		Int/2	Interm 15 - Tail	311	1.68	13.2	5%	7143	Circulate			
Drilling	CEMENT PROGRAM	Prod	Interm 25 - Tail BH	940	1.54	13.3	25%	5965	Braded Post-Fric	Braded Post-Fric	Class C-Accel	
		Prod	Prod - Tail									
		Section/Stage	Slurry	Surface - Tail	892	1.33	14.8	100%	Excess	TOC	Placement	Description
		Int/1	Interm - Tail	141	1.33	14.8	20%	4006	Circulate			
		Int/1	Interm - Lead	1035	1.73	12.9	50%	7143	Circulate			
		Int/2	Interm 15 - Tail	311	1.68	13.2	5%	7143	Circulate			
		Int/2	Interm 25 - Tail BH	940	1.54	13.3	25%	5965	Braded Post-Fric	Braded Post-Fric	Class C-Accel	
		Prod	Prod - Tail									
		Section/Stage	Slurry	Surface - Tail	892	1.33	14.8	100%	Excess	TOC	Placement	Description
		Int/1	Interm - Tail	141	1.33	14.8	20%	4006	Circulate			
VARIANCES	BOP Break Testing Variance	5M Annular BOP Variance	X									
		Bradenhead Ctl. Variance	X									
		Offline Cementing Variance	X									
		Offline Cementing Variance	X									
		Offline Cementing Variance	X									
		Offline Cementing Variance	X									
		Offline Cementing Variance	X									
		Offline Cementing Variance	X									
		Offline Cementing Variance	X									
		Offline Cementing Variance	X									

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

CONDITIONS

Action 495083

CONDITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 495083
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
matthew.gomez	Any previous COA's not addressed within the updated COA's still apply.	10/2/2025