Sundry Print Repor

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

Well Name: NUGGET 6_31 FEDERAL Well Location: T24S / R31E / SEC 6 /

SESE / 32.240544 / -103.8121445 COM

County or Parish/State: EDDY /

Well Number: 14H Type of Well: OIL WELL **Allottee or Tribe Name:**

Lease Number: NMNM82904 **Unit or CA Name: Unit or CA Number:**

US Well Number: 3001556039 Operator: OXY USA INCORPORATED

Notice of Intent

Sundry ID: 2834566

Type of Submission: Notice of Intent Type of Action: APD Change

Date Sundry Submitted: 01/30/2025 **Time Sundry Submitted:** 08:52

Date proposed operation will begin: 03/15/2025

Procedure Description: Oxy respectfully requests approval to change the surface hole location from SESE 520' FSL & 1164' FEL Section 6, T24S, R31E to SESE 520' FSL & 1074' FEL Section 6, T24S, R31E; as well as the bottom hole location. Also included is the blanket A casing design. There will be no additional surface disturbance related to this sundry.

NOI Attachments

Procedure Description

NUGGET6_31FEDCOM14H_VAM_DWC_C_HT_IS_5.500in_20ppf_P110RY_20250130085146.pdf

NUGGET6_31FEDCOM14H_DrillPlan_20250130085138.pdf

Nugget6_31FedCom14H_DirectPlan_20250130085129.pdf

NUGGET6_31FEDCOM14H_C102_20250130085120.pdf

NUGGET6_31FEDCOM14H_Blanket_Design_A_Pad_Review_Document_20250130085038.pdf

NUGGET6_31FEDCOM14H_Blanket_Design_A___OXY___3S_Slim_v7.1_20250130085023.pdf

NUGGET6_31FEDCOM14H_APDCHGSUNDRYWORKSHEET_20250130084952.pdf

eived by OCD: 3/3/2025 2:54:22 PM Well Name: NUGGET 6_31 FEDERAL Well Location: T24S / R31E / SEC 6 /

COM

SESE / 32.240544 / -103.8121445

County or Parish/State: EDDY? of

Well Number: 14H Type of Well: OIL WELL **Allottee or Tribe Name:**

Unit or CA Number: Lease Number: NMNM82904 **Unit or CA Name:**

US Well Number: 3001556039 Operator: OXY USA INCORPORATED

Conditions of Approval

Additional

NUGGET 6 31 FED COM 14H COA 20250303122738.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: SARA GUTHRIE Signed on: JAN 30, 2025 08:51 AM

Name: OXY USA INCORPORATED

Title: Regulatory Advisor

Street Address: 5 GREENWAY PLAZA SUITE 110

City: HOUSTON State: TX

Phone: (713) 497-2851

Email address: SARA_GUTHRIE@OXY.COM

Field

Representative Name: Michael Wilson

Street Address:

City: State: Zip:

Phone: (575)631-6618

Email address: michael_wilson@oxy.com

BLM Point of Contact

Signature: Chris Walls

BLM POC Name: CHRISTOPHER WALLS BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234 BLM POC Email Address: cwalls@blm.gov

Disposition: Approved Disposition Date: 03/03/2025

Page 2 of 2

Form 3160-5 (June 2019)

UNITED STATES DEPARTMENT OF THE INTERIOR DUBEAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 202

BURI	EAU OF LAND MANAGEMENT	5. Lease Serial No.				
Do not use this f	OTICES AND REPORTS ON Worm for proposals to drill or to Use Form 3160-3 (APD) for suc	o re-enter an	6. If Indian, Allottee or Tribe	Name		
SUBMIT IN 1	TRIPLICATE - Other instructions on pag	7. If Unit of CA/Agreement, N	Name and/or No.			
1. Type of Well Oil Well Gas W	/ell Other		8. Well Name and No.			
2. Name of Operator			9. API Well No.			
3a. Address	3b. Phone No.	(include area code)	10. Field and Pool or Explora	tory Area		
4. Location of Well (Footage, Sec., T.,R	.,M., or Survey Description)		11. Country or Parish, State			
12. CHE	CK THE APPROPRIATE BOX(ES) TO IN	DICATE NATURE (DF NOTICE, REPORT OR OTI	HER DATA		
TYPE OF SUBMISSION		TYPI	E OF ACTION			
Notice of Intent	Acidize Deep Alter Casing Hydr	oen raulic Fracturing	Production (Start/Resume) Reclamation	Water Shut-Off Well Integrity		
Subsequent Report		Construction and Abandon	Recomplete Temporarily Abandon	Other		
Final Abandonment Notice		Back	Water Disposal			
is ready for final inspection.)						
14. I hereby certify that the foregoing is	true and correct. Name (Printed/Typed)	TOTAL STATE OF THE				
		Title				
Signature						
THE SPACE FOR FEDERAL OR STATE OFICE USE						
Approved by						
			Date			
	ned. Approval of this notice does not warrar equitable title to those rights in the subject led duct operations thereon.					
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 ny 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, 3162.3-4.

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

(Form 3160-5, page 2)

Additional Information

Location of Well

0. SHL: SESE / 520 FSL / 1164 FEL / TWSP: 24S / RANGE: 31E / SECTION: 6 / LAT: 32.240544 / LONG: -103.8121445 (TVD: 0 feet, MD: 0 feet)
PPP: SESE / 0 FSL / 330 FEL / TWSP: 24S / RANGE: 31E / SECTION: 6 / LAT: 32.2391147 / LONG: -103.8094518 (TVD: 9285 feet, MD: 9582 feet)
PPP: NESE / 1321 FSL / 336 FEL / TWSP: 23S / RANGE: 31E / SECTION: 31 / LAT: 32.2572875 / LONG: -103.8094311 (TVD: 9350 feet, MD: 16202 feet)
PPP: SESE / 100 FSL / 330 FEL / TWSP: 24S / RANGE: 31E / SECTION: 6 / LAT: 32.2393896 / LONG: -103.8094515 (TVD: 9350 feet, MD: 9844 feet)
PPP: SESE / 0 FSL / 338 FEL / TWSP: 23S / RANGE: 31E / SECTION: 31 / LAT: 32.2536577 / LONG: -103.8094376 (TVD: 9350 feet, MD: 14882 feet)
PPP: SENE / 2641 FNL / 335 FEL / TWSP: 23S / RANGE: 31E / SECTION: 31 / LAT: 32.2609174 / LONG: -103.8094305 (TVD: 9350 feet, MD: 17523 feet)
BHL: NENE / 20 FNL / 330 FEL / TWSP: 23S / RANGE: 31E / SECTION: 31 / LAT: 32.2681214 / LONG: -103.8094239 (TVD: 9350 feet, MD: 20144 feet)

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: OXY USA INCORPORATED
WELL NAME & NO.: NUGGET 6 31 FED COM 14H
LOCATION: Section 6, T.24 S., R.31 E.
COUNTY: Eddy County, New Mexico

COA

H2S	• Yes	O No	
Potash	O None	Secretary	© R-111-P
Cave/Karst Potential	• Low	Medium	C High
Cave/Karst Potential	Critical		
Variance	O None	• Flex Hose	Other
Wellhead	Conventional	• Multibowl	O Both
Wellhead Variance	O Diverter		
Other	□4 String	□Capitan Reef	\square WIPP
Other	☐Fluid Filled	☐ Pilot Hole	☐ Open Annulus
Cementing	☐ Contingency	☐ EchoMeter	Primary Cement
_	Cement Squeeze		Squeeze
Special Requirements	☐ Water Disposal	▼ COM	□ Unit
Special Requirements	☐ Batch Sundry		
Special Requirements	Break Testing	✓ Offline	□ Casing
Variance		Cementing	Clearance

A. HYDROGEN SULFIDE

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

B. CASING

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

WELL IS CLOSE TO THE R111Q BOUNDARY. PLEASE DIRECTIONALLY MAINTAIN THE WELL AS PROPOSED AND AWAY FROM R111Q POTASH AREA UNTIL THE SALT INTERVAL IS CLEARED.

<u>A1:</u>

- 1. The **10-3/4** inch surface casing shall be set at approximately **892** feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **24 hours in the Potash Area** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The 7-5/8 inch intermediate casing shall be set at approximately 8,449 feet. KEEP CASING 1/2 FULL FOR COLLAPSE SF. PRESSURE TEST NEEDS EXTERNAL PRESSURE REVIEW AS WELL. The minimum required fill of cement behind the 7-5/8 inch intermediate casing is:

Option 1 (Single Stage):

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

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

- a. First stage: Operator will cement with intent to reach the top of the **Brushy** Canyon
- b. Second stage:
 - Operator will perform bradenhead squeeze and top-out. Cement to surface. If cement does not reach surface, the appropriate BLM office shall be notified
- ❖ In <u>Secretary Potash Areas</u> if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

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

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

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

3. The **5-1/2** inch production casing shall be set at approximately **19,868** feet. The minimum required fill of cement behind the **5-1/2** inch production casing is:

Option 1 (Single Stage):

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

A2:

- 1. The **13-3/8** inch surface casing shall be set at approximately **892** feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.
 - e. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - f. Wait on cement (WOC) time for a primary cement job will be a minimum of **24 hours in the Potash Area** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
 - g. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - h. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The 7-5/8 inch intermediate casing shall be set at approximately 8,449 fee. KEEP CASING 1/2 FULL FOR COLLAPSE SF. PRESSURE TEST NEEDS

EXTERNAL PRESSURE REVIEW AS WELL. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:

Option 1 (Single Stage):

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

Option 2 (Bradenhead):

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

- c. First stage: Operator will cement with intent to reach the top of the **Brushy** Canyon
- d. Second stage:
 - Operator will perform bradenhead squeeze and top-out. Cement to surface. If cement does not reach surface, the appropriate BLM office shall be notified
- 3. The **5-1/2** inch production casing shall be set at approximately **19,868** feet. The minimum required fill of cement behind the **5-1/2** inch production casing is:

Option 1 (Single Stage):

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

C. PRESSURE CONTROL

- 1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'
- 2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 5000 (5M) psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 3500 (70% Working Pressure) psi.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.

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

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in Onshore Order 1 and 2.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

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

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. (Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP)
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer (575-706-2779) prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).

- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per Onshore Oil and Gas Order No. 2.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

Offline Cementing

Offline cementing OK for surface and intermediate intervals. Notify the BLM prior to the commencement of any offline cementing procedure.

GENERAL REQUIREMENTS

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

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

Contact Eddy County Petroleum Engineering Inspection Staff:

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

Contact Lea County Petroleum Engineering Inspection Staff:

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

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

immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

3. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

A. CASING

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

- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- 8. Whenever a casing string is cemented in the R-111-Q potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR 3172**.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - i.Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - ii.If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - iii.Manufacturer representative shall install the test plug for the initial BOP test.
 - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
 - v.If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

- i.In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
- ii.In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
- iii. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- iv. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- v.The results of the test shall be reported to the appropriate BLM office.
- vi.All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- vii.The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10

- minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- viii.BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per 43 CFR 3172.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

JS 3/3/2025

Oxy USA Inc. - NUGGET 6_31 FED COM 14H Drill Plan

1. Geologic Formations

TVD of Target (ft):	9149	Pilot Hole Depth (ft):	
Total Measured Depth (ft):	19868	Deepest Expected Fresh Water (ft):	572

Delaware Basin

Formation	MD-RKB (ft)	TVD-RKB (ft)	Expected Fluids
Rustler	572	572	
Salado	952	952	Salt
Castile	2827	2827	Salt
Delaware	4207	4207	Oil/Gas/Brine
Bell Canyon	4234	4234	Oil/Gas/Brine
Cherry Canyon	5153	5151	Oil/Gas/Brine
Brushy Canyon	6430	6396	Losses
Bone Spring	8153	8061	Oil/Gas
Bone Spring 1st	9310	9084	Oil/Gas
Bone Spring 2nd			Oil/Gas
Bone Spring 3rd			Oil/Gas
Wolfcamp			Oil/Gas
Penn			Oil/Gas
Strawn			Oil/Gas

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

2. Casing Program

		N	ID	TVD					
	Hole	From	То	From	То	Csg.	Csg Wt.		
Section	Size (in)	(ft)	(ft)	(ft)	(ft)	OD (in)	(ppf)	Grade	Conn.
Surface	14.75	0	892	0	892	10.75	45.5	J-55	ВТС
Intermediate	9.875	0	8449	0	8343	7.625	26.4	L-80 HC	втс
Production	6.75	0	19868	0	9149	5.5	20	P-110	DWC/C-HT-IS

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

Created On: 1/28/2025 at 9:53 AM

Occidental - Permian New Mexico

All Casing SF Values will meet or exceed						
those below						
SF	SF	Body SF	Joint SF			
Collapse	Burst	Tension	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?	37
If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching	
the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-Q?	Y
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back	Y
500' into previous casing?	ı
Is well located in R-111-Q and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

NUGGET 6_31 FED COM 14H

Created On: 1/28/2025 at 9:53 AM

3. Cementing Program

		- 0 -							
Section	Stage	Slurry:	Sacks	Yield (ft^3/ft)	Density (lb/gal)	Excess:	тос	Placement	Description
Surface	1	Surface - Tail	746	1.33	14.8	100%	-	Circulate	Class C+Accel.
Int.	1	Intermediate 1S - Tail	237	1.68	13.2	5%	6,680	Circulate	Class C+Ret., Disper.
Int.	2	Intermediate 2S - Tail BH	1031	1.71	13.3	25%	-	Bradenhead	Class C+Accel.
Prod.	1	Production - Tail	675	1.84	13.3	25%	7,949	Circulate	Class C+Ret.

Offline Cementing Request

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

Bradenhead CBL Request

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

Created On: 1/28/2025 at 9:53 AM

Occidental - Permian New Mexico

4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	Min. Required WP		Туре	•	Tested to:	Deepest TVD Depth (ft) per Section:															
		5M		Annular	✓	70% of working pressure																
				Blind Ram	✓																	
9.875" Hole	13-5/8"	5M		Pipe Ram		250 psi / 5000 psi	8343															
				Double Ram	<	230 psi / 3000 psi																
			Other*				1															
		5M		Annular		70% of working pressure																
																			Blind Ram			
6.75" Hole 13-5/8	13-5/8"	5/8" 5M		Pipe Ram		250 psi / 5000 psi	9149															
				Double Ram		200 psi / 3000 psi																
			Other*																			

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.

^{*}Specify if additional ram is utilized

NUGGET 6_31 FED COM 14H

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.

Are anchors required by manufacturer?

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

See attached schematics.

BOP Break Testing Request

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

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

Created On: 1/28/2025 at 9:53 AM

5. Mud Program

Section	Depth -	- MD	Depth -	TVD	Temo	Weight	Vigogitu	Water
Section	From (ft)	To (ft)	From (ft)	To (ft)	Type	(ppg)	Viscosity	Loss
Surface	0	892	0	892	Water-Based Mud	8.6 - 8.8	40-60	N/C
Intermediate	892	8449	892	8343	Saturated Brine-Based or Oil-Based Mud	8.0 - 10.0	35-45	N/C
Production	8449	19868	8343	9149	Water-Based or Oil- Based Mud	8.0 - 9.6	38-50	N/C

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

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

6. Logging and Testing Procedures

Loggi	ng, Coring and Testing.
Yes	Will run GR from TD to surface (horizontal well – vertical portion of hole).
168	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

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

Created On: 1/28/2025 at 9:53 AM

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	4568 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	154°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.

the bi	LIVI.
N	H2S is present
Υ	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 3 well pad in batch by section: all surface sections, intermediate sections and production sections. The wellhead will be secured with a night cap whenever the rig is not over the well.	Yes
Will more than one drilling rig be used for drilling operations? If yes, describe. Oxy requests the option to contract a Surface Rig to drill, set surface casing, and cement for this well. If the timing between rigs is such that Oxy would not be able to preset surface, the Primary Rig will MIRU and drill the well in its entirety per the APD. Please see the attached document for information on the spudder rig.	Yes

Total Estimated Cuttings Volume: 1410 bbls

PRD NM DIRECTIONAL PLANS (NAD 1983) Nugget 6_31 Nugget 6_31 Fed Com 14H

Wellbore #1

Plan: Permitting Plan

Standard Planning Report

23 January, 2025

Planning Report

HOPSPP Database:

Company: **ENGINEERING DESIGNS**

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: Well: Nugget 6_31

Map Zone:

Nugget 6_31 Fed Com 14H

Wellbore: Wellbore #1 Design: Permitting Plan Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Nugget 6_31 Fed Com 14H Assumed RKB=25' @ 3495.00ft

Assumed RKB=25' @ 3495.00ft Grid

Minimum Curvature

Project PRD NM DIRECTIONAL PLANS (NAD 1983)

Map System: Geo Datum:

US State Plane 1983 North American Datum 1983 New Mexico Eastern Zone

System Datum:

Mean Sea Level

Using geodetic scale factor

Site Nugget 6_31

Site Position: Northing: 450,899.01 usft Latitude: 32.238572 From: Мар Easting: 698,758.94 usft Longitude: -103.824183

Position Uncertainty: 0.89 ft Slot Radius: 13.200 in

Well Nugget 6_31 Fed Com 14H

Well Position +N/-S 0.00 ft Northing: 451.634.90 usf Latitude: 32.240544 702,567.37 usf +E/-W 0.00 ft Easting: Longitude: -103.811854

Position Uncertainty 2.00 ft Wellhead Elevation: ft **Ground Level:** 3,470.00 ft

Grid Convergence: 0.28°

Wellbore Wellbore #1

Model Name Declination Field Strength Magnetics Sample Date Dip Angle (°) (nT) HDGM FILE 4/1/2024 6.35 59.78 47,405.70000000

Design Permitting Plan

Audit Notes:

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

Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°) 2.00 0.00 0.00 357.47

Plan Survey Tool Program Date 1/23/2025

Depth From Depth To

(ft) (ft) Remarks Survey (Wellbore) **Tool Name**

0.00 19,867.81 Permitting Plan (Wellbore #1) SQC_C705Mb_MWD+IFR1

MWD+IFR1+Sag+FDIR

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,445.00	0.00	0.00	4,445.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,944.62	15.00	202.07	5,927.56	-180.83	-73.33	1.00	1.00	0.00	202.07	
8,548.52	15.00	202.07	8,442.77	-805.21	-326.54	0.00	0.00	0.00	0.00	
9,588.81	90.18	359.77	9,149.22	-247.42	-400.87	10.00	7.23	15.16	156.97	
19,867.81	90.18	359.77	9,116.95	10,031.44	-442.65	0.00	0.00	0.00	0.00 P	BHL (Nugget 6_31

Planning Report

Database: Company: Project: HOPSPP

ENGINEERING DESIGNS

PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: Nugget 6_31

Well: Nugget 6_31 Fed Com 14H

Wellbore: Wellbore #1

Design: Permitting Plan

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Nugget 6_31 Fed Com 14H Assumed RKB=25' @ 3495.00ft Assumed RKB=25' @ 3495.00ft

Grid

Planned Survey Measured Depth (ft)	Turn Rate (°/100ft) 0.00 0.00 0.00 0.00 0.00 0.00
Depth Inclination Azimuth C') (ft) (ft)	Rate (°/100ft) 0.00 0.00 0.00 0.00 0.00
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0.00 0.00 0.00 0.00
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0.00 0.00 0.00
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0.00 0.00
400.00 0.00 0.00 400.00 0.00	0.00
600.00 0.00 0.00 600.00 0.00	0.00
600.00 0.00 0.00 600.00 0.00	
700.00 0.00 0.00 700.00 0.00	0.00
900.00 0.00 900.00 0.00	0.00
1,000.00 0.00 0.00 1,000.00 0.00 <td>0.00</td>	0.00
1,100.00 0.00 0.00 1,100.00 0.00 0.00 0.00 0.00 0.00 1,200.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1,300.00 0.00 0.00 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 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
	0.00
	0.00
1,500.00 0.00 0.00 1,500.00 0.00 0.00 0.00 0.00	0.00
1,500.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	0.00
1,700.00 0.00 0.00 1,700.00 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
1,900.00 0.00 0.00 1,900.00 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.	0.00
2,100.00 0.00 0.00 2,100.00 0.00 0.00 0.00 0.00	0.00
2,200.00 0.00 0.00 2,200.00 0.00 0.00 0.	0.00 0.00
2,400.00 0.00 0.00 2,400.00 0.00 0.00 0.00 0.00	0.00
2,500.00 0.00 0.00 2,500.00 0.00 0.00 0.00 0.00	0.00
2,600.00 0.00 0.00 2,600.00 0.00 0.00 0.00 0.00 0.00	0.00
2,700.00 0.00 0.00 2,700.00 0.00 0.00 0.00 0.00 0.00	0.00
2,800.00 0.00 0.00 2,800.00 0.00 0.00 0.00 0.00	0.00
2,900.00 0.00 0.00 2,900.00 0.00 0.00 0.00 0.00	0.00
3,000.00 0.00 0.00 3,000.00 0.00 0.00 0.	0.00
3,100.00 0.00 0.00 3,100.00 0.00 0.00 0.00 0.00	0.00
3,200.00 0.00 0.00 3,200.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	0.00 0.00
3,400.00 0.00 0.00 3,400.00 0.00 0.00 0.00 0.00	0.00
3,500.00 0.00 0.00 3,500.00 0.00 0.00 0.00 0.00	0.00
3,600.00 0.00 0.00 3,600.00 0.00 0.00 0.00 0.00	0.00
3,700.00 0.00 0.00 3,700.00 0.00 0.00 0.00 0.00	0.00
3,800.00 0.00 0.00 3,800.00 0.00 0.00 0.00 0.00	0.00
3,900.00 0.00 0.00 3,900.00 0.00 0.00 0.00 0.00	0.00
4,000.00 0.00 0.00 4,000.00 0.00 0.00 0.	0.00
4,100.00 0.00 0.00 4,100.00 0.00 0.00 0.00 0.00 0.00 4,200.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00
4,200.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	0.00
4,400.00 0.00 0.00 4,400.00 0.00 0.00 0.	0.00
4,445.00 0.00 0.00 4,445.00 0.00 0.00 0.00 0.00 0.00	0.00
Build 1°/100'	
4,500.00 0.55 202.07 4,500.00 -0.24 -0.10 -0.24 1.00 1.00	0.00
4,600.00 1.55 202.07 4,599.98 -1.94 -0.79 -1.91 1.00 1.00	0.00
4,700.00 2.55 202.07 4,699.92 -5.26 -2.13 -5.16 1.00 1.00 4,800.00 3.55 202.07 4,799.77 -10.19 -4.13 -10.00 1.00 1.00	0.00 0.00
4,900.00 4.55 202.07 4,899.52 -16.73 -6.79 -16.42 1.00 1.00 5,000.00 5.55 202.07 4,999.13 -24.89 -10.09 -24.42 1.00 1.00	0.00 0.00
5,100.00 5.55 202.07 4,999.13 -24.69 -10.09 -24.42 1.00 1.00 5,100.00 6.55 202.07 5,098.57 -34.66 -14.05 -34.00 1.00 1.00	0.00
5,200.00 7.55 202.07 5,197.82 -46.03 -18.67 -45.16 1.00 1.00	0.00

Planning Report

Database: Company: HOPSPP

ENGINEERING DESIGNS

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: Nugget 6_31

Well: Nugget 6_31 Fed Com 14H

Wellbore: Wellbore #1

Design: Permitting Plan

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Nugget 6_31 Fed Com 14H Assumed RKB=25' @ 3495.00ft Assumed RKB=25' @ 3495.00ft

Grid

elibore: esign:	Permitting Pla	an							
lanned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,300.00	8.55	202.07	5,296.83	-59.01	-23.93	-57.90	1.00	1.00	0.00
5,400.00 5,500.00 5,600.00 5,700.00 5,800.00 5,900.00	9.55 10.55 11.55 12.55 13.55	202.07 202.07 202.07 202.07 202.07	5,395.58 5,494.05 5,592.19 5,689.99 5,787.40 5,884.41	-73.58 -89.76 -107.52 -126.86 -147.79 -170.28	-29.84 -36.40 -43.60 -51.45 -59.93	-72.20 -88.06 -105.49 -124.47 -145.00	1.00 1.00 1.00 1.00 1.00	1.00 1.00 1.00 1.00 1.00	0.00 0.00 0.00 0.00 0.00 0.00
5,944.62	15.00	202.07	5,927.56	-180.83	-73.33	-177.42	1.00	1.00	0.00
Hold 15° Tar 6,000.00 6,100.00 6,200.00	15.00 15.00 15.00	202.07 202.07 202.07	5,981.05 6,077.65 6,174.24	-194.11 -218.09 -242.07	-78.72 -88.44 -98.17	-190.45 -213.98 -237.50	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
6,300.00 6,400.00 6,500.00 6,600.00 6,700.00	15.00 15.00 15.00 15.00 15.00	202.07 202.07 202.07 202.07 202.07	6,270.83 6,367.43 6,464.02 6,560.62 6,657.21	-266.04 -290.02 -314.00 -337.98 -361.96	-107.89 -117.61 -127.34 -137.06 -146.79	-261.03 -284.56 -308.08 -331.61 -355.14	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
6,800.00 6,900.00 7,000.00 7,100.00 7,200.00	15.00 15.00 15.00 15.00 15.00	202.07 202.07 202.07 202.07 202.07	6,753.81 6,850.40 6,946.99 7,043.59 7,140.18	-385.94 -409.92 -433.90 -457.87 -481.85	-156.51 -166.24 -175.96 -185.68 -195.41	-378.66 -402.19 -425.72 -449.24 -472.77	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
7,300.00 7,363.26	15.00 15.00	202.07 202.07	7,236.78 7,297.88	-505.83 -521.00	-205.13 -211.28	-496.30 -511.18	0.00 0.00	0.00 0.00	0.00 0.00
7,400.00 7,500.00 7,600.00	15.00 15.00 15.00	202.07 202.07 202.07	7,333.37 7,429.97 7,526.56	-529.81 -553.79 -577.77	-214.86 -224.58 -234.31	-519.82 -543.35 -566.88	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
7,700.00 7,800.00 7,900.00 8,000.00 8,100.00	15.00 15.00 15.00 15.00 15.00	202.07 202.07 202.07 202.07 202.07	7,623.15 7,719.75 7,816.34 7,912.94 8,009.53	-601.75 -625.73 -649.70 -673.68 -697.66	-244.03 -253.75 -263.48 -273.20 -282.93	-590.40 -613.93 -637.46 -660.99 -684.51	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
8,200.00 8,300.00 8,400.00 8,500.00 8,548.52	15.00 15.00 15.00 15.00 15.00	202.07 202.07 202.07 202.07 202.07	8,106.13 8,202.72 8,299.31 8,395.91 8,442.77	-721.64 -745.62 -769.60 -793.58 -805.21	-292.65 -302.37 -312.10 -321.82 -326.54	-708.04 -731.57 -755.09 -778.62 -790.03	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
KOP, Build	& Turn 10°/100) '							
8,600.00 8,700.00 8,800.00 8,900.00 9,000.00	10.45 5.95 12.69 22.04 31.78	213.24 282.38 332.88 345.19 350.30	8,492.99 8,592.14 8,690.90 8,786.27 8,875.34	-815.30 -821.79 -810.87 -782.88 -738.67	-331.61 -341.67 -351.77 -361.59 -370.85	-799.88 -805.92 -794.58 -766.18 -721.61	10.00 10.00 10.00 10.00 10.00	-8.83 -4.50 6.74 9.35 9.74	21.68 69.15 50.50 12.31 5.10
9,100.00 9,200.00 9,300.00 9,302.67	41.63 51.54 61.46 61.73	353.18 355.11 356.58 356.61	8,955.42 9,024.06 9,079.19 9,080.46	-679.58 -607.41 -524.35 -522.00	-379.26 -386.56 -392.53 -392.67	-662.20 -589.78 -506.53 -504.18	10.00 10.00 10.00 10.00	9.85 9.90 9.93 9.93	2.88 1.94 1.46 1.31
9,400.00 9,500.00	71.40 81.34	357.79 358.86	9,119.13 9,142.66	-432.91 -335.89	-397.00 -399.82	-414.99 -317.94	10.00	9.94 9.95	1.21
9,588.81 Landing Po i 9,600.00	90.18 i nt 90.18	359.77 359.77	9,149.22 9,149.19	-247.42 -236.23	-400.87 -400.92	-229.51 -218.33	0.00	9.95 0.00	0.00

Planning Report

Database: Company: HOPSPP

ENGINEERING DESIGNS

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: Nugget 6_31

Well: Nugget 6_31 Fed Com 14H

Wellbore: Wellbore #1
Design: Permitting Plan

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Nugget 6_31 Fed Com 14H Assumed RKB=25' @ 3495.00ft Assumed RKB=25' @ 3495.00ft

Grid

Design:	Permitting Pla	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)				
9,700.00	90.18	359.77	9,148.87	-136.23	-401.33	-118.41	0.00	0.00	0.00				
9,800.00	90.18	359.77	9,148.56	-36.23	-401.73	-18.49	0.00	0.00	0.00				
9,900.00	90.18	359.77	9,148.24	63.76	-402.14	81.43	0.00	0.00	0.00				
10,000.00	90.18	359.77	9,147.93	163.76	-402.54	181.35	0.00	0.00	0.00				
10,100.00	90.18	359.77	9,147.62	263.76	-402.95	281.27	0.00	0.00	0.00				
10,200.00	90.18	359.77	9,147.30	363.76	-403.36	381.19	0.00	0.00	0.00				
10,300.00	90.18	359.77	9,146.99	463.76	-403.76	481.11	0.00	0.00	0.00				
10,400.00	90.18	359.77	9,146.67	563.76	-404.17	581.03	0.00	0.00	0.00				
10,500.00	90.18	359.77	9,146.36	663.76	-404.58	680.95	0.00	0.00	0.00				
10,600.00	90.18	359.77	9,146.05	763.75	-404.98	780.87	0.00	0.00	0.00				
10,700.00	90.18	359.77	9,145.73	863.75	-405.39	880.78	0.00	0.00	0.00				
10,800.00	90.18	359.77	9,145.42	963.75	-405.80	980.70	0.00	0.00	0.00				
10,900.00	90.18	359.77	9,145.11	1,063.75	-406.20	1,080.62	0.00	0.00	0.00				
11,000.00	90.18	359.77	9,144.79	1,163.75	-406.61	1,180.54	0.00	0.00	0.00				
11,100.00	90.18	359.77	9,144.48	1,263.75	-407.02	1,280.46	0.00	0.00	0.00				
11,200.00	90.18	359.77	9,144.16	1,363.75	-407.42	1,380.38	0.00	0.00	0.00				
11,300.00	90.18	359.77	9,143.85	1,463.75	-407.83	1,480.30	0.00	0.00	0.00				
11,400.00	90.18	359.77	9,143.54	1,563.74	-408.23	1,580.22	0.00	0.00	0.00				
11,500.00	90.18	359.77	9,143.22	1,663.74	-408.64	1,680.14	0.00	0.00	0.00				
11,600.00	90.18	359.77	9,142.91	1,763.74	-409.05	1,780.06	0.00	0.00	0.00				
11,700.00	90.18	359.77	9,142.59	1,863.74	-409.45	1,879.98	0.00	0.00	0.00				
11,800.00	90.18	359.77	9,142.28	1,963.74	-409.86	1,979.90	0.00	0.00	0.00				
11,900.00	90.18	359.77	9,141.97	2,063.74	-410.27	2,079.82	0.00	0.00	0.00				
12,000.00	90.18	359.77	9,141.65	2,163.74	-410.67	2,179.74	0.00	0.00	0.00				
12,100.00	90.18	359.77	9,141.34	2,263.73	-411.08	2,279.66	0.00	0.00	0.00				
12,200.00	90.18	359.77	9,141.02	2,363.73	-411.49	2,379.58	0.00	0.00	0.00				
12,300.00	90.18	359.77	9,140.71	2,463.73	-411.89	2,479.49	0.00	0.00	0.00				
12,400.00	90.18	359.77	9,140.40	2,563.73	-412.30	2,579.41	0.00	0.00	0.00				
12,500.00	90.18	359.77	9,140.08	2,663.73	-412.70	2,679.33	0.00	0.00	0.00				
12,600.00	90.18	359.77	9,139.77	2,763.73	-413.11	2,779.25	0.00	0.00	0.00				
12,700.00	90.18	359.77	9,139.46	2,863.73	-413.52	2,879.17	0.00	0.00	0.00				
12,800.00	90.18	359.77	9,139.14	2,963.73	-413.92	2,979.09	0.00	0.00	0.00				
12,900.00	90.18	359.77	9,138.83	3,063.72	-414.33	3,079.01	0.00	0.00	0.00				
13,000.00	90.18	359.77	9,138.51	3,163.72	-414.74	3,178.93	0.00	0.00	0.00				
13,100.00	90.18	359.77	9,138.20	3,263.72	-415.14	3,278.85	0.00	0.00	0.00				
13,200.00	90.18	359.77	9,137.89	3,363.72	-415.55	3,378.77	0.00	0.00	0.00				
13,300.00	90.18	359.77	9,137.57	3,463.72	-415.96	3,478.69	0.00	0.00	0.00				
13,400.00	90.18	359.77	9,137.26	3,563.72	-416.36	3,578.61	0.00	0.00	0.00				
13,500.00	90.18	359.77	9,136.94	3,663.72	-416.77	3,678.53	0.00	0.00	0.00				
13,600.00	90.18	359.77	9,136.63	3,763.72	-417.18	3,778.45	0.00	0.00	0.00				
13,700.00	90.18	359.77	9,136.32	3,863.71	-417.58	3,878.37	0.00	0.00	0.00				
13,800.00	90.18	359.77	9,136.00	3,963.71	-417.99	3,978.29	0.00	0.00	0.00				
13,900.00	90.18	359.77	9,135.69	4,063.71	-418.39	4,078.20	0.00	0.00	0.00				
14,000.00	90.18	359.77	9,135.37	4,163.71	-418.80	4,178.12	0.00	0.00	0.00				
14,100.00	90.18	359.77	9,135.06	4,263.71	-419.21	4,278.04	0.00	0.00	0.00				
14,200.00	90.18	359.77	9,134.75	4,363.71	-419.61	4,377.96	0.00	0.00	0.00				
14,300.00	90.18	359.77	9,134.43	4,463.71	-420.02	4,477.88	0.00	0.00	0.00				
14,400.00	90.18	359.77	9,134.12	4,563.70	-420.43	4,577.80	0.00	0.00	0.00				
14,500.00	90.18	359.77	9,133.80	4,663.70	-420.83	4,677.72	0.00	0.00	0.00				
14,600.00	90.18	359.77	9,133.49	4,763.70	-421.24	4,777.64	0.00	0.00	0.00				
14,604.30	90.18	359.77	9,133.48	4,768.00	-421.26	4,781.94	0.00	0.00	0.00				
PPP-3 Cro 14,700.00	90.18	359.77	9,133.18	4,863.70	-421.65	4,877.56	0.00	0.00	0.00				
14,800.00	90.18	359.77	9,132.86	4,963.70	-422.05	4,977.48	0.00	0.00	0.00				
14,900.00	90.18	359.77	9,132.55	5,063.70	-422.46	5,077.40	0.00	0.00	0.00				

Planning Report

Database: Company:

Planned Survey

HOPSPP

ENGINEERING DESIGNS

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: Nugget 6_31

Well: Nugget 6_31 Fed Com 14H

Wellbore: Wellbore #1

Design: Permitting Plan

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Nugget 6_31 Fed Com 14H Assumed RKB=25' @ 3495.00ft Assumed RKB=25' @ 3495.00ft

Grid

Minimum Curvature

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)	
15,000.00	90.18	359.77	9,132.24	5,163.70	-422.87	5,177.32	0.00	0.00	0.00	
15,100.00	90.18	359.77	9,131.92	5,263.70	-423.27	5,277.24	0.00	0.00	0.00	
15,200.00	90.18	359.77	9,131.61	5,363.69	-423.68	5,377.16	0.00	0.00	0.00	
15,300.00	90.18	359.77	9,131.29	5,463.69	-424.08	5,477.08	0.00	0.00	0.00	
15,400.00	90.18	359.77	9,130.98	5,563.69	-424.49	5,577.00	0.00	0.00	0.00	
15,500.00	90.18	359.77	9,130.67	5,663.69	-424.90	5,676.92	0.00	0.00	0.00	
15,600.00	90.18	359.77	9,130.35	5,763.69	-425.30	5,776.83	0.00	0.00	0.00	
15,700.00	90.18	359.77	9,130.04	5,863.69	-425.71	5,876.75	0.00	0.00	0.00	
15,800.00	90.18	359.77	9,129.72	5,963.69	-426.12	5,976.67	0.00	0.00	0.00	
15,900.00	90.18	359.77	9,129.41	6,063.68	-426.52	6,076.59	0.00	0.00	0.00	
16,000.00	90.18	359.77	9,129.10	6,163.68	-426.93	6,176.51	0.00	0.00	0.00	
16,100.00	90.18	359.77	9,128.78	6,263.68	-427.34	6,276.43	0.00	0.00	0.00	
16,200.00	90.18	359.77	9,128.47	6,363.68	-427.74	6,376.35	0.00	0.00	0.00	
16,300.00	90.18	359.77	9,128.15	6,463.68	-428.15	6,476.27	0.00	0.00	0.00	
16,400.00	90.18	359.77	9,127.84	6,563.68	-428.55	6,576.19	0.00	0.00	0.00	
16,500.00	90.18	359.77	9,127.53	6,663.68	-428.96	6,676.11	0.00	0.00	0.00	
16,600.00	90.18	359.77	9,127.21	6,763.68	-429.37	6,776.03	0.00	0.00	0.00	
16,700.00	90.18	359.77	9,126.90	6,863.67	-429.77	6,875.95	0.00	0.00	0.00	
16,800.00	90.18	359.77	9,126.58	6,963.67	-430.18	6,975.87	0.00	0.00	0.00	
16,900.00	90.18	359.77	9,126.27	7,063.67	-430.59	7,075.79	0.00	0.00	0.00	
17,000.00	90.18	359.77	9,125.96	7,163.67	-430.99	7,175.71	0.00	0.00	0.00	
17,100.00	90.18	359.77	9,125.64	7,263.67	-431.40	7,275.63	0.00	0.00	0.00	
17,200.00	90.18	359.77	9,125.33	7,363.67	-431.81	7,375.54	0.00	0.00	0.00	
17,300.00	90.18	359.77	9,125.02	7,463.67	-432.21	7,475.46	0.00	0.00	0.00	
17,400.00	90.18	359.77	9,124.70	7,563.67	-432.62	7,575.38	0.00	0.00	0.00	
17,500.00	90.18	359.77	9,124.39	7,663.66	-433.03	7,675.30	0.00	0.00	0.00	
17,600.00	90.18	359.77	9,124.07	7,763.66	-433.43	7,775.22	0.00	0.00	0.00	
17,700.00	90.18	359.77	9,123.76	7,863.66	-433.84	7,875.14	0.00	0.00	0.00	
17,800.00	90.18	359.77	9,123.45	7,963.66	-434.24	7,975.06	0.00	0.00	0.00	
17,900.00	90.18	359.77	9,123.13	8,063.66	-434.65	8,074.98	0.00	0.00	0.00	
18,000.00	90.18	359.77	9,122.82	8,163.66	-435.06	8,174.90	0.00	0.00	0.00	
18,100.00	90.18	359.77	9,122.50	8,263.66	-435.46	8,274.82	0.00	0.00	0.00	
18,200.00	90.18	359.77	9,122.19	8,363.65	-435.87	8,374.74	0.00	0.00	0.00	
18,300.00	90.18	359.77	9,121.88	8,463.65	-436.28	8,474.66	0.00	0.00	0.00	
18,400.00	90.18	359.77	9,121.56	8,563.65	-436.68	8,574.58	0.00	0.00	0.00	
18,500.00	90.18	359.77	9,121.25	8,663.65	-437.09	8,674.50	0.00	0.00	0.00	
18,600.00	90.18	359.77	9,120.93	8,763.65	-437.50	8,774.42	0.00	0.00	0.00	
18,700.00	90.18	359.77	9,120.62	8,863.65	-437.90	8,874.34	0.00	0.00	0.00	
18,800.00	90.18	359.77	9,120.31	8,963.65	-438.31	8,974.25	0.00	0.00	0.00	

18,900.00

19.000.00

19,100.00

19,200.00

19,300.00

19,400.00

19,500.00

19,600.00

19,700.00

19,800.00

19,867.81

TD at 19867.81' MD

90.18

90.18

90.18

90.18

90.18

90.18

90.18

90 18

90.18

90.18

90.18

359.77

359.77

359.77

359.77

359.77

359.77

359.77

359.77

359.77

359.77

359.77

9,119.99

9.119.68

9,119.36

9,119.05

9,118.74

9,118.42

9,118.11

9.117.80

9,117.48

9,117.17

9,116.95

9,063.65

9.163.64

9,263.64

9,363.64

9,463.64

9,563.64

9,663.64

9.763.64

9,863.63

9,963.63

10,031.44

-438.71

-439.12

-439.53

-439.93

-440.34

-440.75

-441.15

-441.56

-441.97

-442.37

-442.65

9,074.17

9.174.09

9,274.01

9,373.93

9,473.85

9,573.77

9,673.69

9.773.61

9,873.53

9,973.45

10,041.20

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

Planning Report

Database: HOPSPP

Company: ENGINEERING DESIGNS

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: Nugget 6_31

Well: Nugget 6_31 Fed Com 14H

Wellbore: Wellbore #1

Design: Permitting Plan

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Nugget 6_31 Fed Com 14H Assumed RKB=25' @ 3495.00ft Assumed RKB=25' @ 3495.00ft

Grid

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
KOP (Nugget 6_31 - plan misses targe - Point	0.00 t center by 91		0.00 Ooft MD (0.0	-821.77 0 TVD, 0.00 I	-398.53 N, 0.00 E)	450,813.18	702,168.87	32.238291	-103.813156
PBHL (Nugget 6_31 - plan hits target ce - Point	0.00 enter	0.00	9,116.95	10,031.44	-442.65	461,665.71	702,124.75	32.268123	-103.813129
FTP (Nugget 6_31 Fed - plan misses targe			9,149.77 8.18ft MD (9	-421.75 9124.66 TVD,	-400.17 -415.61 N, -3	451,213.18 397.64 E)	702,167.23	32.239390	-103.813155

Formations							
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
	572.00	572.00	RUSTLER				
	952.00	952.00	SALADO				
	2,827.00	2,827.00	CASTILE				
	4,207.00	4,207.00	DELAWARE				
	4,234.00	4,234.00	BELL CANYON				
	5,152.80	5,151.00	CHERRY CANYON				
	6,429.58	6,396.00	BRUSHY CANYON				
	8,153.28	8,061.00	BONE SPRING				
	9,310.23	9,084.00	BONE SPRING 1ST				

Measured	Vertical	Local Coordinates			
Depth (ft)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment	
4,445.00	4,445.00	0.00	0.00	Build 1°/100'	
5,944.62	5,927.56	-180.83	-73.33	Hold 15° Tangent	
7,363.26	7,297.88	-521.00	-211.28	PPP-1 Cross	
8,548.52	8,442.77	-805.21	-326.54	KOP, Build & Turn 10°/100'	
9,302.67	9,080.46	-522.00	-392.67	PPP-2 Cross	
9,588.81	9,149.22	-247.42	-400.87	Landing Point	
14,604.30	9,133.48	4,768.00	-421.26	PPP-3 Cross	
19,867.81	9,116.95	10,031.44	-442.65	TD at 19867.81' MD	

Submit Electronically Via OCD Permitting

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

	Revised July 9, 2024 AGE 1 OF 2
	☐ Initial Submittal
Submittal Type:	✓ Amended Report
Type.	_

As Drilled

			•		WELL LOCATION	ON INFORMATION					
API Nur	nber 015-56	:020	Pool Code 1336	7		Pool Name COTTON DRAW; BONE SPRING					
		0039				COTTOND	KAVV, DO	Well Number	G		
Property Code Property Name 329887 NUGGET 6 31 FED COM											
OGRID			0 ()		NUGGET 6	_31 FED COM		14H			
OGRID		Operator Name						Ground Level Elevation			
	16696)			OXYU	JSA INC.		3470			
Surface	ırface 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		
P	06	24S	31E		520' FSL	1074' FEL	32.24054414	-103.81185404	EDDY		
		•	•	· ·	Rottom H	ole Location	•	•			
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County		
В	31	23S	31E		20' FNL	1475' FEL	32.26812253	-103.81312839	EDDY		
		l	<u> </u>		ı						
Dedicated Acres Infill or Defining Well De			Defining Well API		Overlapping Spacing Unit	(Y/N)	Consolidation Code				
640.41 INFILL				015-48615	NO	NO					
Order Numbers:					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		
В	07	24S	31E		300' FNL	1475' FEL	32.23829072	-103.81315577	EDDY		
					First Take	Point (FTP)					
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County		
О	06	24S	31E		100' FSL	1475' FEL	32.23939026	-103.81315481	EDDY		
					Last Take	Point (LTP)					
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County		
В	31	23S	31E		100' FNL	1475' FEL	32.26790262	-103.81312812	EDDY		
Unitized	d Area or Area	of Uniform Inter	est	G .	II '- V II '-	. 1	Ground Floor	Elevation			
				Spacin	g Unit Type: X Horiz	zontal		3470'			
OPER	ATOR CEI	RTIFICATIO	NS			SURVEYOR CERT	IFICATIONS				
	I hereby certify that the information contained herein is true and complete to the best of my										
					well, that this organization	actual surveys made by me	e or under my supervision	n, and that the same is tru	ue and correct to		

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.

Sara Guthrie Signature	1/29/2025	
Signature	Date	
Sara Guthrie		
Printed Name		
sara_guthrie@oxy.com		

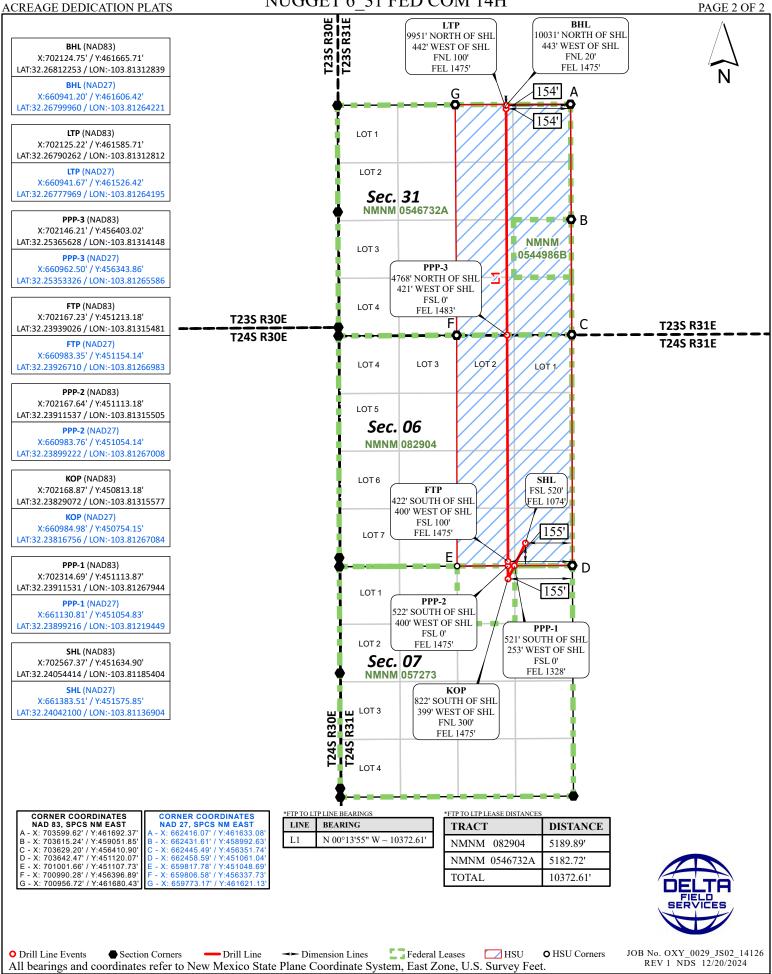
Email Address



Signature and Seal of Professional Surveyor

Certificate Number Date of Survey

> 21653 JANUARY 06, 2025



Oxy USA Inc. - Blanket Design Pad Document

OXY - Blanket Design A

Pad Name: SNDDNS_T24SR31E_6_6 **SHL:** 520' FSL 1044' FEL, Sec 06, T24S-R31E

Oxy requests for the bellow wells to be approved for the two designs listed in the Blanket Design document (Blanket Design A –OXY –3S Slim v7.) The MDs and TVDs for all intervals are within the boundary conditions. The max inclination and DLS are also within the boundary conditions (directional plans attached separately for review.)

1. Blanket Design - Wells

Well Name	APD#	Sur	face	Intermediate		Production	
well Name	APD#	MD	TVD	MD	TVD	MD	TVD
NUGGET 6_31 FED COM 7H	10400098727	898	898	8664	8559	20070	9349
NUGGET 6_31 FED COM 13H	N/A - New Permit	883	883	8782	8555	20158	9299
NUGGET 6_31 FED COM 14H	N/A - New Permit	892	892	8449	8343	19868	9149

2. Review Criteria Table

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

3. Geologic Formations

Formation	MD-RKB (ft)	TVD-RKB (ft)	Expected Fluids
Rustler	582	582	
Salado	958	958	Salt
Castile	2832	2832	Salt
Delaware	4221	4221	Oil/Gas/Brine
Bell Canyon	4243	4243	Oil/Gas/Brine
Cherry Canyon	5181	5177	Oil/Gas/Brine
Brushy Canyon	6454	6417	Losses
Bone Spring	8165	8077	Oil/Gas
Bone Spring 1st	9232	9102	Oil/Gas
Bone Spring 2nd			Oil/Gas
Bone Spring 3rd			Oil/Gas
Wolfcamp			Oil/Gas
Penn			Oil/Gas
Strawn			Oil/Gas

4. Cementing Program

Section	Stage	Slurry:	Sacks	Yield (ft^3/ft)	Density (lb/gal)	Excess:	тос	Placement	Description
Surface	1	Surface - Tail	751	1.33	14.8	100%	-	Circulate	Class C+Accel.
Int.	1	Intermediate 1S - Tail	263	1.68	13.2	5%	6,704	Circulate	Class C+Ret., Disper.
Int.	2	Intermediate 2S - Tail BH	1034	1.71	13.3	25%	-	Bradenhead	Class C+Accel.
Prod.	1	Production - Tail	674	1.84	13.3	25%	8,164	Circulate	Class C+Ret.



Oxy Bulk Design - Casing Design "A"



1. Casing Program

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

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

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

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

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

Design Variation "A1"

		I	MD	T	VD				
Section	Hole Size (in)	From (ft)	To (ft)	From (ft)	To (ft)	Csg. OD (in)	Csg Wt. (ppf)	Grade	Conn.
Surface	14.75	0	1200	0	1200	10.75	45.5	J-55	ВТС
Intermediate	9.875	0	13111*	0	12775*	7.625	26.4	L-80 HC	BTC Axis HT
Production	6.75	0	23361	0	12775	5.5	20	P-110	Wedge 461 Sprint SF DWC/C-HT-IS

^{*}Curve could be in intermediate or production section

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

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

^{*}Curve could be in intermediate or production section

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 SF Body SF Joint SF							
	٠.	Doug o.	301116 31				
Collapse		Tension					

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



Oxy Bulk Design - Casing Design "A"



§Annular Clearance Variance Request

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

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

2. Trajectory / Boundary Conditions

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

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

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



Oxy Bulk Design - Casing Design "A"



3. Cementing Program

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

Design Variation "A1"

Section	Stage	Slurry:	Sacks	Yield (ft^3/ft)	Density (lb/gal)	Excess:	тос	Placement	Description
Surface	1	Surface - Tail	819	1.33	14.8	100%	1	Circulate	Class C+Accel.
Int.	1	Intermediate 1S - Tail	658	1.68	13.2	5%	7,206	Circulate	Class C+Ret., Disper.
Int.	2	Intermediate 2S - Tail BH	1111	1.71	13.3	25%		Bradenhead	Class C+Accel.
Prod.	1	Production - Tail	665	1.84	13.3	25%	11,611	Circulate	Class C+Ret.
							500' inside	·	
Prod.	2*	Production - Tail BH*	TBD	1.84	13.3	50%	prev csg	Circulate	Class C+Ret.

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

Design Variation "A2"

Section	Stage	Slurry:	Sacks	Yield (ft^3/ft)	Density (lb/gal)	Excess:	тос	Placement	Description
Surface	1	Surface - Tail	1023	1.33	14.8	100%	-	Circulate	Class C+Accel.
Int.	1	Intermediate 1S - Tail	658	1.68	13.2	5%	7,206	Circulate	Class C+Ret., Disper.
Int.	2	Intermediate 2S - Tail BH	1293	1.71	13.3	25%	-	Bradenhead	Class C+Accel.
Prod.	1	Production - Tail	665	1.84	13.3	25%	11,611	Circulate	Class C+Ret.
Prod.	2*	Production - Tail BH*	TBD	1.84	13.3	50%	500' inside prev csg	Circulate	Class C+Ret.

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

Offline Cementing Request

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

Bradenhead CBL Request

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





4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	Min. Required WP		Туре	1	Tested to:	Deepest TVD Depth (ft) per Section:
		5M		Annular	√	70% of working pressure	
			Blind Ram ✓				
9.875" Hole	13-5/8"	5/8" 5M		Pipe Ram		250 psi / 5000 psi	12775**
		JIVI		Double Ram	✓	230 psi / 3000 psi	
			Other*				
		5M		Annular	√	100% of working pressure	
				Blind Ram	✓		
6.75" Hole	13-5/8" 10M		Pipe Ram		250 psi / 10000 psi	12775	
		TOW		Double Ram	✓	200 psi / 10000 psi	
			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. See attached schematics.

5M Annular BOP Request

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

^{**}Curve could be in intermediate or production section





Formation integrity test will be performed per 43 CFR part 3170 Subpart 3172.

On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with 43 CFR part 3170 Subpart 3172.

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

Υ

Are anchors required by manufacturer?

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

See attached Schematics.

BOP Break Testing Request

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

Hammer Union Variance

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

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





5. Mud Program & Drilling Conditions

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

^{*}Curve could be in intermediate or production section*

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times. The following is a general list of products:

Barite, Bentonite, Gypsum, Lime, Soda Ash, Caustic Soda, Nut Plug, Cedar Fiber, Cotton Seed Hulls, Drilling Paper, Salt Water Clay, CACL2. Oxy will use a closed mud system.

Drilling Blind Request

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

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

What will be used to monitor the	PVT/MD Totco/Visual Monitoring
loss or gain of fluid?	F V 1/1VID TOLCO/ VISUAL IVIOLITIONING

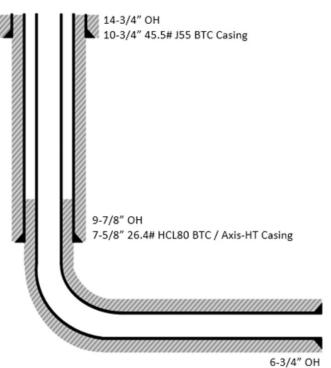
Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times. Appropriately weighted mud will be used to isolate potential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





6. Wellbore Diagram(s)

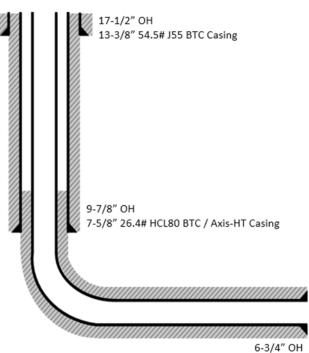
Design Variation "A1"



5-1/2" 20# P110 Wedge 461 / Sprint SF / DWC/C-HT-IS Casing

TOC @ 500' Above Prev. CSG

Design Variation "A2"



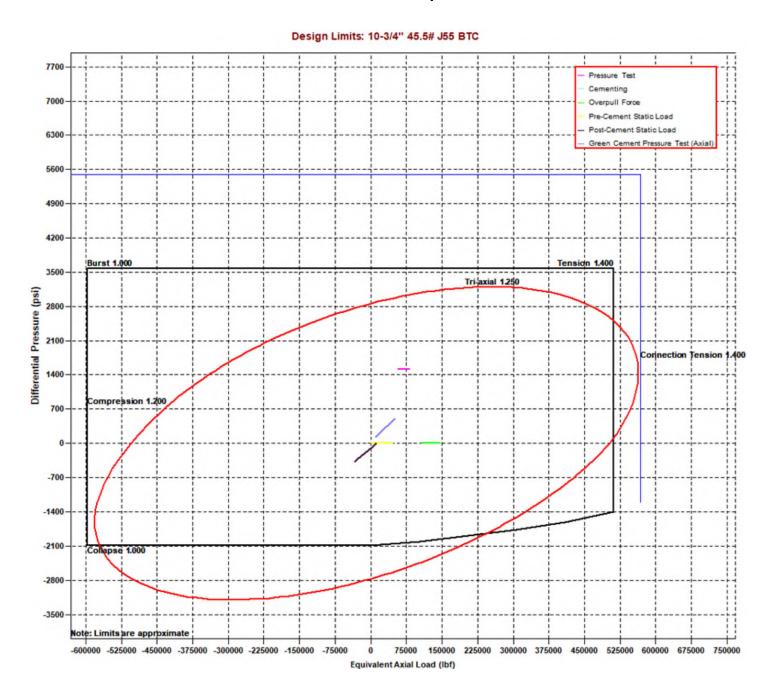
5-1/2" 20# P110 Wedge 461 / Sprint SF / DWC/C-HT-IS Casing

TOC @ 500' Above Prev. CSG



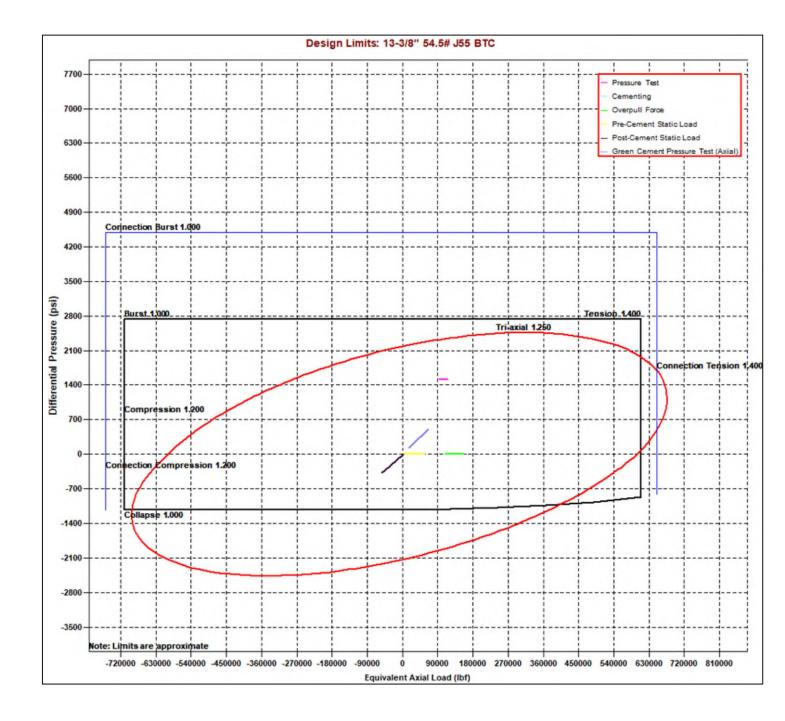


7. Landmark StressCheck Screenshots - Triaxial Output



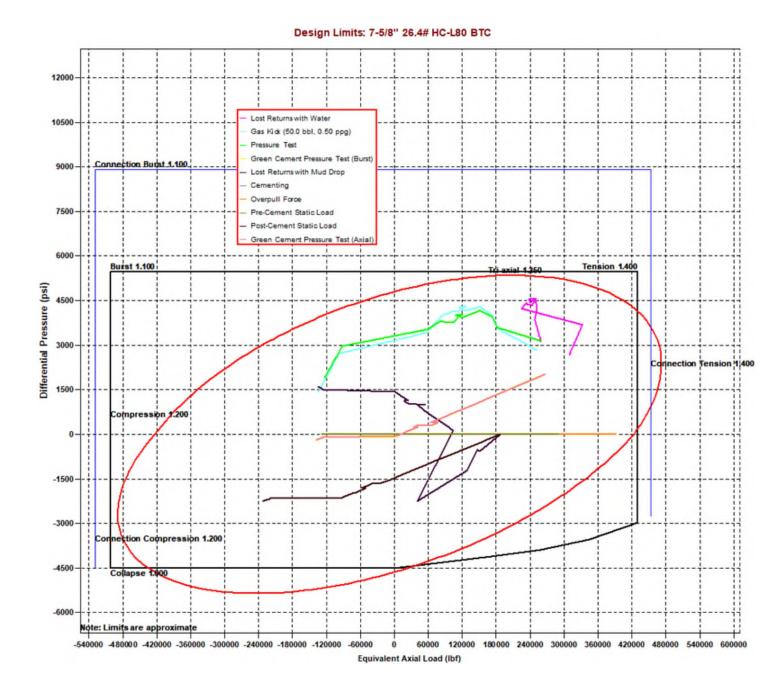








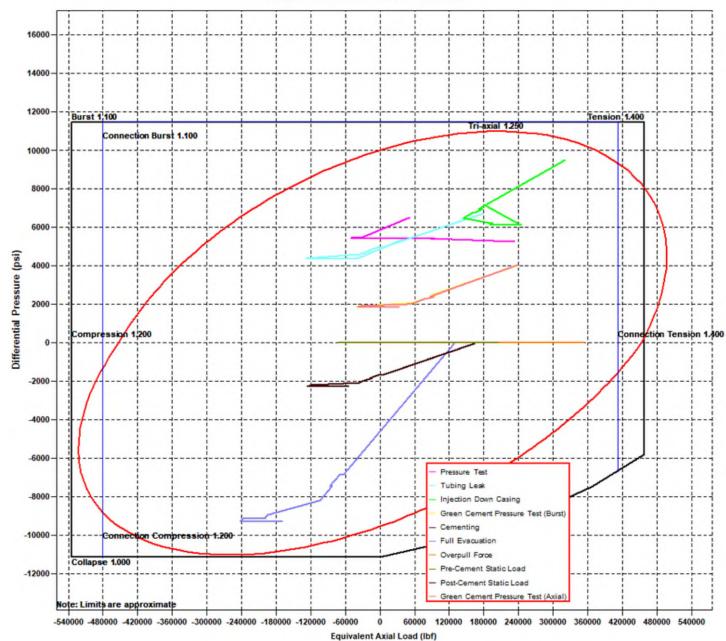










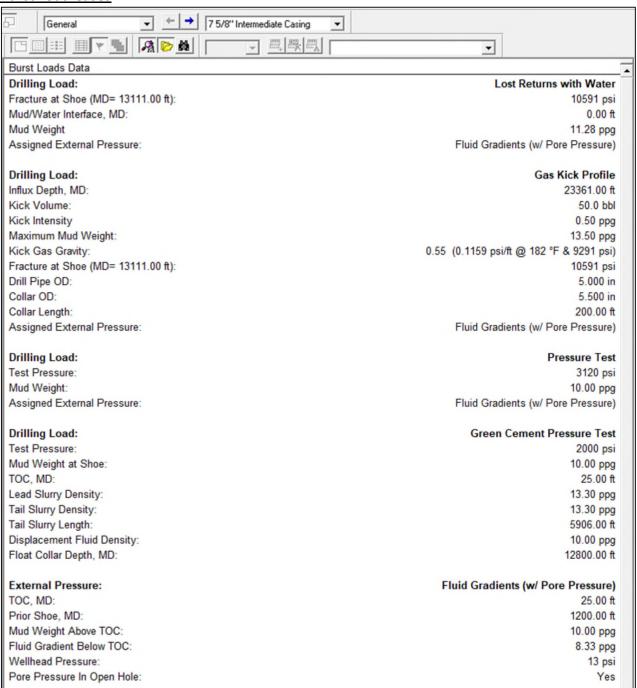






8. Landmark StressCheck Screenshots – Inputs for Intermediate CSG Load Cases

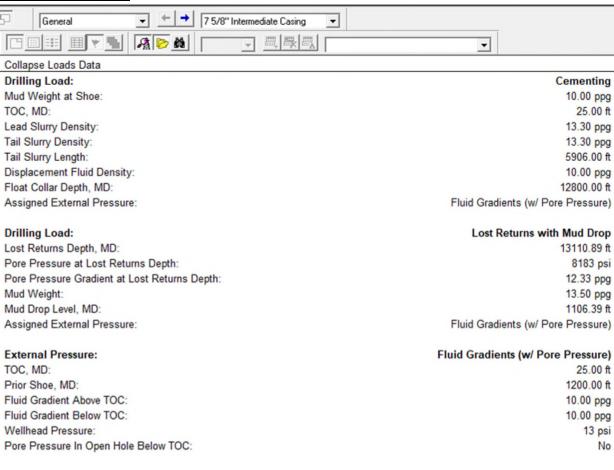
Burst Load Cases



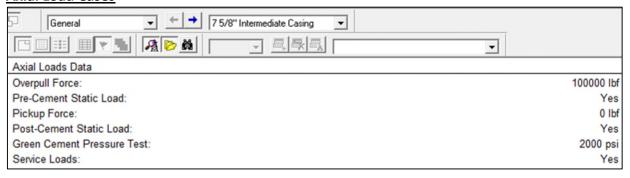




Collapse Load Cases



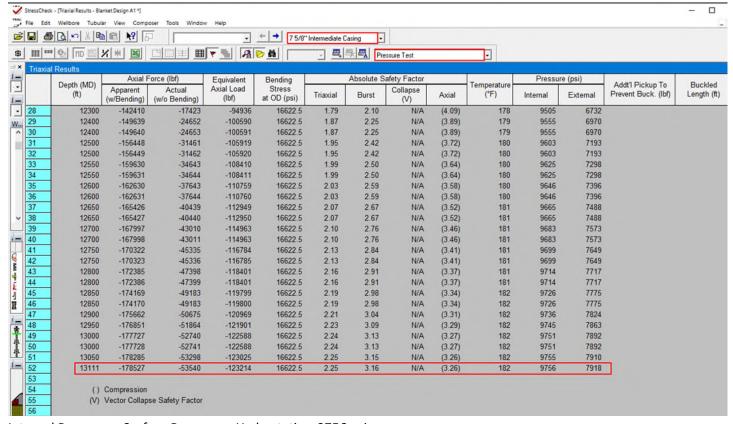
Axial Load Cases







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



Internal Pressure = Surface Pressure + Hydrostatic = 9756 psi External Pressure = Fluid Gradient w/ Pore Pressure = 7918 psi Burst SF = 3.16

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





10. Intermediate Non-API Casing Spec Sheet



Technical Data Sheet

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

Mod	haniaa	/ Droportice	
		Properties	
Minimum Yield Strength	psi.	80,000	
Maximum Yield Strength	psi.	95,000	
Minimum Tensile Strength	psi.	95,000	
	Dime	nsions	
		Pipe	AXIS HT
Outside Diameter	in.	7.625	8.500
Wall Thickness	in.	0.328	-
Inside Diameter	in.	6.969	-
Standard Drift	in.	6.844	6.844
Alternate Drift	in.	-	-
Plain End Weight	lbs/ft.	-	-
Nominal Linear Weight	lbs/ft.	26.40	-
	Perfor	mance	
		Pipe	AXIS HT
Minimum Collapse Pressure	psi.	4,320	-
Minimum Internal Yield Pressure	psi.	6,020	6,020
Minimum Pipe Body Yield Strength	lbs.	602 x 1,000	-
Joint Strength	lbs.	-	635 x 1,000
Má	ake-Up	Torques	
		Pipe	AXIS HT
Optimum Make-Up Torque	ft/lbs.	-	8,000
Maximum Operational Torque	ft/lbs.	-	25,000

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





11. Production Non-API Casing Spec Sheets





Printed on: 11/09/2021

Coupling Pipe Body

Grade: P1104CY Grade: P1104CY

Body: White 1st Band: White

1st Band: Pale Green 2nd Band: Pale Green

2nd Band: - 3rd Band: Pale Green

4th Band:
5th Band:
6th Band: -

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

Pipe Body Data

Geometry			
Nominal OD	5.500 in.	Wall Thickness	0.361 in.
Nominal Weight	20 lb/ft	Plain End Weight	19.83 lb/ft
Drift	4.653 in.	OD Tolerance	API
Nominal ID	4.778 in.		

Performance	
Body Yield Strength	729 x1000 lb
Min. Internal Yield Pressure	14,360 psi
SMYS	125,000 psi
Collapse Pressure	12,300 psi

Connection Data

6.050 in.
7.714 in.
4.778 in.
3.775 in.
3.40
Ms

Performance	
Tension Efficiency	100 %
Joint Yield Strength	729 x1000 lb
Internal Pressure Capacity	14,360 psi
Compression Efficiency	100 %
Compression Strength	729 x1000 lb
Max. Allowable Bending	104 °/100 ft
External Pressure Capacity	12,300 psi
Coupling Face Load	273,000 lb

Make-Up Torques	
Minimum	17,000 ft-lb
Optimum	18,000 ft-lb
Maximum	21,600 ft-lb
Operation Limit Torques	
Operating Torque	43,000 ft-lb
Yield Torque	51,000 ft-lb
Buck-On	
Minimum	21,600 ft-lb
Maximum	23,100 ft-lb

Notes

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

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

Tenaris has issued this document for general information only, and the information in this document, including, without limitation, any pictures, drawings or designs ("Information") is not intended to constitute professional or any other type of advice or recommendation and is provided on an "as is" basis. No warranty is given. Tenaris has not independently werified any information—if any-provided by the user in connection with, or for the purpose of, the Information contained hereunder. The use of the Information is at user's own risk and Tenaris does not assume any responsibility or liability of any kind for any loss, damage or injury resulting from, or in connection with any Information contained hereunder or any use thereof. The Information in this document is subject to change or modification without notice. Tenaris's reproducts and services are subject to Tenaris's standard terms and conditions or otherwise to the terms resulting from the respective contracts of sale or services, as the case may be, between petitioner and Tenaris. For more complete information please contact a Tenaris's representative or visit our website at www.tenaris.com . ©Tenaris 2021. All rights reserved.





Generated on May 21, 2024



CONNECTION DATA SHEET





PI	PE	BODY	PROPERTIES	

Nominal OD	5.500	in.
Nominal ID	4.778	in.
Nominal Wall Thickness	0.361	in.
Minimum Wall Thickness	87.5	%
Nominal Weight (API)	20.00	lb/ft
Plain End Weight	19.83	lb/ft
Drift	4.653	in.
Grade Type	API 5CT	
Grade Type Minimum Yield Strength	API 5CT 110	ksi
And a second sec		ksi ksi
Minimum Yield Strength	110	
Minimum Yield Strength Maximum Yield Strength	110 140	ksi
Minimum Yield Strength Maximum Yield Strength Minimum Ultimate Tensile Strength	110 140 125	ksi ksi

CONNECTION PROPERTIES •

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

JOINT PERFORMANCES

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

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



Scan the QR code to contact us







Connection Data Sheet

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

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

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

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

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

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

FPITOMY - Coupling Win Yield Strength is 110ks and Coupling Max Yield is 125ks

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

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

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

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

All information is provided by VAM USA or its affiliates at user's sole risk, without liability for loss, damage or injury resulting from the use thereof, and on an ""AS IS"" basis without warranty or representation of any kind, whether express or implied, including without limitation any warranty of merchantability, fitness for purpose or completeness. This document and its contents are subject to change without notice. In no event shall VAM USA or its affiliates be responsible for any indirect, special, incidental, punitive, exemplary or consequential loss or damage (including without limitation, loss of use, loss of bargain, loss of revenue, profit or anticipated profit) however caused or arising, and whether such losses or damages were foreseeable or VAM USA or its affiliates was advised of the possibility of such damages.

03/04/2024 08:36:50 PM







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

DWC Connection Data Sheet Notes:

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

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

All information is provided by VAM USA or its affiliates at user's sole risk, without liability for loss, damage or injury resulting from the use thereof; and on an "AS IS" basis without warranty or representation of any kind, whether express or impfed, including without limitation any warranty of merchantability, fitness for purpose or completeness. This document and its contents are subject to change without notice. In no event shall VAM USA or its affiliates be responsible for any indirect, special, incidental, punitive, exemplary or consequential loss or damage (including without limitation, loss of use, loss of bargain, loss of revenue, profit or anticipated profit) however caused or arising, and whether such losses or damages were foreseeable or VAM USA or its affiliates was advised of the possibility of such damages.

03/04/2024 08:36:50 PM



Page 53 of 56

Received by OCD: 3/3/2025 2:54:22 PM

	OXY APD C	HANGE SUNDRY LIST	FORM	AFMSS Blurb																
	DATE SUNDRY WORKSHEET CREATED WELL NAME_NUMBER API NUMBER ESTIMATED SPUD DATE	NUGGET 6_31 FED 30-015-56039 3/15/2025	1/28/2025 DERAL COM 14H								NGES AND ATTACHMENTS. GENERAL CHANGE DOCUMENTS ARE COMBINED INTO 1 PDF FILE AND WELL SPECIFIC DOCUMENTS ARE INDIVIDUAL ATTACHMENTS.									
	ITEM			۸۱	PD BASE LINE (For	Regulatory	o Complet	1					SHINDI	RV DI AN (Groups to	complete the lat	est nlan)				
	TI CIVI	Date APD/BASE LI	NE APPROVED:	Al	D DASE LINE (I OI	Negulator y	.o complet	- 1			SUNDRY PLAN (Groups to complete the latest plan) DATE Sundry Worksheet: 1/28/2025									
	NAME	NUGGET 6 31 FED										, , , ,								
	NSL	NO NO									YES									
ing	SHL	SESE 520' FSL 116	64' FEL								SESE 520' FSL 1074' FEL									
uue	PAD	SNDDNS_24S31E_	6 6																	
E S	BHL	NENE 20' FNL 330									NWNE 20' FNL 1475' FEL									
face	HSU SIZE, ACRES	640																		
Suri	POOL	COTTON DRAW; B	ONESPRING																	
o,	TVD	9,350									9,116									
	TARGET FORMATION	BONESPRING																		
					APD	BASE LINE								SUNDR	RY PLAN					
	RA	Section	Hole Size (in.)	MD	TVD		Csg WT			Conn.	Section	Hole Size (in.)	MD	TVD	Csg OD (in)	Csg WT (ppf)			Conn.	
	90	Surface	14.75	897	897	10.75	45.5	J-55		ВТС	Surface	14.7		892	10.75		J-55		BTC	
	A R	Int	9.875	8711	8559	7.625	26.4	L-80 HC		ВТС	Int	9.87	8449	8343	7.625	26.4	L-80 HC		ВТС	
	N S	Int2									Int2									
	. ASI	Prod	6.75	20144	9350	5.5	20	P-110		WEDGE 461	Prod	6.7	19868	9149	5.5	20	P-110		DWC/C-HT-IS	
	<u> </u>	Liner				DAGE 11315					Liner			ou un p						
		Cartina (Chara	Cl	les des		BASE LINE	Jr	Toc	Internation	Description	Continue (Channe	St	Carles		Y PLAN	IF	ITOC	Dia	In a suite dia su	
	¥	Section/Stage	Slurry SURFACE -TAIL		Yield (ft^3/ft)	Density (I		тос	Placement	Description CLASS C+ACCEL.	Section/Stage Surf	SURFACE -TAIL	Sacks	Yield (ft^3/ft)	Density (lb/gal)				Description	
	A DOGR	Suri In+/1	INTERMEDIATE 1S -TAIL	750 273	1.33 1.65	14.8 13.2	100% 5%	6,711	CIRCULATE CIRCULATE	CLASS C+ACCEL. CLASS H+ACCEL., DISPER., SALT	Suri	INTERMEDIATE 1S -TAIL	740	1.33	14.8 13.2		1		CLASS C+ACCEL. CLASS C+RET., DISPER.	
B C	No.	Int/1 Int/2	INTERMEDIATE 13 - TAIL INTERMEDIATE 2S - TAIL BH	1035	1.71		25%	0,711	BRADENHEAD		Int	INTERMEDIATE 2S - TAIL BH	1031	1.71	13.2	25%	-,		CLASS C+ACCEL.	
- €	<u> </u>	Int2	INTERIVIEDIATE 23 - TAIL BIT	1033	1./1	13.2	23/0	0	BRADEINITEAD	CLASS CFACCEL.	Int2	INTERIVIEDIATE 23 - TAIL BH	1051	1.71	15.5	23/0		BRADENHEAD	CLASS CHACCEL.	
Δ	<u> </u>	Int2					1				Int2									
	CE	Prod	PRODUCTION -TAIL	676	1.84	13.3	25%	8,211	CIRCULATE	CLASS C+RET.	Prod	PRODUCTION -TAIL	675	1.84	13.3	25%	7,949	CIRCULATE	CLASS C+RET	
		1100	TRODUCTION TAIL	1 070		BASE LINE	23/0	0,211	CINCOBATE	CD 133 CTRET.	1100	TRODUCTION TAIL	0,3		RY PLAN	2570	7,545	CINCOLATE	CD 133 CTRET.	
		BOP Break Tesing	Variance	Тү	72						BOP Break Tesing Variance	e								
	ES	5M Annular BOP \									5M Annular BOP Variance									
	y Z	Bradenhead CBL V		Y							Bradenhead CBL Variance									
	R A	Offline Cementing	y Variance	Y							Offline Cementing Variance	ce								
	 		ar Clearance Variance	Y							Production Annular Clear									
		Flexible Choke Lin	e Variance								Flexible Choke Line Varian	nce								
		(Pilot Hole, Logs e	tc.)								(Pilot Hole, Logs etc.)									
				-																

Note- Only fill out what item is changing. The other cells can be left blank.

VERSION DATE 8/30/2024

	Hole Size						
Section	(in.)	MD (ft)	TVD (ft)	Csg OD (in)	Csg WT (ppf)	Grade	Conn.
Surface							
Int							
Int2							
Prod							
Liner							

Section	Stage	Slurry	Sacks	Yield (ft^3/ft)	Density (lb/gal)	Excess	тос	Placement
Surf								
Int								
Int								
Int2								
Int2								
Prod								

Description					

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

General Information Phone: (505) 629-6116

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

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

CONDITIONS

Action 438438

CONDITIONS

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	438438
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Any previous COA's not addressed within the updated COA's still apply.	3/13/2025