

Well Name: IRIDIUM MDP1 28-21 FEDERAL COM	Well Location: T23S / R31E / SEC 28 / SWSE / 32.2700275 / -103.7806352	County or Parish/State: EDDY / NM
Well Number: 74H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM40659	Unit or CA Name:	Unit or CA Number: NMNM138937
US Well Number: 3001556055	Operator: OXY USA INCORPORATED	

Notice of Intent

Sundry ID: 2836715

Type of Submission: Notice of Intent	Type of Action: APD Change
Date Sundry Submitted: 02/13/2025	Time Sundry Submitted: 01:47
Date proposed operation will begin: 05/01/2025	

**Procedure Description:** OXY USA Inc. respectfully requests approval to amend the subject well AAPD to change the SHL, BHL, and amend the drilling plan. SHL updated from SWSE 672' FSL & 1987' FEL to SWSE 670' FSL & 1657' FEL. BHL updated from NENE 20' FNL & 600' FEL to NENE 20' FNL & 330' FEL. Attached is an updated well plat, revised drill plan, and updated directional for reference. There is no additional surface disturbance included in this sundry.

NOI Attachments

Procedure Description

- IRIDIUMMDP128\_21FEDCOM74H\_APDCHGSUNDRYWORKSHEET\_20250213134629.pdf
- IRIDIUMMDP128\_21FEDCOM74H\_C102\_20250213134412.pdf
- IRIDIUMMDP128\_21FEDCOM74H\_VAM\_SPRINT\_SF\_5.5in\_20ppf\_P110RY\_20250213070500.pdf
- IRIDIUMMDP128\_21FEDCOM74H\_ExistingRoads\_20250213070450.pdf
- IRIDIUMMDP128\_21FEDCOM74H\_DrillPlan\_20250213070434.pdf
- IridiumMDP128\_21FedCom74H\_DirectPlan\_20250213070420.pdf
- IRIDIUMMDP128\_21FEDCOM74H\_API\_BTC\_SC\_10.750in\_45.50ppf\_L80IC\_20250213070352.pdf
- IRIDIUMMDP128\_21FEDCOM74H\_2024\_KPLA\_Addendum\_WellboreSchematics\_20250213070047.pdf

Received by OCD: 3/27/2025 7:28:17 AM

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Conditions of Approval

Additional

IRIDIUM\_MDP1\_28\_21\_FEDERAL\_COM\_74H\_\_COA\_20250325163921.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: FEB 13, 2025 07:04 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

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: 03/26/2025
Signature: Chris Walls	

Form 3160-5  
(June 2019)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

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

1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No.
2. Name of Operator		6. If Indian, Allottee or Tribe Name
3a. Address	3b. Phone No. (include area code)	7. If Unit of CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)		8. Well Name and No.
		9. API Well No.
		10. Field and Pool or Exploratory Area
		11. Country or Parish, State

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

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

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

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

THE SPACE FOR FEDERAL OR STATE OFFICE USE

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

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

(Instructions on page 2)

## GENERAL INSTRUCTIONS

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

## SPECIFIC INSTRUCTIONS

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

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

## NOTICES

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

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

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

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

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

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

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

Response to this request is mandatory.

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

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



## Additional Information

### Location of Well

0. SHL: SWSE / 672 FSL / 1987 FEL / TWSP: 23S / RANGE: 31E / SECTION: 28 / LAT: 32.2700275 / LONG: -103.7806352 ( TVD: 0 feet, MD: 0 feet )

PPP: SESE / 0 FSL / 660 FEL / TWSP: 23S / RANGE: 31E / SECTION: 21 / LAT: 32.2827002 / LONG: -103.7763491 ( TVD: 10690 feet, MD: 16495 feet )

PPP: SESE / 100 FSL / 660 FEL / TWSP: 23S / RANGE: 31E / SECTION: 28 / LAT: 32.268457 / LONG: -103.776342 ( TVD: 10714 feet, MD: 11313 feet )

BHL: NENE / 20 FNL / 660 FEL / TWSP: 23S / RANGE: 31E / SECTION: 21 / LAT: 32.2971664 / LONG: -103.7763564 ( TVD: 10664 feet, MD: 21759 feet )

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b> OXY USA INC.
<b>WELL NAME &amp; NO.:</b> IRIDIUM MDP1 28 21 FEDERAL COM 74H
<b>LOCATION:</b> Sec28, T23S, R31E
<b>COUNTY:</b> <span style="border: 1px solid black; padding: 2px;">Eddy County, New Mexico</span> ▼

**SUNDRY COA. ALL PREVIOUS COAs STILL APPLY**

COA

H <sub>2</sub> S	<input type="radio"/> No <span style="float: right;"><input checked="" type="radio"/> Yes</span>			
<b>Potash / WIPP</b>	<input type="radio"/> None	<input type="radio"/> Secretary	<input checked="" type="radio"/> R-111-Q	<input checked="" type="checkbox"/> Open Annulus 4-String Design: Open 1st Int x 2nd Annulus (ICP 2 below Relief Zone) <input type="checkbox"/> WIPP
<b>Cave / Karst</b>	<input checked="" type="radio"/> Low	<input type="radio"/> Medium	<input type="radio"/> High	<input type="radio"/> Critical
<b>Wellhead</b>	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both	<input type="radio"/> Diverter
<b>Cementing</b>	<input checked="" type="checkbox"/> Primary Squeeze	<input type="checkbox"/> Cont. Squeeze	<input checked="" type="checkbox"/> EchoMeter	<input type="checkbox"/> DV Tool
<b>Special Req</b>	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit
<b>Waste Prev.</b>	<input type="radio"/> Self-Certification	<input type="radio"/> Waste Min. Plan	<input checked="" type="radio"/> APD Submitted prior to 06/10/2024	
<b>Additional Language</b>	<input checked="" type="checkbox"/> Flex Hose	<input checked="" type="checkbox"/> Casing Clearance	<input type="checkbox"/> Pilot Hole	<input checked="" type="checkbox"/> Break Testing
	<input checked="" type="checkbox"/> Four-String	<input checked="" type="checkbox"/> Offline Cementing	<input type="checkbox"/> Fluid-Filled	

### A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan shall be activated AT SPUD. As a result, the Hydrogen Sulfide area must meet all requirements from 43 CFR 3176, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

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

### B. CASING

*Set points in COA reflects requirements from BLM Geology. Please review.*

1. The **13-3/8** inch surface casing shall be set at approximately **565** feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface. *BLM Geology: BLM proposes to set the surface casing at 565' in the Rustler fm. managing BLM identified groundwater zones and karst surface to groundwater transport structures.*
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of

- the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
- b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or **500 pounds compressive strength**, whichever is greater. (This is to include the lead cement)
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The **10-3/4** inch intermediate salt protection casing shall be set at approximately **4167** feet **TVD**. *For R111Q, please set salt protection string prior to entering hydrocarbon bearing zone( Delaware.).* The minimum required fill of cement behind the **10-3/4** inch intermediate casing is:

**Option 1 (Single Stage):**

- Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, Capitan Reef, or potash.**
3. The **7-5/8** inch second intermediate casing shall be set at approximately **11,222** feet. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:

**Option 1 (Primary + Post Frac Bradenhead):**

- Cement should tie-back **500 feet** into the previous casing but not higher than USGS Marker Bed No. 126. **Operator must verify top of cement per R-111-Q requirements.** Submit results to the BLM. If cement does not circulate, contact the appropriate BLM office. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, Capitan Reef, or potash.**
- ❖ **A monitored open annulus will be incorporated during completion by leaving the Intermediate Casing 1 x Intermediate Casing 2 annulus un-cemented and monitored inside the Intermediate String.** Operator must follow monitoring requirements listed within R-111-Q. Tieback requirements shall be met within **180 days**.

Operator has proposed to pump down **intermediate 1 x intermediate 2** annulus post completion. **Operator must run Echo-meter to verify Cement Slurry/Fluid top in the annulus OR operator shall run a CBL from TD of the intermediate 2 casing to surface after the second stage BH to verify TOC.** Submit results to the BLM. No displacement fluid/wash out shall be utilized at the top of the cement slurry during second stage bradenhead when running Echo-meter if cement is required to surface. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

Operator has proposed an open annulus completion in R-111-Q. Operator shall provide a method of verification pre-completion top of cement. **Submit results to the BLM. Pressure monitoring device and Pressure Safety Valves must be installed at surface on both the intermediate annulus and the production annulus for the life of the well.**

**In the event of a casing failure during completion, the operator must contact the BLM at (575-706-2779) and (575-361-2822 Eddy County).**

4. The 5-1/2 inch production casing shall be set at approximately **21,493** feet. The minimum required fill of cement behind the 5-1/2 inch production casing is:

**Option 1 (Single Stage):**

- Cement should tie-back **500 feet** into the previous casing but not higher than USGS Marker Bed No. 126. **Operator must verify top of cement per R-111-Q requirements.** Submit results to the BLM. If cement does not circulate, contact the appropriate BLM office. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, Capitan Reef, or potash.**

## 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).
1. Operator has proposed a multi-bowl wellhead assembly. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M) psi** and intermediate casing shoe shall be **10,000 (10M) psi**. **Variance is approved to use a 5000 (5M) Annular which shall be tested to 3500 psi.**
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
  - e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.

## D. SPECIAL REQUIREMENT (S)

### Communitization Agreement

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

### BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for intervals utilizing a 5M BOPE or less. **(Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP.)**
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer **(575-706-2779)** prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per **43 CFR 3172**.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

### Offline Cementing

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

### Casing Clearance

Overlap clearance OK.

## 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](mailto:BLM_NM_CFO_DrillingNotifications@BLM.GOV); (575) 361-2822

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

### A. CASING

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



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

## **B. PRESSURE CONTROL**

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR 3172**.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's

requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - ii. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - iii. Manufacturer representative shall install the test plug for the initial BOP test.
  - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
  - v. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - i. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
  - ii. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve

open. (only applies to single stage cement jobs, prior to the cement setting up.)

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

### **C. DRILLING MUD**

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

### **D. WASTE MATERIAL AND FLUIDS**

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

disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

**KPI -7/15/2024**

OXY APD CHANGE SUNDRY LIST FORM

AFMSS Blurb

DATE SUNDRY WORKSHEET CREATED	2/11/2025
WELL NAME, NUMBER	Iridium MDP1 28-21 Federal Com 74H
API NUMBER	30-015-56055
ESTIMATED SPUD DATE	5/1/2025

PLEASE SEE ATTACHED OXY APD CHANGE SUNDRY LIST THAT HIGHLIGHTS CHANGES AND ATTACHMENTS. GENERAL CHANGE DOCUMENTS ARE COMBINED INTO 1 PDF FILE AND WELL SPECIFIC DOCUMENTS ARE INDIVIDUAL ATTACHMENTS.

ITEM		APD BASE LINE (For Regulatory to Complete)										SUNDRY PLAN (Groups to complete the latest plan)										
Surface Planning	NAME	Date APD/BASE LINE APPROVED: Iridium MDP1 28-21 Federal Com 74H										DATE Sundry Worksheet : Iridium MDP1 28-21 Federal Com 74H										
	NSL	No										No										
	SHL	SWSE 672' FSL & 1987' FEL										SWSE 670' FSL & 1657' FEL										
	PAD	SNDDNS T23SR31E 2801										SNDDNS T23SR31E 2801										
	BHL	NENE 20' FNL & 660' FEL										NENE 20' FNL & 330' FEL										
	HSU SIZE, ACRES	640										320										
	POOL	Ingle Wells; Bonespring										Ingle Wells; Bonespring										
TVD	10,665										10,650											
TARGET FORMATION	Bonespring										Bonespring											
CASING PROGRAM	APD BASE LINE										SUNDRY PLAN											
	Section	Hole Size (in.)	MD	TVD	Csg OD	Csg WT	Grade	Conn.	Section	Hole Size (in.)	MD	TVD	Csg OD (in)	Csg WT (ppf)	Grade	Conn.						
	Surface	17.5	542	542	13.375	54.5	J-55	BTC	Surface	17.5	538	538	13.375	54.5	J-55	BTC						
	Int	12.25	4362	4362	9.625	40	L-80 HC	BTC	Int	12.25	4258	4258	10.75	45.5	L-80 HC	BTC-SC						
	Int2	8.75	10187	9937	7.625	26.4	L-80 HC	Wedge 425	Int2	9.875	11222	10650	7.625	26.4	L-80 HC	BTC						
	Prod	6.75	21759	10715	5.5	20	P-110	Wedge 461	Prod	6.75	21493	10660	5.5	20	P-110	Sprint-SF						
	Liner								Liner													
CEMENT PROGRAM	APD BASE LINE										SUNDRY PLAN											
	Section/Stage	Slurry	Sacks	Yield (ft³/ft)	Density (lb/gal)	Excess	TOC	Placement	Description	Section/Stage	Slurry	Sacks	Yield (ft³/ft)	Density (lb/gal)	Excess	TOC	Placement	Description				
	Surf	Surface-Tail	566	1.33	14.8	100%	0	Circulate	Class C+Accel.	Surf	Surface-Tail	562	1.33	14.8	100%	0	Circulate	Class C+Accel.				
	Int/1	Intermediate-Tail	141	1.33	14.8	20%	3,862	Circulate	Class C+Accel.	Int	Intermediate-Tail	85	1.33	14.8	20%	3,758	Circulate	Class C+Accel.				
	Int/2	Intermediate-Lead	1015	1.73	12.9	50%	0	Circulate	Class Pozz+Ret.	Int	Intermediate-Lead	599	1.73	12.9	50%	0	Circulate	Class Pozz+Ret.				
	Int2	Intermediate 15-Tail	215	1.68	13.2	5%	6,768	Circulate	Class C+Ret., Disper.	Int2	Intermediate 15-Tail	602	1.68	13.2	5%	6,740	Circulate	Class C+Ret., Disper.				
	Int2	Intermediate 25-Tail BH	208	1.71	13.3	25%	3,862	Bradenhead Post-Frac	Class C+Accel.	Int2	Intermediate 25-Tail BH	455	1.71	13.3	25%	3,758	Bradenhead Post-Frac	Class C+Accel.				
	Prod	Production-Tail	684	1.84	13.3	25%	9,687	Circulate	Class C+Ret.	Prod	Production-Tail	610	1.84	13.3	25%	10,722	Circulate	Class C+Ret.				
VARIANCES	APD BASE LINE										SUNDRY PLAN											
	BOP Break Testing Variance	Y										BOP Break Testing Variance	Y									
	SM Annular BOP Variance	Y										SM Annular BOP Variance	Y									
	Bradenhead CBL Variance	Y										Bradenhead CBL Variance	Y									
	Offline Cementing Variance	Y										Offline Cementing Variance	Y									
	Production Annular Clearance Variance	Y										Production Annular Clearance Variance	N									
	Flexible Choke Line Variance											Flexible Choke Line Variance										
	(Pilot Hole, Logs etc.)										(Pilot Hole, Logs etc.)											

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

VERSION DATE 8/20/2024

<b>C-102</b>  Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals, & Natural Resources Department <b>OIL CONSERVATION DIVISION</b>	Revised July 9, 2024 PAGE 1 OF 2
		Submittal Type: <input type="checkbox"/> Initial Submittal <input checked="" type="checkbox"/> Amended Report <input type="checkbox"/> As Drilled

## WELL LOCATION INFORMATION

API Number <b>30-015-56055</b>	Pool Code <b>33740</b>	Pool Name <b>INGLE WELLS; BONESPRING</b>
Property Code <b>321632</b>	Property Name <b>IRIDIUM MDP1 28_21 FED COM</b>	Well Number <b>74H</b>
OGRID No. <b>16696</b>	Operator Name <b>OXY USA INC.</b>	Ground Level Elevation <b>3386'</b>
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal

## Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
O	28	23S	31E		670' FSL	1657' FEL	32.27002306	-103.77956791	EDDY

## Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
A	21	23S	31E		20' FNL	330' FEL	32.29716663	-103.77528837	EDDY

Dedicated Acres <b>320.00</b>	Infill or Defining Well <b>INFILL</b>	Defining Well API <b>30-015-45247</b>	Overlapping Spacing Unit (Y/N) <b>NO</b>	Consolidation Code
Order Numbers:			Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input type="checkbox"/> No	

## Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
A	33	23S	31E		300' FNL	330' FEL	32.26735767	-103.77527379	EDDY

## First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
P	28	23S	31E		100' FSL	330' FEL	32.26845718	-103.77527427	EDDY

## Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
A	21	23S	31E		100' FNL	330' FEL	32.29694672	-103.77528833	EDDY

Unitized Area or Area of Uniform Interest	Spacing Unit Type: <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation <b>3386'</b>
---	---	--

## OPERATOR CERTIFICATIONS

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

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

Sara Guthrie                      2/12/2025  
Signature                              Date

Sara Guthrie  
Printed Name

sara\_guthrie@oxy.com  
Email Address

## SURVEYOR CERTIFICATIONS

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



Signature and Seal of Professional Surveyor

Certificate Number <b>21653</b>	Date of Survey <b>JANUARY 17, 2025</b>
------------------------------------	---



## ACREAGE DEDICATION PLATS

## IRIDIUM MDP1 28\_21 FED COM 74H

PAGE 2 OF 2

**BHL (NAD83)**  
X:713765.70' / Y:472290.47'  
LAT:32.29716663 / LON:-103.77528837

**BHL (NAD27)**  
X:672582.44' / Y:472230.90'  
LAT:32.29704371 / LON:-103.77480196

**LTP (NAD83)**  
X:713766.13' / Y:472210.47'  
LAT:32.29694672 / LON:-103.77528833

**LTP (NAD27)**  
X:672582.87' / Y:472150.90'  
LAT:32.29682380 / LON:-103.77480192

**PPP-2/PI-1 (NAD83)**  
X:713794.95' / Y:467027.55'  
LAT:32.28269977 / LON:-103.77528233

**PPP-2/PI-1 (NAD27)**  
X:672611.53' / Y:466968.12'  
LAT:32.28257677 / LON:-103.77479650

**FTP (NAD83)**  
X:713824.39' / Y:461846.23'  
LAT:32.26845718 / LON:-103.77527427

**FTP (NAD27)**  
X:672640.82' / Y:461786.93'  
LAT:32.26833409 / LON:-103.77478902

**PPP-1 (NAD83)**  
X:713824.95' / Y:461746.24'  
LAT:32.26818232 / LON:-103.77527414

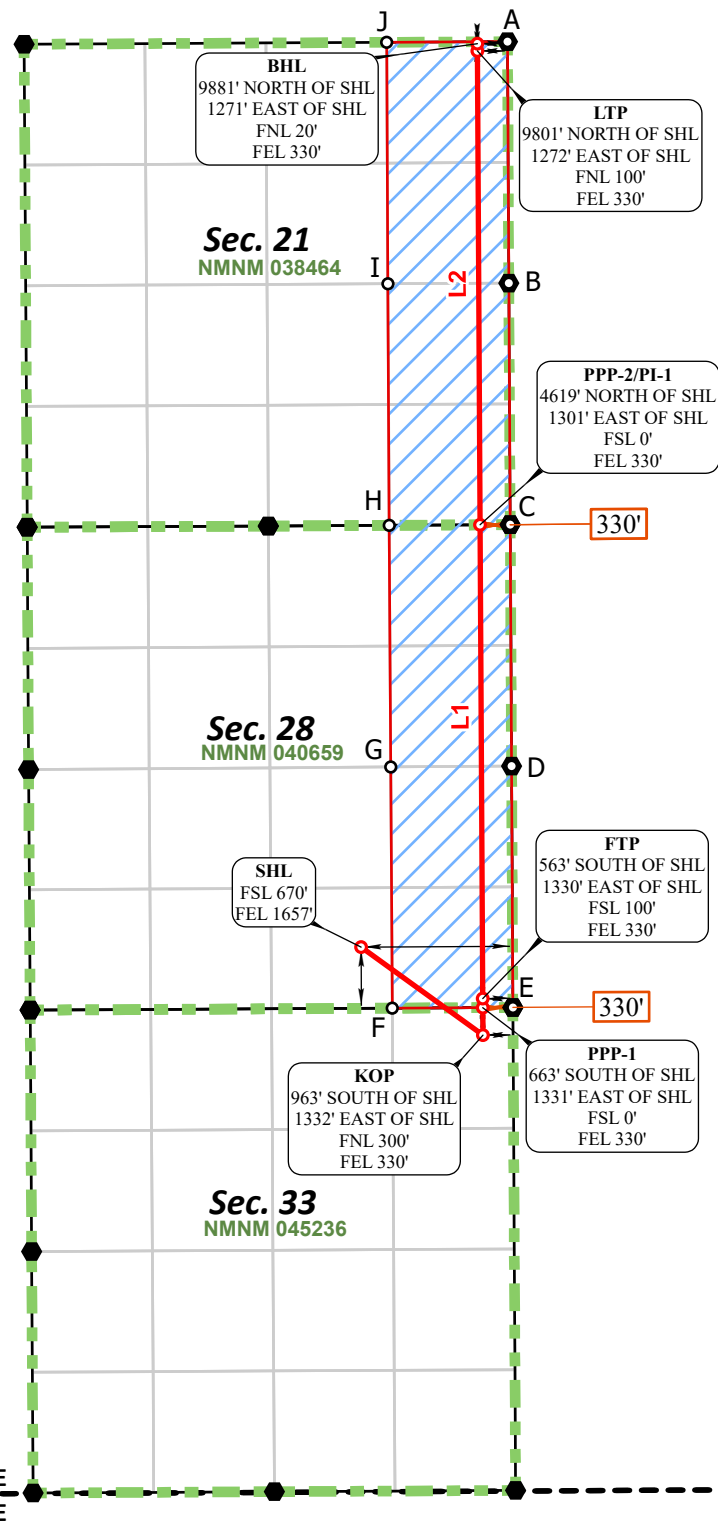
**PPP-1 (NAD27)**  
X:672641.38' / Y:461686.94'  
LAT:32.26805924 / LON:-103.77478890

**KOP (NAD83)**  
X:713826.62' / Y:461446.24'  
LAT:32.26735767 / LON:-103.77527379

**KOP (NAD27)**  
X:672643.04' / Y:461386.95'  
LAT:32.26723459 / LON:-103.77478857

**SHL (NAD83)**  
X:712494.34' / Y:462409.01'  
LAT:32.27002306 / LON:-103.77956791

**SHL (NAD27)**  
X:671310.79' / Y:462349.69'  
LAT:32.26990000 / LON:-103.77908248



CORNER COORDINATES NAD 83, SPCS NM EAST	CORNER COORDINATES NAD 27, SPCS NM EAST
A - X: 714095.58' / Y:472312.25'	A - X: 672912.32' / Y:472252.68'
B - X: 714109.89' / Y:469670.91'	B - X: 672926.55' / Y:469611.41'
C - X: 714124.95' / Y:467029.52'	C - X: 672941.53' / Y:466970.09'
D - X: 714140.29' / Y:464388.33'	D - X: 672956.79' / Y:464328.97'
E - X: 714154.94' / Y:461748.01'	E - X: 672971.37' / Y:461688.71'
F - X: 712834.81' / Y:461740.92'	F - X: 671651.24' / Y:461681.62'
G - X: 712818.72' / Y:464378.81'	G - X: 671635.23' / Y:464319.45'
H - X: 712802.26' / Y:467021.63'	H - X: 671618.84' / Y:466962.20'
I - X: 712787.85' / Y:469663.84'	I - X: 671604.52' / Y:469604.33'
J - X: 712773.83' / Y:472305.13'	J - X: 671590.57' / Y:472245.56'

\*FTP TO LTP LINE BEARINGS

LINE	BEARING
L1	N 00°19'32" W ~ 5181.40'
L2	N 00°19'07" W ~ 5183.00'

\*FTP TO LTP LEASE DISTANCES

TRACT	DISTANCE
NMNM 040659	5181.40'
NMNM 038464	5183.00'
TOTAL	10364.40'



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

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

JOB No. OXY\_0003\_IS\_14396  
REV 2 NDS 1/10/2025

Distances/areas relative to NAD 83 grid measurements. Combined Scale Factor: 0.99977581 and a Convergence Angle: 0.27195833°



CONNECTION DATA SHEET

OD: 5.500 in.

Grade: P110 RY

Weight: 20.00 lb/ft

Drift: 4.653 in. (API)

Wall Th.: 0.361 in.

VAM<sup>®</sup> SPRINT-SF



Semi-Flush

Field Torque Values

Make-up Torque (ft-lb)

20,000 MIN

22,500 OPTI

25,000 MAX

Torque with Sealability (ft-lb)

36,000 MTS

Locked Flank Torque (ft-lb)

4,500 MIN

15,750 MAX

(2) MTS: Maximum Torque with Sealability.

PIPE BODY PROPERTIES

Nominal OD	5.500	in.
Nominal ID	4.778	in.
Nominal Wall Thickness	0.361	in.
Minimum Wall Thickness	87.5	%
Nominal Weight (API)	20.00	lb/ft
Plain End Weight	19.83	lb/ft
Drift	4.653	in.
Grade Type	Controlled Yield	
Minimum Yield Strength	110	ksi
Maximum Yield Strength	125	ksi
Minimum Ultimate Tensile Strength	140	ksi
Pipe Body Yield Strength	641	klb
Internal Yield Pressure	12,640	psi
Collapse Pressure	11,110	psi


CONNECTION PROPERTIES

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

JOINT PERFORMANCES

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


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



BOOST YOUR EFFICIENCY, REDUCE COSTS  
AND ENSURE 100% WELL INTEGRITY WITH

VAM<sup>®</sup> FIELD SERVICE

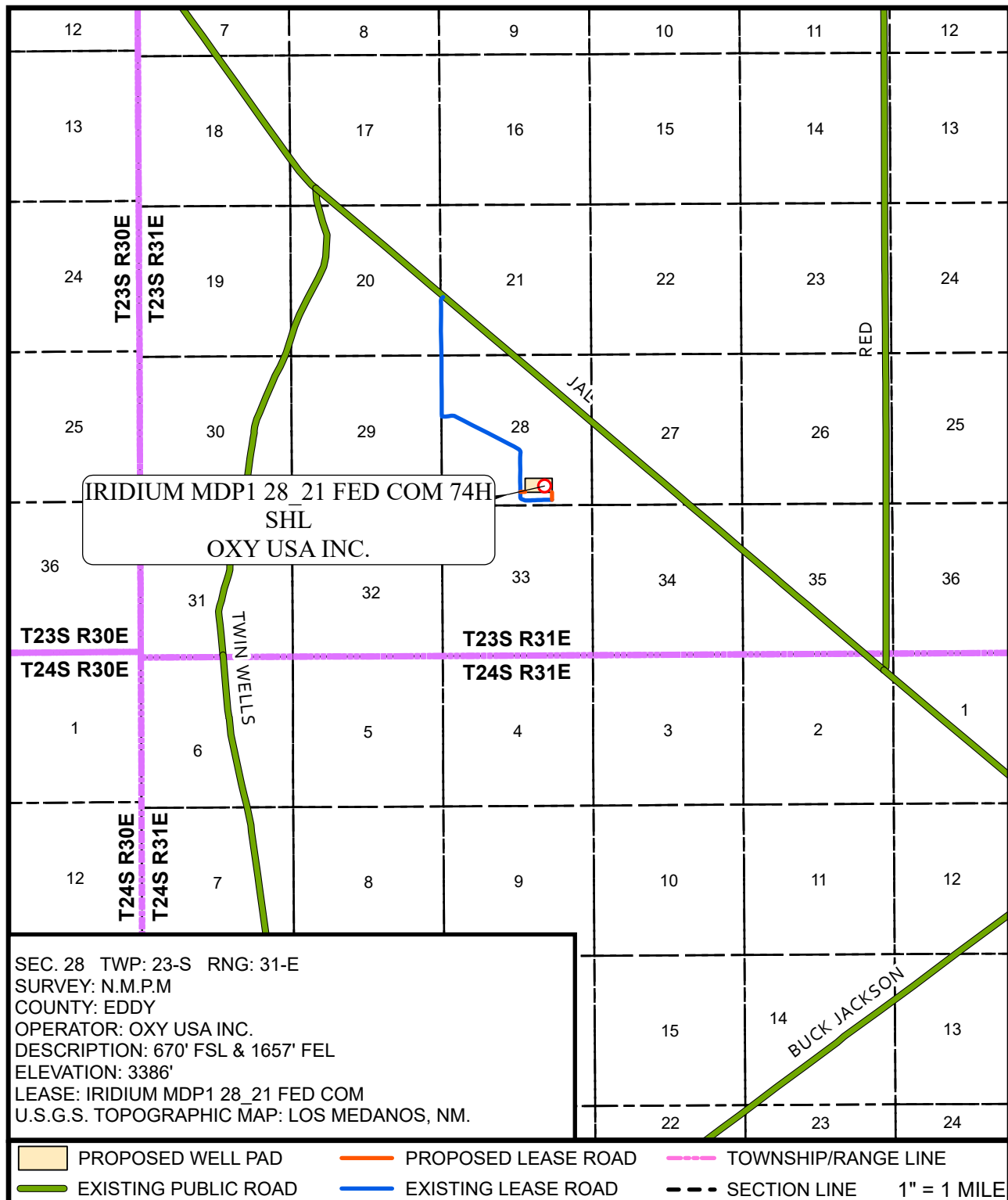
Scan the QR code  
to contact us



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Released to Imaging: 4/18/2025 7:37:39 AM

## VICINITY MAP



APPROXIMATELY 18.51 MILES EAST SOUTHEAST OF LOVING, NM.

FROM THE INTERSECTION OF U.S. HWY 285 AND STATE HWY 387 / W. CEDAR STREET IN LOVING, NEW MEXICO, HEAD NORTH ON U.S. HWY 285 FOR APPROXIMATELY 2.3 MILES TO STATE HWY 31 / POTASH MINES ROAD. HEAD EAST ON STATE HWY 31 / POTASH MINES ROAD FOR APPROXIMATELY 7.7 MILES TO STATE HWY 128 / JAL HWY ON EAST SIDE OF ROAD. HEAD EASTERLY ON STATE HWY 128 / JAL HWY FOR APPROXIMATELY 13.9 MILES TO AN EXISTING LEASE ROAD ON THE SOUTH SIDE OF THE HIGHWAY. HEAD SOUTH ON SAID LEASE ROAD FOR APPROXIMATELY 0.8 MILES TO AN EXISTING LEASE ROAD ON THE EAST SIDE OF ROAD. HEAD EAST ON SAID LEASE ROAD FOR APPROXIMATELY 0.9 MILES TO A PROPOSED CENTERLINE ACCESS ROAD SURVEY ON THE EAST SIDE OF ROAD. HEAD EAST ALONG SAID CENTERLINE ACCESS SURVEY FOR APPROXIMATELY 165 FEET TO THE SOUTHWEST SNDDNS\_T23SR31E\_2801 PAD ENTRANCE.



PREPARED BY:  
DELTA FIELD SERVICES, LLC  
510 TRENTON STREET,  
WEST MONROE, LA 71291  
318-323-6900 OFFICE  
JOB No. OXY\_0003\_IS\_14396





INDEX	WELL NAME	ELEVATION	FNL/FSL	FEL/FWL
1	STERLING SILVER MDP1 33_4 FED COM 21H	3373	736' FSL	1680' FWL
2	STERLING SILVER MDP1 33_4 FED COM 22H	3373	736' FSL	1710' FWL
3	STERLING SILVER MDP1 33_4 FED COM 23H	3374	735' FSL	1740' FWL
4	STERLING SILVER MDP1 33_4 FED COM 11H	3375	735' FSL	1800' FWL
5	STERLING SILVER MDP1 33_4 FED COM 12H	3374	735' FSL	1830' FWL
6	STERLING SILVER MDP1 33_4 FED COM 41H	3375	735' FSL	1890' FWL
7	STERLING SILVER MDP1 33_4 FED COM 42H	3375	734' FSL	1920' FWL
8	STERLING SILVER MDP1 33_4 FED COM 43H	3376	734' FSL	1950' FWL
9	IRIDIUM MDP1 28-21 FED COM 71H	3371	610' FSL	1739' FWL
10	IRIDIUM MDP1 28-21 FED COM 72H	3373	610' FSL	1769' FWL

INDEX	WELL NAME	ELEVATION	FNL/FSL	FEL/FWL
11	IRIDIUM MDP1 28_21 FED COM 22H	3374	610' FSL	1829' FWL
12	IRIDIUM MDP1 28_21 FED COM 23H	3374	610' FSL	1859' FWL
13	IRIDIUM MDP1 28_21 FED COM 42H	3376	609' FSL	1919' FWL
14	IRIDIUM MDP1 28_21 FED COM 43H	3377	609' FSL	1949' FWL
15	STERLING SILVER MDP1 33-4 FED COM 73H	3382	45' FNL	1854' FWL
16	STERLING SILVER MDP1 33-4 FED COM 72H	3382	75' FNL	1854' FWL
17	STERLING SILVER MDP1 33-4 FED COM 71H	3380	105' FNL	1854' FWL
18	STERLING SILVER MDP1 33_4 FED COM 13H	3383	796' FSL	1836' FEL
19	STERLING SILVER MDP1 33_4 FED COM 14H	3383	796' FSL	1806' FEL
20	STERLING SILVER MDP1 33_4 FED COM 24H	3384	795' FSL	1746' FEL

INDEX	WELL NAME	ELEVATION	FNL/FSL	FEL/FWL
21	STERLING SILVER MDP1 33_4 FED COM 25H	3384	795' FSL	1716' FEL
22	STERLING SILVER MDP1 33_4 FED COM 26H	3384	795' FSL	1686' FEL
23	STERLING SILVER MDP1 33_4 FED COM 44H	3385	795' FSL	1626' FEL
24	STERLING SILVER MDP1 33_4 FED COM 45H	3385	794' FSL	1596' FEL
25	STERLING SILVER MDP1 33_4 FED COM 46H	3385	794' FSL	1566' FEL
26	IRIDIUM MDP1 28-21 FED COM 73H	3387	672' FSL	2017' FEL
27	IRIDIUM MDP1 28-21 FED COM 74H	3388	672' FSL	1987' FEL
28	IRIDIUM MDP1 28_21 FED COM 12H	3389	671' FSL	1927' FEL
29	IRIDIUM MDP1 28_21 FED COM 13H	3388	671' FSL	1897' FEL
30	IRIDIUM MDP1 28_21 FED COM 14H	3387	671' FSL	1867' FEL

INDEX	WELL NAME	ELEVATION	FNL/FSL	FEL/FWL
31	IRIDIUM MDP1 28_21 FED COM 24H	3386	671' FSL	1807' FEL
32	IRIDIUM MDP1 28_21 FED COM 25H	3386	670' FSL	1777' FEL
33	IRIDIUM MDP1 28_21 FED COM 26H	3386	670' FSL	1747' FEL
34	IRIDIUM MDP1 28_21 FED COM 44H	3387	670' FSL	1687' FEL
35	IRIDIUM MDP1 28_21 FED COM 45H	3387	670' FSL	1657' FEL
36	IRIDIUM MDP1 28_21 FED COM 46H	3388	669' FSL	1597' FEL
37	IRIDIUM MDP1 28_21 FED COM 47H	3389	669' FSL	1567' FEL



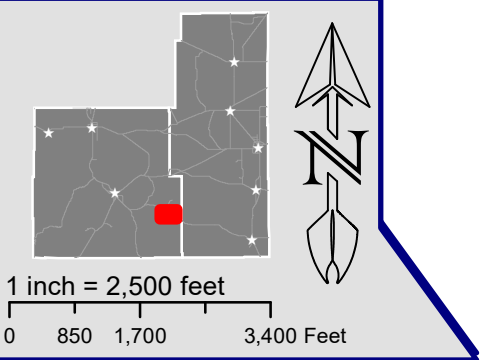
- WELLS
- PROPOSED ROAD
- NM NAMED ROADS
- EXISTING ROADS
- SNDDNS T23S-R31E 2801 WELL PAD
- SNDDNS T23S-R31E 2803 WELL PAD
- SNDDNS T23S-R31E 3304 WELL PAD
- SECTIONS

IRIDIUM 28-21/STERLING SILVER 33-04

OVERALL IMAGERY MAP Draft Date: 11/29/2022 REV: 0

Section: 28 TWN-RNG:T23S - R31E COUNTY: EDDY

TOTAL 30' WIDE PROPOSED LEASE ROAD EASEMENT:  
2704.55 FEET (163.91 RODS)





# Oxy USA Inc. - IRIDIUM MDP1 28\_21 FED COM 74H

## Drill Plan

### 1. Geologic Formations

TVD of Target (ft):	10650	Pilot Hole Depth (ft):	
Total Measured Depth (ft):	21493	Deepest Expected Fresh Water (ft):	478

#### Delaware Basin

Formation	MD-RKB (ft)	TVD-RKB (ft)	Expected Fluids
Rustler	478	478	
Salado	823	823	Salt
Castile	2750	2750	Salt
Delaware	4258	4258	Oil/Gas/Brine
Bell Canyon	4282	4282	Oil/Gas/Brine
Cherry Canyon	5181	5179	Oil/Gas/Brine
Brushy Canyon	6490	6449	Losses
Bone Spring	8196	8071	Oil/Gas
Bone Spring 1st	9316	9136	Oil/Gas
Bone Spring 2nd	9974	9762	Oil/Gas
Bone Spring 3rd			Oil/Gas
Wolfcamp			Oil/Gas
Penn			Oil/Gas
Strawn			Oil/Gas

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

### 2. Casing Program

Section	Hole Size (in)	MD		TVD		Csg. OD (in)	Csg Wt. (ppf)	Grade	Conn.
		From (ft)	To (ft)	From (ft)	To (ft)				
Surface	17.5	0	538	0	538	13.375	54.5	J-55	BTC
Salt	12.25	0	4258	0	4258	10.75	45.5	L-80 HC	BTC-SC
Intermediate	9.875	0	11222	0	10650	7.625	26.4	L-80 HC	BTC
Production	6.75	0	21493	0	10650	5.5	20	P-110	Sprint-SF

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

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

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



**3. Cementing Program**

Section	Stage	Slurry:	Sacks	Yield (ft <sup>3</sup> /ft)	Density (lb/gal)	Excess:	TOC	Placement	Description
Surface	1	Surface - Tail	562	1.33	14.8	100%	-	Circulate	Class C+Accel.
Int.1	1	Intermediate - Tail	85	1.33	14.8	20%	3,758	Circulate	Class C+Accel.
Int.1	1	Intermediate - Lead	599	1.73	12.9	50%	-	Circulate	Class Pozz+Ret.
Int. 2	1	Intermediate 1S - Tail	602	1.68	13.2	5%	6,740	Circulate	Class C+Ret., Disper.
Int. 2	2	Intermediate 2S - Tail BH	455	1.71	13.3	25%	3,758	Bradenhead Post-Frac	Class C+Accel.
Prod.	1	Production - Tail	610	1.84	13.3	25%	10,722	Circulate	Class C+Ret.

**Offline Cementing Request**

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

**Bradenhead CBL Request**

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

**4. Pressure Control Equipment**

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	✓	Tested to:	TVD Depth (ft) per Section:
12.25" Hole	13-5/8"	5M	Annular	✓	70% of working pressure	4258
		5M	Blind Ram	✓	250 psi / 5000 psi	
			Pipe Ram			
			Double Ram	✓		
			Other*			
9.875" Hole	13-5/8"	5M	Annular	✓	70% of working pressure	10650
		5M	Blind Ram	✓	250 psi / 5000 psi	
			Pipe Ram			
			Double Ram	✓		
			Other*			
6.75" Hole	13-5/8"	5M	Annular	✓	100% of working pressure	10650
		10M	Blind Ram	✓	250 psi / 10000 psi	
			Pipe Ram			
			Double Ram	✓		
			Other*			

\*Specify if additional ram is utilized

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

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

**5M Annular BOP Request**

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

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

### BOP Break Testing Request

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

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

**5. Mud Program**

Section	Depth		Depth - TVD		Type	Weight (ppg)	Viscosity	Water Loss
	From (ft)	To (ft)	From (ft)	To (ft)				
Surface	0	538	0	538	Water-Based Mud	8.6 - 8.8	40-60	N/C
Intermediate 1	538	4258	538	4258	Saturated Brine-Based or Oil-Based Mud	8.0 - 10.0	35-45	N/C
Intermediate 2	4258	11222	4258	10650	Water-Based or Oil-Based Mud	8.0 - 10.0	38-50	N/C
Production	11222	21493	10650	10650	Water-Based or Oil-Based Mud	9.5 - 12.5	38-50	N/C

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

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

**6. Logging and Testing Procedures**

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

**7. Drilling Conditions**

Condition	Specify what type and where?
BH Pressure at deepest TVD	6923 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	166°F

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

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

N	H2S is present
Y	H2S Plan attached

**8. Other facets of operation**

	Yes/No
Will the well be drilled with a walking/skidding operation? If yes, describe. We plan to drill the 2 well pad in batch by section: all surface sections, intermediate sections and production sections. The wellhead will be secured with a night cap whenever the rig is not over the well.	Yes
Will more than one drilling rig be used for drilling operations? If yes, describe. Oxy requests the option to contract a Surface Rig to drill, set surface casing, and cement for this well. If the timing between rigs is such that Oxy would not be able to preset surface, the Primary Rig will MIRU and drill the well in its entirety per the APD. Please see the attached document for information on the spudder rig.	Yes

**Total Estimated Cuttings Volume:** 1817 bbls

# **OXY**

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

**Iridium MDP1 28\_21 Fed Com**

**Iridium MDP1 28\_21 Fed Com 74H**

**Wellbore #1**

**Plan: Permitting Plan**

## **Standard Planning Report**

**31 January, 2025**



OXY  
Planning Report

Database:	HOPSPP				Local Co-ordinate Reference:	Well Iridium MDP1 28_21 Fed Com 74H			
Company:	ENGINEERING DESIGNS				TVD Reference:	RKB=25' @ 3411.00ft			
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)				MD Reference:	RKB=25' @ 3411.00ft			
Site:	Iridium MDP1 28_21 Fed Com				North Reference:	Grid			
Well:	Iridium MDP1 28_21 Fed Com 74H				Survey Calculation Method:	Minimum Curvature			
Wellbore:	Wellbore #1								
Design:	Permitting Plan								

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

Site	Iridium MDP1 28_21 Fed Com									
Site Position:			Northing:	462,153.25 usft	Latitude:	32.269362				
From:	Map		Easting:	709,519.68 usft	Longitude:	-103.789196				
Position Uncertainty:	0.89 ft		Slot Radius:	13.200 in						

Well	Iridium MDP1 28_21 Fed Com 74H									
Well Position	+N/-S	0.00 ft	Northing:	462,409.01 usf	Latitude:	32.270023				
	+E/-W	0.00 ft	Easting:	712,494.34 usf	Longitude:	-103.779568				
Position Uncertainty		2.00 ft	Wellhead Elevation:	ft	Ground Level:	3,386.00 ft				
Grid Convergence:		0.30 °								

Wellbore	Wellbore #1									
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)					
	HDGM_FILE	2/6/2023	6.43	59.85	47,570.50000000					

Design	Permitting Plan									
Audit Notes:										
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00						
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)						
	0.00	0.00	0.00	7.33						

Plan Survey Tool Program	Date	1/31/2025								
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks						
1	0.00	21,493.02	Permitting Plan (Wellbore #1)	B001Mc_MWD+HRGM_R5						
				MWD+HRGM						

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,445.00	0.00	0.00	4,445.00	0.00	0.00	0.00	0.00	0.00	0.00	
6,244.72	18.00	129.23	6,215.27	-177.30	217.15	1.00	1.00	0.00	129.23	
10,208.23	18.00	129.23	9,984.85	-951.80	1,165.74	0.00	0.00	0.00	0.00	
11,221.71	90.00	359.67	10,650.00	-389.11	1,329.14	10.00	7.10	-12.78	-128.15	
16,229.71	90.00	359.67	10,650.00	4,618.81	1,300.69	0.00	0.00	0.00	0.00	PI-1 (Iridium MDP1
16,230.18	90.00	359.68	10,650.00	4,619.29	1,300.68	1.50	0.00	1.50	90.00	
21,493.02	90.00	359.68	10,650.00	9,882.05	1,271.44	0.00	0.00	0.00	0.00	PBHL (Iridium

OXY  
Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well Iridium MDP1 28_21 Fed Com 74H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=25' @ 3411.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=25' @ 3411.00ft
Site:	Iridium MDP1 28_21 Fed Com	North Reference:	Grid
Well:	Iridium MDP1 28_21 Fed Com 74H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,445.00	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	129.23	4,500.00	-0.17	0.20	-0.14	1.00	1.00	0.00
4,600.00	1.55	129.23	4,599.98	-1.33	1.62	-1.11	1.00	1.00	0.00
4,700.00	2.55	129.23	4,699.92	-3.59	4.39	-3.00	1.00	1.00	0.00
4,800.00	3.55	129.23	4,799.77	-6.95	8.52	-5.81	1.00	1.00	0.00
4,900.00	4.55	129.23	4,899.52	-11.42	13.99	-9.54	1.00	1.00	0.00
5,000.00	5.55	129.23	4,999.13	-16.99	20.81	-14.19	1.00	1.00	0.00
5,100.00	6.55	129.23	5,098.57	-23.65	28.97	-19.76	1.00	1.00	0.00
5,200.00	7.55	129.23	5,197.82	-31.42	38.48	-26.25	1.00	1.00	0.00

# OXY

## Planning Report

<b>Database:</b>	HOPSPP	<b>Local Co-ordinate Reference:</b>	Well Iridium MDP1 28_21 Fed Com 74H
<b>Company:</b>	ENGINEERING DESIGNS	<b>TVD Reference:</b>	RKB=25' @ 3411.00ft
<b>Project:</b>	PRD NM DIRECTIONAL PLANS (NAD 1983)	<b>MD Reference:</b>	RKB=25' @ 3411.00ft
<b>Site:</b>	Iridium MDP1 28_21 Fed Com	<b>North Reference:</b>	Grid
<b>Well:</b>	Iridium MDP1 28_21 Fed Com 74H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Permitting Plan		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,300.00	8.55	129.23	5,296.83	-40.27	49.32	-33.65	1.00	1.00	0.00
5,400.00	9.55	129.23	5,395.58	-50.22	61.51	-41.96	1.00	1.00	0.00
5,500.00	10.55	129.23	5,494.05	-61.26	75.02	-51.18	1.00	1.00	0.00
5,600.00	11.55	129.23	5,592.19	-73.38	89.87	-61.31	1.00	1.00	0.00
5,700.00	12.55	129.23	5,689.99	-86.58	106.04	-72.34	1.00	1.00	0.00
5,800.00	13.55	129.23	5,787.40	-100.86	123.53	-84.27	1.00	1.00	0.00
5,900.00	14.55	129.23	5,884.41	-116.22	142.34	-97.10	1.00	1.00	0.00
6,000.00	15.55	129.23	5,980.98	-132.64	162.45	-110.82	1.00	1.00	0.00
6,100.00	16.55	129.23	6,077.08	-150.12	183.87	-125.43	1.00	1.00	0.00
6,200.00	17.55	129.23	6,172.69	-168.67	206.58	-140.93	1.00	1.00	0.00
6,244.72	18.00	129.23	6,215.27	-177.30	217.15	-148.14	1.00	1.00	0.00
Hold 18° Tangent									
6,300.00	18.00	129.23	6,267.85	-188.10	230.38	-157.17	0.00	0.00	0.00
6,400.00	18.00	129.23	6,362.95	-207.64	254.31	-173.49	0.00	0.00	0.00
6,500.00	18.00	129.23	6,458.06	-227.18	278.25	-189.82	0.00	0.00	0.00
6,600.00	18.00	129.23	6,553.17	-246.72	302.18	-206.15	0.00	0.00	0.00
6,700.00	18.00	129.23	6,648.27	-266.26	326.11	-222.47	0.00	0.00	0.00
6,800.00	18.00	129.23	6,743.38	-285.81	350.05	-238.80	0.00	0.00	0.00
6,900.00	18.00	129.23	6,838.49	-305.35	373.98	-255.13	0.00	0.00	0.00
7,000.00	18.00	129.23	6,933.60	-324.89	397.91	-271.45	0.00	0.00	0.00
7,100.00	18.00	129.23	7,028.70	-344.43	421.85	-287.78	0.00	0.00	0.00
7,200.00	18.00	129.23	7,123.81	-363.97	445.78	-304.11	0.00	0.00	0.00
7,300.00	18.00	129.23	7,218.92	-383.51	469.71	-320.43	0.00	0.00	0.00
7,400.00	18.00	129.23	7,314.02	-403.05	493.64	-336.76	0.00	0.00	0.00
7,500.00	18.00	129.23	7,409.13	-422.59	517.58	-353.09	0.00	0.00	0.00
7,600.00	18.00	129.23	7,504.24	-442.13	541.51	-369.42	0.00	0.00	0.00
7,700.00	18.00	129.23	7,599.35	-461.67	565.44	-385.74	0.00	0.00	0.00
7,800.00	18.00	129.23	7,694.45	-481.21	589.38	-402.07	0.00	0.00	0.00
7,900.00	18.00	129.23	7,789.56	-500.75	613.31	-418.40	0.00	0.00	0.00
8,000.00	18.00	129.23	7,884.67	-520.29	637.24	-434.72	0.00	0.00	0.00
8,100.00	18.00	129.23	7,979.77	-539.84	661.17	-451.05	0.00	0.00	0.00
8,200.00	18.00	129.23	8,074.88	-559.38	685.11	-467.38	0.00	0.00	0.00
8,300.00	18.00	129.23	8,169.99	-578.92	709.04	-483.70	0.00	0.00	0.00
8,400.00	18.00	129.23	8,265.10	-598.46	732.97	-500.03	0.00	0.00	0.00
8,500.00	18.00	129.23	8,360.20	-618.00	756.91	-516.36	0.00	0.00	0.00
8,600.00	18.00	129.23	8,455.31	-637.54	780.84	-532.68	0.00	0.00	0.00
8,700.00	18.00	129.23	8,550.42	-657.08	804.77	-549.01	0.00	0.00	0.00
8,800.00	18.00	129.23	8,645.53	-676.62	828.71	-565.34	0.00	0.00	0.00
8,900.00	18.00	129.23	8,740.63	-696.16	852.64	-581.67	0.00	0.00	0.00
9,000.00	18.00	129.23	8,835.74	-715.70	876.57	-597.99	0.00	0.00	0.00
9,100.00	18.00	129.23	8,930.85	-735.24	900.50	-614.32	0.00	0.00	0.00
9,200.00	18.00	129.23	9,025.95	-754.78	924.44	-630.65	0.00	0.00	0.00
9,300.00	18.00	129.23	9,121.06	-774.32	948.37	-646.97	0.00	0.00	0.00
9,400.00	18.00	129.23	9,216.17	-793.87	972.30	-663.30	0.00	0.00	0.00
9,500.00	18.00	129.23	9,311.28	-813.41	996.24	-679.63	0.00	0.00	0.00
9,600.00	18.00	129.23	9,406.38	-832.95	1,020.17	-695.95	0.00	0.00	0.00
9,700.00	18.00	129.23	9,501.49	-852.49	1,044.10	-712.28	0.00	0.00	0.00
9,800.00	18.00	129.23	9,596.60	-872.03	1,068.04	-728.61	0.00	0.00	0.00
9,900.00	18.00	129.23	9,691.70	-891.57	1,091.97	-744.93	0.00	0.00	0.00
10,000.00	18.00	129.23	9,786.81	-911.11	1,115.90	-761.26	0.00	0.00	0.00
10,100.00	18.00	129.23	9,881.92	-930.65	1,139.83	-777.59	0.00	0.00	0.00
10,200.00	18.00	129.23	9,977.03	-950.19	1,163.77	-793.92	0.00	0.00	0.00
10,208.23	18.00	129.23	9,984.85	-951.80	1,165.74	-795.26	0.00	0.00	0.00
KOP, Build & Turn 10°/100'									
10,300.00	14.22	98.54	10,073.16	-962.46	1,187.92	-803.01	10.00	-4.11	-33.44

# OXY

## Planning Report

<b>Database:</b>	HOPSPP	<b>Local Co-ordinate Reference:</b>	Well Iridium MDP1 28_21 Fed Com 74H
<b>Company:</b>	ENGINEERING DESIGNS	<b>TVD Reference:</b>	RKB=25' @ 3411.00ft
<b>Project:</b>	PRD NM DIRECTIONAL PLANS (NAD 1983)	<b>MD Reference:</b>	RKB=25' @ 3411.00ft
<b>Site:</b>	Iridium MDP1 28_21 Fed Com	<b>North Reference:</b>	Grid
<b>Well:</b>	Iridium MDP1 28_21 Fed Com 74H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Permitting Plan		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,400.00	16.06	60.17	10,169.92	-957.40	1,212.12	-794.89	10.00	1.83	-38.37
10,500.00	22.56	36.74	10,264.38	-935.09	1,235.66	-769.76	10.00	6.51	-23.42
10,600.00	30.92	24.39	10,353.68	-896.21	1,257.80	-728.38	10.00	8.36	-12.35
10,700.00	39.99	17.05	10,435.08	-841.95	1,277.88	-672.00	10.00	9.06	-7.34
10,800.00	49.37	12.09	10,506.13	-773.95	1,295.29	-602.34	10.00	9.38	-4.96
10,900.00	58.90	8.36	10,564.67	-694.29	1,309.50	-521.51	10.00	9.54	-3.72
10,936.24	62.38	7.20	10,582.43	-663.00	1,313.77	-489.93	10.00	9.60	-3.20
<b>PPP-1 Cross</b>									
11,000.00	68.53	5.33	10,608.91	-605.38	1,320.08	-431.97	10.00	9.64	-2.94
11,100.00	78.20	2.67	10,637.51	-509.91	1,326.70	-336.45	10.00	9.67	-2.65
11,200.00	87.89	0.20	10,649.60	-410.81	1,329.17	-237.83	10.00	9.70	-2.47
11,221.71	90.00	359.67	10,650.00	-389.11	1,329.14	-216.31	10.00	9.70	-2.43
<b>Landing Point</b>									
11,300.00	90.00	359.67	10,650.00	-310.81	1,328.70	-138.72	0.00	0.00	0.00
11,400.00	90.00	359.67	10,650.00	-210.81	1,328.13	-39.61	0.00	0.00	0.00
11,500.00	90.00	359.67	10,650.00	-110.82	1,327.56	59.50	0.00	0.00	0.00
11,600.00	90.00	359.67	10,650.00	-10.82	1,326.99	158.61	0.00	0.00	0.00
11,700.00	90.00	359.67	10,650.00	89.18	1,326.42	257.72	0.00	0.00	0.00
11,800.00	90.00	359.67	10,650.00	189.18	1,325.86	356.82	0.00	0.00	0.00
11,900.00	90.00	359.67	10,650.00	289.18	1,325.29	455.93	0.00	0.00	0.00
12,000.00	90.00	359.67	10,650.00	389.18	1,324.72	555.04	0.00	0.00	0.00
12,100.00	90.00	359.67	10,650.00	489.17	1,324.15	654.15	0.00	0.00	0.00
12,200.00	90.00	359.67	10,650.00	589.17	1,323.58	753.26	0.00	0.00	0.00
12,300.00	90.00	359.67	10,650.00	689.17	1,323.02	852.37	0.00	0.00	0.00
12,400.00	90.00	359.67	10,650.00	789.17	1,322.45	951.47	0.00	0.00	0.00
12,500.00	90.00	359.67	10,650.00	889.17	1,321.88	1,050.58	0.00	0.00	0.00
12,600.00	90.00	359.67	10,650.00	989.17	1,321.31	1,149.69	0.00	0.00	0.00
12,700.00	90.00	359.67	10,650.00	1,089.16	1,320.74	1,248.80	0.00	0.00	0.00
12,800.00	90.00	359.67	10,650.00	1,189.16	1,320.17	1,347.91	0.00	0.00	0.00
12,900.00	90.00	359.67	10,650.00	1,289.16	1,319.61	1,447.02	0.00	0.00	0.00
13,000.00	90.00	359.67	10,650.00	1,389.16	1,319.04	1,546.12	0.00	0.00	0.00
13,100.00	90.00	359.67	10,650.00	1,489.16	1,318.47	1,645.23	0.00	0.00	0.00
13,200.00	90.00	359.67	10,650.00	1,589.16	1,317.90	1,744.34	0.00	0.00	0.00
13,300.00	90.00	359.67	10,650.00	1,689.15	1,317.33	1,843.45	0.00	0.00	0.00
13,400.00	90.00	359.67	10,650.00	1,789.15	1,316.77	1,942.56	0.00	0.00	0.00
13,500.00	90.00	359.67	10,650.00	1,889.15	1,316.20	2,041.67	0.00	0.00	0.00
13,600.00	90.00	359.67	10,650.00	1,989.15	1,315.63	2,140.77	0.00	0.00	0.00
13,700.00	90.00	359.67	10,650.00	2,089.15	1,315.06	2,239.88	0.00	0.00	0.00
13,800.00	90.00	359.67	10,650.00	2,189.15	1,314.49	2,338.99	0.00	0.00	0.00
13,900.00	90.00	359.67	10,650.00	2,289.14	1,313.92	2,438.10	0.00	0.00	0.00
14,000.00	90.00	359.67	10,650.00	2,389.14	1,313.36	2,537.21	0.00	0.00	0.00
14,100.00	90.00	359.67	10,650.00	2,489.14	1,312.79	2,636.32	0.00	0.00	0.00
14,200.00	90.00	359.67	10,650.00	2,589.14	1,312.22	2,735.42	0.00	0.00	0.00
14,300.00	90.00	359.67	10,650.00	2,689.14	1,311.65	2,834.53	0.00	0.00	0.00
14,400.00	90.00	359.67	10,650.00	2,789.14	1,311.08	2,933.64	0.00	0.00	0.00
14,500.00	90.00	359.67	10,650.00	2,889.14	1,310.52	3,032.75	0.00	0.00	0.00
14,600.00	90.00	359.67	10,650.00	2,989.13	1,309.95	3,131.86	0.00	0.00	0.00
14,700.00	90.00	359.67	10,650.00	3,089.13	1,309.38	3,230.97	0.00	0.00	0.00
14,800.00	90.00	359.67	10,650.00	3,189.13	1,308.81	3,330.07	0.00	0.00	0.00
14,900.00	90.00	359.67	10,650.00	3,289.13	1,308.24	3,429.18	0.00	0.00	0.00
15,000.00	90.00	359.67	10,650.00	3,389.13	1,307.67	3,528.29	0.00	0.00	0.00
15,100.00	90.00	359.67	10,650.00	3,489.13	1,307.11	3,627.40	0.00	0.00	0.00
15,200.00	90.00	359.67	10,650.00	3,589.12	1,306.54	3,726.51	0.00	0.00	0.00
15,300.00	90.00	359.67	10,650.00	3,689.12	1,305.97	3,825.62	0.00	0.00	0.00
15,400.00	90.00	359.67	10,650.00	3,789.12	1,305.40	3,924.72	0.00	0.00	0.00

# OXY

## Planning Report

<b>Database:</b>	HOPSPP	<b>Local Co-ordinate Reference:</b>	Well Iridium MDP1 28_21 Fed Com 74H
<b>Company:</b>	ENGINEERING DESIGNS	<b>TVD Reference:</b>	RKB=25' @ 3411.00ft
<b>Project:</b>	PRD NM DIRECTIONAL PLANS (NAD 1983)	<b>MD Reference:</b>	RKB=25' @ 3411.00ft
<b>Site:</b>	Iridium MDP1 28_21 Fed Com	<b>North Reference:</b>	Grid
<b>Well:</b>	Iridium MDP1 28_21 Fed Com 74H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Permitting Plan		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
15,500.00	90.00	359.67	10,650.00	3,889.12	1,304.83	4,023.83	0.00	0.00	0.00
15,600.00	90.00	359.67	10,650.00	3,989.12	1,304.27	4,122.94	0.00	0.00	0.00
15,700.00	90.00	359.67	10,650.00	4,089.12	1,303.70	4,222.05	0.00	0.00	0.00
15,800.00	90.00	359.67	10,650.00	4,189.11	1,303.13	4,321.16	0.00	0.00	0.00
15,900.00	90.00	359.67	10,650.00	4,289.11	1,302.56	4,420.27	0.00	0.00	0.00
16,000.00	90.00	359.67	10,650.00	4,389.11	1,301.99	4,519.37	0.00	0.00	0.00
16,100.00	90.00	359.67	10,650.00	4,489.11	1,301.42	4,618.48	0.00	0.00	0.00
16,200.00	90.00	359.67	10,650.00	4,589.11	1,300.86	4,717.59	0.00	0.00	0.00
16,229.71	90.00	359.67	10,650.00	4,618.82	1,300.69	4,747.04	0.00	0.00	0.00
<b>Turn 1.5°/100'</b>									
16,229.89	90.00	359.67	10,650.00	4,619.00	1,300.69	4,747.21	0.00	0.00	0.00
<b>PPP-2 Cross</b>									
16,230.18	90.00	359.68	10,650.00	4,619.29	1,300.68	4,747.50	2.44	0.00	2.44
<b>Hold</b>									
16,300.00	90.00	359.68	10,650.00	4,689.11	1,300.30	4,816.70	0.00	0.00	0.00
16,400.00	90.00	359.68	10,650.00	4,789.10	1,299.74	4,915.81	0.00	0.00	0.00
16,500.00	90.00	359.68	10,650.00	4,889.10	1,299.19	5,014.92	0.00	0.00	0.00
16,600.00	90.00	359.68	10,650.00	4,989.10	1,298.63	5,114.03	0.00	0.00	0.00
16,700.00	90.00	359.68	10,650.00	5,089.10	1,298.07	5,213.14	0.00	0.00	0.00
16,800.00	90.00	359.68	10,650.00	5,189.10	1,297.52	5,312.25	0.00	0.00	0.00
16,900.00	90.00	359.68	10,650.00	5,289.10	1,296.96	5,411.36	0.00	0.00	0.00
17,000.00	90.00	359.68	10,650.00	5,389.10	1,296.41	5,510.47	0.00	0.00	0.00
17,100.00	90.00	359.68	10,650.00	5,489.09	1,295.85	5,609.58	0.00	0.00	0.00
17,200.00	90.00	359.68	10,650.00	5,589.09	1,295.29	5,708.69	0.00	0.00	0.00
17,300.00	90.00	359.68	10,650.00	5,689.09	1,294.74	5,807.80	0.00	0.00	0.00
17,400.00	90.00	359.68	10,650.00	5,789.09	1,294.18	5,906.91	0.00	0.00	0.00
17,500.00	90.00	359.68	10,650.00	5,889.09	1,293.63	6,006.02	0.00	0.00	0.00
17,600.00	90.00	359.68	10,650.00	5,989.09	1,293.07	6,105.13	0.00	0.00	0.00
17,700.00	90.00	359.68	10,650.00	6,089.08	1,292.52	6,204.24	0.00	0.00	0.00
17,800.00	90.00	359.68	10,650.00	6,189.08	1,291.96	6,303.35	0.00	0.00	0.00
17,900.00	90.00	359.68	10,650.00	6,289.08	1,291.40	6,402.46	0.00	0.00	0.00
18,000.00	90.00	359.68	10,650.00	6,389.08	1,290.85	6,501.57	0.00	0.00	0.00
18,100.00	90.00	359.68	10,650.00	6,489.08	1,290.29	6,600.68	0.00	0.00	0.00
18,200.00	90.00	359.68	10,650.00	6,589.08	1,289.74	6,699.79	0.00	0.00	0.00
18,300.00	90.00	359.68	10,650.00	6,689.08	1,289.18	6,798.90	0.00	0.00	0.00
18,400.00	90.00	359.68	10,650.00	6,789.07	1,288.63	6,898.01	0.00	0.00	0.00
18,500.00	90.00	359.68	10,650.00	6,889.07	1,288.07	6,997.12	0.00	0.00	0.00
18,600.00	90.00	359.68	10,650.00	6,989.07	1,287.51	7,096.23	0.00	0.00	0.00
18,700.00	90.00	359.68	10,650.00	7,089.07	1,286.96	7,195.34	0.00	0.00	0.00
18,800.00	90.00	359.68	10,650.00	7,189.07	1,286.40	7,294.45	0.00	0.00	0.00
18,900.00	90.00	359.68	10,650.00	7,289.07	1,285.85	7,393.56	0.00	0.00	0.00
19,000.00	90.00	359.68	10,650.00	7,389.06	1,285.29	7,492.67	0.00	0.00	0.00
19,100.00	90.00	359.68	10,650.00	7,489.06	1,284.74	7,591.78	0.00	0.00	0.00
19,200.00	90.00	359.68	10,650.00	7,589.06	1,284.18	7,690.89	0.00	0.00	0.00
19,300.00	90.00	359.68	10,650.00	7,689.06	1,283.62	7,790.00	0.00	0.00	0.00
19,400.00	90.00	359.68	10,650.00	7,789.06	1,283.07	7,889.11	0.00	0.00	0.00
19,500.00	90.00	359.68	10,650.00	7,889.06	1,282.51	7,988.22	0.00	0.00	0.00
19,600.00	90.00	359.68	10,650.00	7,989.06	1,281.96	8,087.33	0.00	0.00	0.00
19,700.00	90.00	359.68	10,650.00	8,089.05	1,281.40	8,186.44	0.00	0.00	0.00
19,800.00	90.00	359.68	10,650.00	8,189.05	1,280.84	8,285.55	0.00	0.00	0.00
19,900.00	90.00	359.68	10,650.00	8,289.05	1,280.29	8,384.66	0.00	0.00	0.00
20,000.00	90.00	359.68	10,650.00	8,389.05	1,279.73	8,483.77	0.00	0.00	0.00
20,100.00	90.00	359.68	10,650.00	8,489.05	1,279.18	8,582.88	0.00	0.00	0.00
20,200.00	90.00	359.68	10,650.00	8,589.05	1,278.62	8,681.99	0.00	0.00	0.00
20,300.00	90.00	359.68	10,650.00	8,689.04	1,278.07	8,781.10	0.00	0.00	0.00

OXY  
Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well Iridium MDP1 28_21 Fed Com 74H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=25' @ 3411.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=25' @ 3411.00ft
Site:	Iridium MDP1 28_21 Fed Com	North Reference:	Grid
Well:	Iridium MDP1 28_21 Fed Com 74H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
20,400.00	90.00	359.68	10,650.00	8,789.04	1,277.51	8,880.21	0.00	0.00	0.00	
20,500.00	90.00	359.68	10,650.00	8,889.04	1,276.95	8,979.32	0.00	0.00	0.00	
20,600.00	90.00	359.68	10,650.00	8,989.04	1,276.40	9,078.43	0.00	0.00	0.00	
20,700.00	90.00	359.68	10,650.00	9,089.04	1,275.84	9,177.54	0.00	0.00	0.00	
20,800.00	90.00	359.68	10,650.00	9,189.04	1,275.29	9,276.65	0.00	0.00	0.00	
20,900.00	90.00	359.68	10,650.00	9,289.04	1,274.73	9,375.76	0.00	0.00	0.00	
21,000.00	90.00	359.68	10,650.00	9,389.03	1,274.18	9,474.87	0.00	0.00	0.00	
21,100.00	90.00	359.68	10,650.00	9,489.03	1,273.62	9,573.98	0.00	0.00	0.00	
21,200.00	90.00	359.68	10,650.00	9,589.03	1,273.06	9,673.09	0.00	0.00	0.00	
21,300.00	90.00	359.68	10,650.00	9,689.03	1,272.51	9,772.20	0.00	0.00	0.00	
21,400.00	90.00	359.68	10,650.00	9,789.03	1,271.95	9,871.31	0.00	0.00	0.00	
21,493.02	90.00	359.68	10,650.00	9,882.05	1,271.44	9,963.50	0.00	0.00	0.00	
TD at 21493.02' MD										

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target - Shape									
KOP (Iridium MDP1 - plan misses target center by 1643.84ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E) - Point	0.00	0.00	0.00	-962.83	1,332.36	461,446.24	713,826.62	32.267358	-103.775274
PBHL (Iridium MDP1 - plan hits target center - Point	0.00	0.00	10,650.00	9,882.05	1,271.44	472,290.47	713,765.70	32.297167	-103.775289
PI-1 (Iridium MDP1 - plan hits target center - Point	0.00	0.00	10,650.00	4,618.81	1,300.69	467,027.55	713,794.95	32.282700	-103.775283
FTP (Iridium MDP1 - plan misses target center by 25.75ft at 11053.18ft MD (10626.13 TVD, -555.24 N, 1324.11 E) - Point	0.00	0.00	10,650.00	-562.81	1,330.13	461,846.23	713,824.39	32.268457	-103.775275

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
478.00	478.00	RUSTLER				
823.00	823.00	SALADO				
2,750.00	2,750.00	CASTILE				
4,258.00	4,258.00	DELAWARE				
4,282.00	4,282.00	BELL CANYON				
5,181.02	5,179.00	CHERRY CANYON				
6,490.47	6,449.00	BRUSHY CANYON				
8,195.92	8,071.00	BONE SPRING				
9,315.71	9,136.00	BONE SPRING 1ST				
9,973.91	9,762.00	BONE SPRING 2ND				

OXY  
Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well Iridium MDP1 28_21 Fed Com 74H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=25' @ 3411.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=25' @ 3411.00ft
Site:	Iridium MDP1 28_21 Fed Com	North Reference:	Grid
Well:	Iridium MDP1 28_21 Fed Com 74H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
4,445.00	4,445.00	0.00	0.00	Build 1°/100'
6,244.72	6,215.27	-177.30	217.15	Hold 18° Tangent
10,208.23	9,984.85	-951.80	1,165.74	KOP, Build & Turn 10°/100'
10,936.24	10,582.43	-663.00	1,313.77	PPP-1 Cross
11,221.71	10,650.00	-389.11	1,329.14	Landing Point
16,229.71	10,650.00	4,618.82	1,300.69	Turn 1.5°/100'
16,229.89	10,650.00	4,619.00	1,300.69	PPP-2 Cross
16,230.18	10,650.00	4,619.29	1,300.68	Hold
21,493.02	10,650.00	9,882.05	1,271.44	TD at 21493.02' MD



# API BTC -Special Clearance

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

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

## Pipe Body Data

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

## Connection Data

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

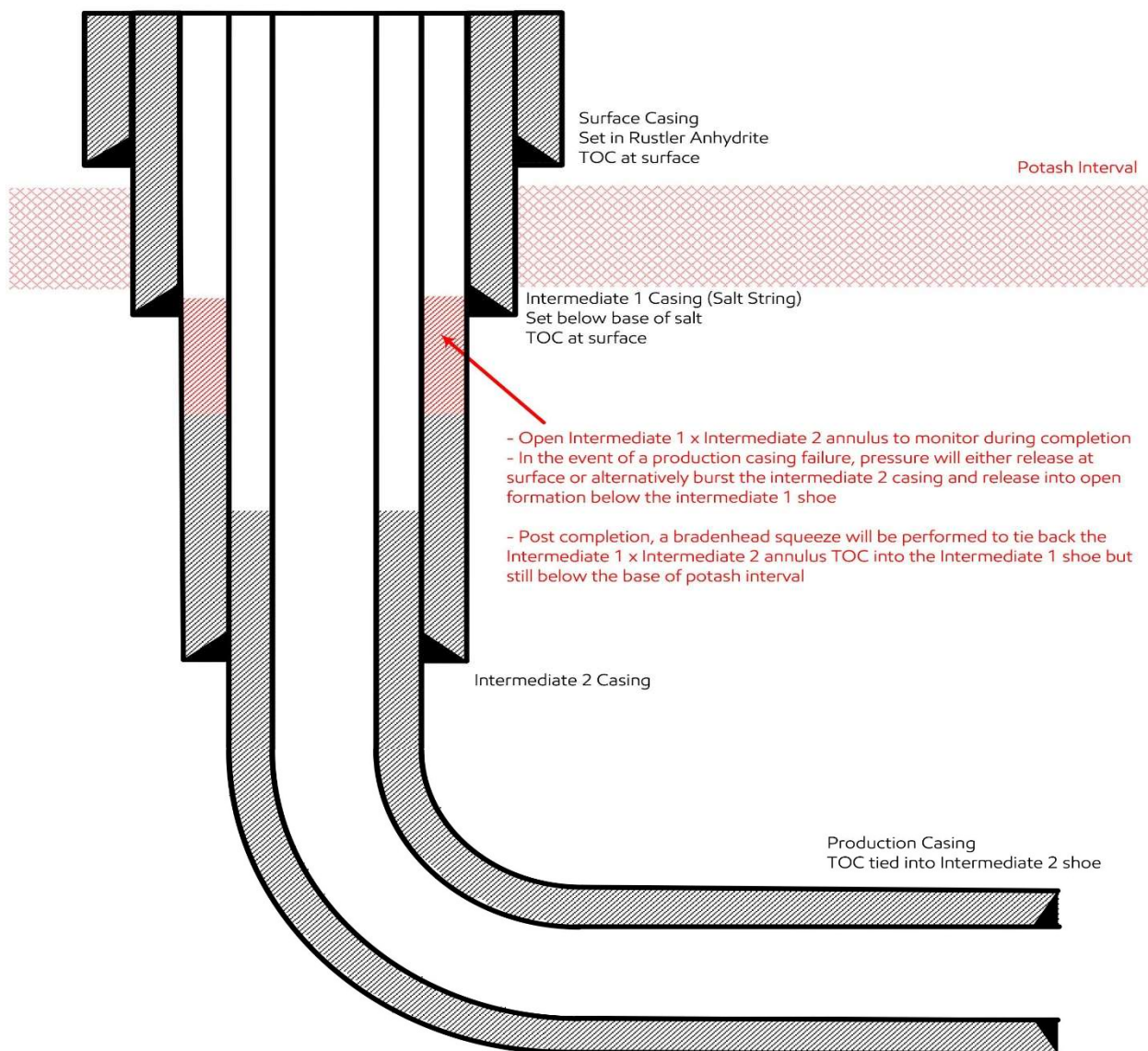
## Notes

For products according to API Standards 5CT & 5B; Performance calculated considering API Technical Report 5C3 (Sections 9 & 10) equations.  
For geometrical and steel grades combinations not considered in the API Standards 5CT and/or 5B; Performance calculations indirectly derived from API Technical Report 5C3 (Sections 9 & 10) equations.  
Couplings OD are shown according to current API 5CT 10th Edition.  
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Revision Date – May 21, 2024

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



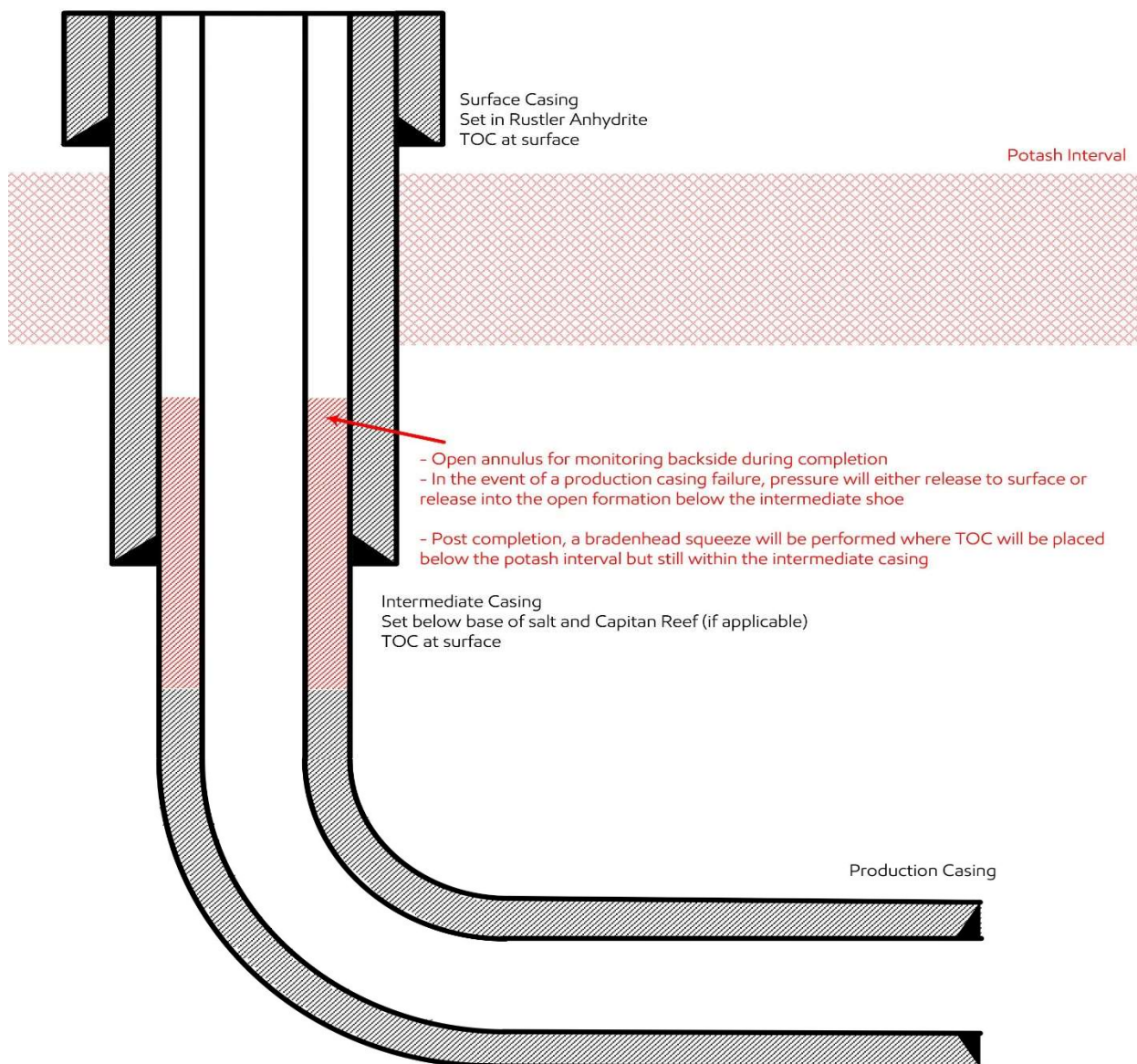
### Update May 2024:

OXY is aware of the R111-Q update and will comply with these requirements including (but not limited to):

- 1) Alignment with KPLA requirements per schematic above, leaving open annulus for pressure monitoring during frac and utilizing new casing that meets API standards
- 2) Contingency plans in place to divert formation fluids away from salt interval in event of production casing failure
- 3) Bradenhead squeeze to be completed within 180days to tie back TOC to salt string at least 500ft but with top below Marker Bed 126
- 4) Production cement to be tied back no less than 500ft inside previous casing shoe
- 5) While drilling salt interval, separation distance to any active/inactive producing offset well will be ensured such that  $SF > 1.0$ ; Anti-Collision Reports will be provided with APD Packages for review where  $SF < 1.5$  against any applicable offset well, or where center-to-center separation against a blind or inclination only surveyed offset well is less than 500ft

Revision Date – May 21, 2024

### 3-String Design – Open Production Casing Annulus



#### Update May 2024:

OXY is aware of the R111-Q update and will comply with these requirements including (but not limited to):

- 1) Alignment with KPLA requirements per schematic above, leaving open annulus for pressure monitoring during frac and utilizing new casing that meets API standards
- 2) Contingency plans in place to divert formation fluids away from salt interval in event of production casing failure
- 3) Bradenhead squeeze for Production cement to be completed within 180days to tie back TOC to previous casing string at least 500ft but with top below Marker Bed 126
- 4) While drilling salt interval, separation distance to any active/inactive producing offset well will be ensured such that  $SF > 1.0$ ; Anti-Collision Reports will be provided with APD Packages for review where  $SF < 1.5$  against any applicable offset well, or where center-to-center separation against a blind or inclination only surveyed offset well is less than 500ft

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

CONDITIONS

Action 446111

CONDITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 446111
	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.	4/18/2025