

<b>Well Name:</b> IRIDIUM MDP1 28-21 FEDERAL COM	<b>Well Location:</b> T23S / R31E / SEC 28 / SWSE / 32.2700279 / -103.7807322	<b>County or Parish/State:</b> EDDY / NM
<b>Well Number:</b> 73H	<b>Type of Well:</b> OIL WELL	<b>Allottee or Tribe Name:</b>
<b>Lease Number:</b> NMNM40659	<b>Unit or CA Name:</b>	<b>Unit or CA Number:</b> NMNM138937
<b>US Well Number:</b> 3001556054	<b>Operator:</b> OXY USA INCORPORATED	

**Notice of Intent**

**Sundry ID:** 2836530

**Type of Submission:** Notice of Intent

**Type of Action:** APD Change

**Date Sundry Submitted:** 02/13/2025

**Time Sundry Submitted:** 01:55

**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 & 2017' FEL to SWSE 670' FSL & 1687' FEL. BHL updated from NWNE 20' FNL & 1855' FEL TO NWNE 20' FNL & 1560' FEL. Please see the attached 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\_21FEDCOM73H\_APDCHGSUNDRYWORKSHEET\_20250213134906.pdf

IRIDIUMMDP128\_21FEDCOM73H\_C102\_20250213134851.pdf

IRIDIUMMDP128\_21FEDCOM73H\_ExistingRoads\_20250212150029.pdf

IRIDIUMMDP128\_21FEDCOM73H\_2024\_KPLA\_Addendum\_WellboreSchematics\_20250212145955.pdf

IRIDIUMMDP128\_21FEDCOM73H\_VAM\_SPRINT\_SF\_5.5in\_20ppf\_P110RY\_20250212112756.pdf

IRIDIUMMDP128\_21FEDCOM73H\_DrillPlan\_20250212112746.pdf

IridiumMDP128\_21FedCom73H\_DirectPlan\_20250212112730.pdf

IRIDIUMMDP128\_21FEDCOM73H\_API\_BTC\_SC\_10.750in\_45.50ppf\_L80IC\_20250212112718.pdf

Well Name: IRIDIUM MDP1 28-21  
FEDERAL COM

Well Location: T23S / R31E / SEC 28 /  
SWSE / 32.2700279 / -103.7807322

County or Parish/State: EDDY /  
NM

Well Number: 73H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM40659

Unit or CA Name:

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US Well Number: 3001556054

Operator: OXY USA INCORPORATED

### Conditions of Approval

#### Additional

IRIDIUM\_MDP1\_28\_21\_FEDERAL\_COM\_73H\_\_COA\_20250325163836.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 12, 2025 11:52 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.**

<b>SUBMIT IN TRIPLICATE - Other instructions on page 2</b>		5. Lease Serial No.
1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
2. Name of Operator		7. If Unit of CA/Agreement, Name and/or No.
3a. Address	3b. Phone No. (include area code)	8. Well Name and No.
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)		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 recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed 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 determined 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 / 2017 FEL / TWSP: 23S / RANGE: 31E / SECTION: 28 / LAT: 32.2700279 / LONG: -103.7807322 ( TVD: 0 feet, MD: 0 feet )

PPP: SWSE / 0 FSL / 1855 FEL / TWSP: 23S / RANGE: 31E / SECTION: 21 / LAT: 32.2826998 / LONG: -103.7802159 ( TVD: 10689 feet, MD: 16378 feet )

PPP: SWSE / 100 FSL / 1855 FEL / TWSP: 23S / RANGE: 31E / SECTION: 28 / LAT: 32.2684564 / LONG: -103.7802081 ( TVD: 10718 feet, MD: 11196 feet )

BHL: NWNW / 20 FNL / 1855 FEL / TWSP: 23S / RANGE: 31E / SECTION: 21 / LAT: 32.2971658 / LONG: -103.7802237 ( TVD: 10658 feet, MD: 21641 feet )

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

**OPERATOR'S NAME:** OXY USA INC.  
**WELL NAME & NO.:** IRIDIUM MDP1 28 21 FEDERAL COM 73H  
**LOCATION:** Sec28, T23S, R31E  
**COUNTY:** Eddy County, New Mexico

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

COA

H <sub>2</sub> S	<input type="radio"/> No	<input checked="" type="radio"/> Yes
<b>Potash / WIPP</b>	<input type="radio"/> None 4-String Design: Open 1st Int x 2nd Annulus (ICP 2 below Relief Zone)	<input checked="" type="radio"/> Secretary <input checked="" type="radio"/> R-111-Q <input checked="" type="checkbox"/> Open Annulus <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"/> Four-String	<input checked="" type="checkbox"/> Casing Clearance <input checked="" type="checkbox"/> Offline Cementing <input type="checkbox"/> Pilot Hole <input type="checkbox"/> Fluid-Filled <input checked="" type="checkbox"/> Break Testing

**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 **11,039** 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 **21,311** 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 73H
API NUMBER	30-015-5604
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)																							
	Date APD/BASE LINE APPROVED:								DATE Sundry Worksheet :																							
NAME	Iridium MDP1 28-21 Federal Com 73H								Iridium MDP1 28-21 Federal Com 73H																							
NSL	No								Yes																							
SHL	SWSE 67' FSL & 2017' FEL								SWSE 67' FSL & 1687' FEL																							
PAD	SNDONS T23SR31E 2801								SNDONS T23SR31E 2801																							
DHL	NWNE 20' FNL & 1855' FEL								NWNE 20' FNL & 1560' FEL																							
HSU SIZE, ACRES	640								320																							
POOL	Ingle Wells; Bonespring								Ingle Wells; Bonespring																							
TVD	10,659								10,621																							
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		531	531	13.375	54.5	J-55	BTC	Surface	17.5		528	528	13.375	54.5	J-55	BTC														
	Int	12.25		4353	4353	9.625	40	L-80 HC	BTC	Int	12.25		4250	4250	10.75	45.5	L-80 HC	BTC-SC														
	Int2	8.75		11044	9899	7.625	26.4	L-80 HC	Wedge 425	Int2 (Salt)	8.75		11039	10621	7.625	26.4	L-80 HC	BTC														
Prod	6.75		21642	10718	5.5	20	P-110	Wedge 461	Prod	6.75		21311	10621	5.5	20	P-110	Sprint-SP															
Liner									Liner																							
CEMENT PROGRAM	APD BASE LINE																SUNDRY PLAN															
	Section/Stage	Slurry	Sacks	Yield (ft³)	Density (lb/gal)	Excess	TOC	Placement	Description	Section/Stage	Slurry	Sacks	Yield (ft³/ft)	Density (lb/gal)	Excess	TOC	Placement	Description														
	Surf	Surface-Tail	355	1.33	14.8	100%	0	Circulate	Class C+Accel.	Surf	Surface-Tail	353	1.33	14.8	100%	0	Circulate	Class C+Accel.														
	Int/1	Intermediate-Tail	141	1.33	14.8	20%	3,853	Circulate	Class C+Accel.	Int	Intermediate-Tail	85	1.33	14.8	20%	3,750	Circulate	Class C+Accel.														
	Int/2	Intermediate-Lead	1013	1.73	12.9	50%	0	Circulate	Class Pozz+Ret.	Int	Intermediate-Lead	598	1.73	12.9	50%	0	Circulate	Class Pozz+Ret.														
	Int2	Intermediate 15-Tail	209	1.68	13.2	5%	6,721	Circulate	Class C+Ret.,Disper.	Int2	Intermediate 15-Tail	579	1.68	13.2	5%	6,722	Circulate	Class C+Ret.,Disper.														
	Int2	Intermediate 25-Tail BH	206	1.71	13.3	25%	3,853	Bradenhead Post-Frac	Class C+Accel.	Int2	Intermediate 25-Tail BH	483	1.71	13.3	25%	3,750	Bradenhead Post-Frac	Class C+Accel.														
Prod	Production-Tail	685	1.84	13.3	25%	9,544	Circulate	Class C+Ret.	Prod	Production-Tail	610	1.84	13.3	25%	10,539	Circulate	Class C+Ret.															
VARIANCES	APD BASE LINE																SUNDRY PLAN															
	BOP Break Tesing Variance															Y	BOP Break Tesing Variance															Y
	SM Annular BOP Variance															Y	SM Annular BOP Variance															Y
	Bradenhead CBK Variance															Y	Bradenhead CBK 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 6/30/2024



**BHL (NAD83)**  
X:712535.71' / Y:472283.84'  
LAT:32.29716593 / LON:-103.77926905

**BHL (NAD27)**  
X:671352.45' / Y:472224.27'  
LAT:32.29704303 / LON:-103.77878254

**LTP (NAD83)**  
X:712536.15' / Y:472203.85'  
LAT:32.29694606 / LON:-103.77926896

**LTP (NAD27)**  
X:671352.89' / Y:472144.28'  
LAT:32.29682316 / LON:-103.77878246

**PPP-2 (NAD83)**  
X:712565.29' / Y:467020.22'  
LAT:32.28269714 / LON:-103.77926132

**PPP-2 (NAD27)**  
X:671381.88' / Y:466960.79'  
LAT:32.28257416 / LON:-103.77877539

**FTP (NAD83)**  
X:712594.41' / Y:461839.63'  
LAT:32.26845655 / LON:-103.77925366

**FTP (NAD27)**  
X:671410.84' / Y:461780.33'  
LAT:32.26833349 / LON:-103.77876831

**PPP-1 (NAD83)**  
X:712594.96' / Y:461739.63'  
LAT:32.26818167 / LON:-103.77925356

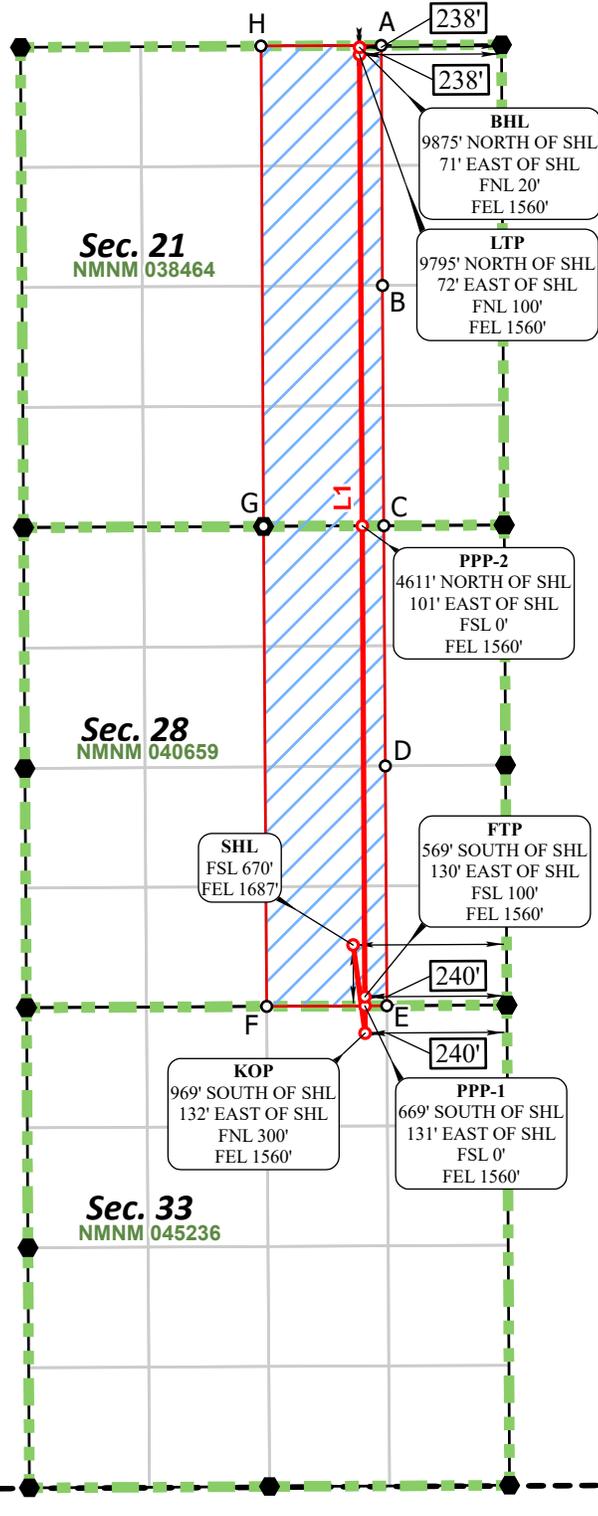
**PPP-1 (NAD27)**  
X:671411.39' / Y:461680.33'  
LAT:32.26805860 / LON:-103.77876821

**KOP (NAD83)**  
X:712596.63' / Y:461439.63'  
LAT:32.26735702 / LON:-103.77925316

**KOP (NAD27)**  
X:671413.05' / Y:461380.34'  
LAT:32.26723394 / LON:-103.77876785

**SHL (NAD83)**  
X:712464.39' / Y:462408.95'  
LAT:32.27002332 / LON:-103.77966481

**SHL (NAD27)**  
X:671280.84' / Y:462349.63'  
LAT:32.26990026 / LON:-103.77917938



T23S R31E  
T24S R31E

**CORNER COORDINATES NAD 83, SPCS NM EAST**

A - X: 712773.83' / Y:472305.13'
B - X: 712787.85' / Y:469663.84'
C - X: 712802.26' / Y:467021.63'
D - X: 712818.72' / Y:464378.81'
E - X: 712834.81' / Y:461740.92'
F - X: 711514.68' / Y:461733.82'
G - X: 711479.57' / Y:467013.75'
H - X: 711452.07' / Y:472298.01'

**CORNER COORDINATES NAD 27, SPCS NM EAST**

A - X: 671590.57' / Y:472245.56'
B - X: 671604.52' / Y:469604.33'
C - X: 671618.84' / Y:466962.20'
D - X: 671635.23' / Y:464319.45'
E - X: 671651.24' / Y:461681.62'
F - X: 670331.11' / Y:461674.53'
G - X: 670296.16' / Y:466954.31'
H - X: 670268.82' / Y:472238.44'

**\*FTP TO LTP LINE BEARINGS**

LINE	BEARING
L1	N 00°19'19" W ~ 10364.38'

**\*FTP TO LTP LEASE DISTANCES**

TRACT	DISTANCE
NMNM 040659	5180.67'
NMNM 038464	5183.71'
TOTAL	10364.38'



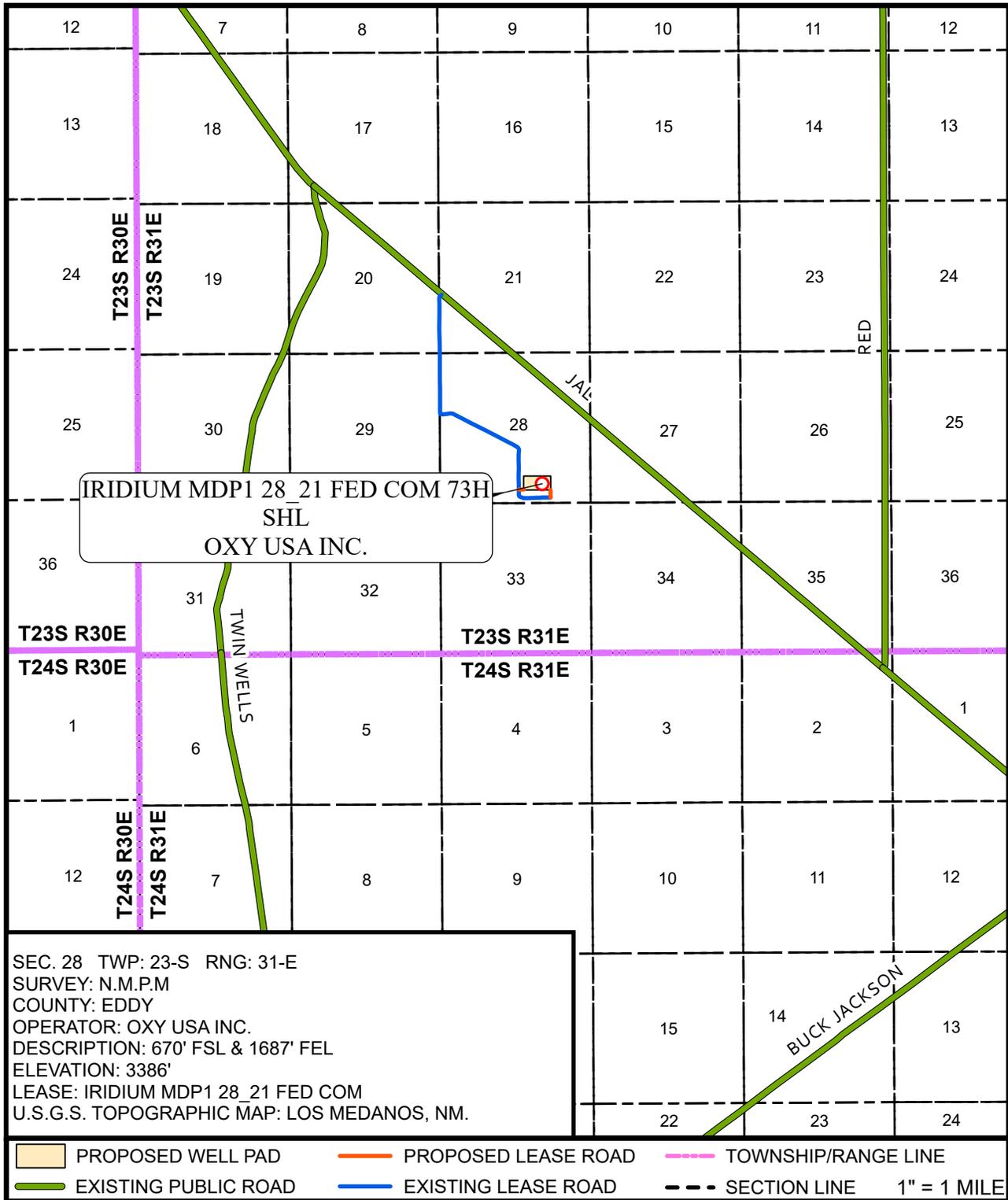
○ Drill Line Events    ● Section Corners    — Drill Line    ← Dimension Lines    □ Federal Leases    □ HSU    ○ HSU Corners

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

JOB No. OXY\_0003\_IS\_14395  
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°

# VICINITY MAP



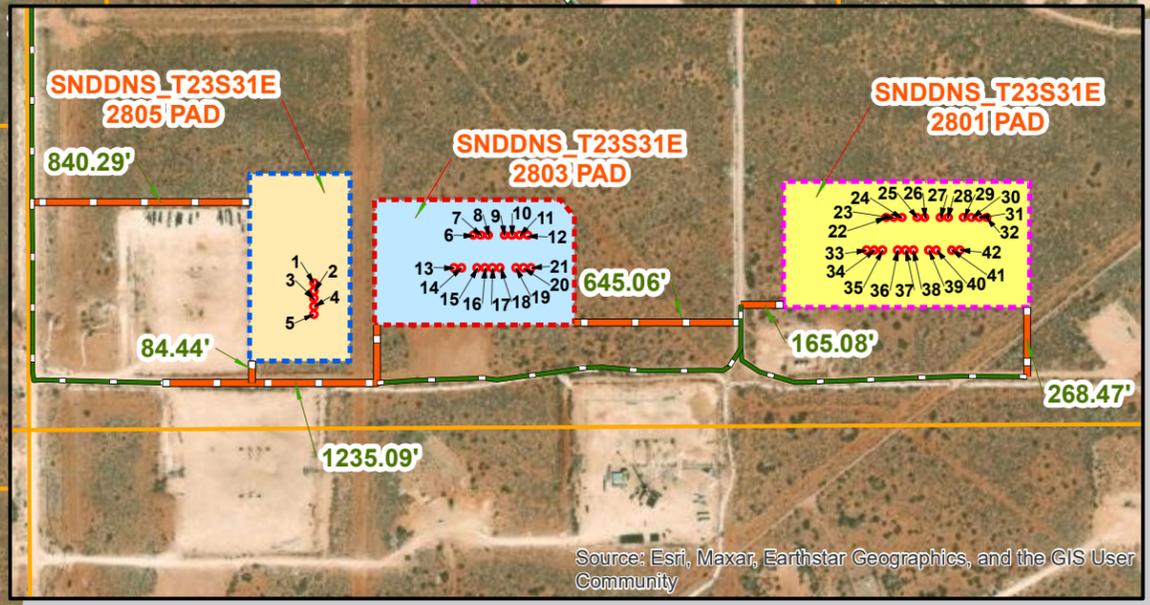
SEC. 28 TWP: 23-S RNG: 31-E  
 SURVEY: N.M.P.M  
 COUNTY: EDDY  
 OPERATOR: OXY USA INC.  
 DESCRIPTION: 670' FSL & 1687' FEL  
 ELEVATION: 3386'  
 LEASE: IRIDIUM MDP1 28\_21 FED COM  
 U.S.G.S. TOPOGRAPHIC MAP: LOS MEDANOS, NM.

**APPROXIMATELY 18.51 MILES EAST SOUTHEAST OF LOVING, NM.**

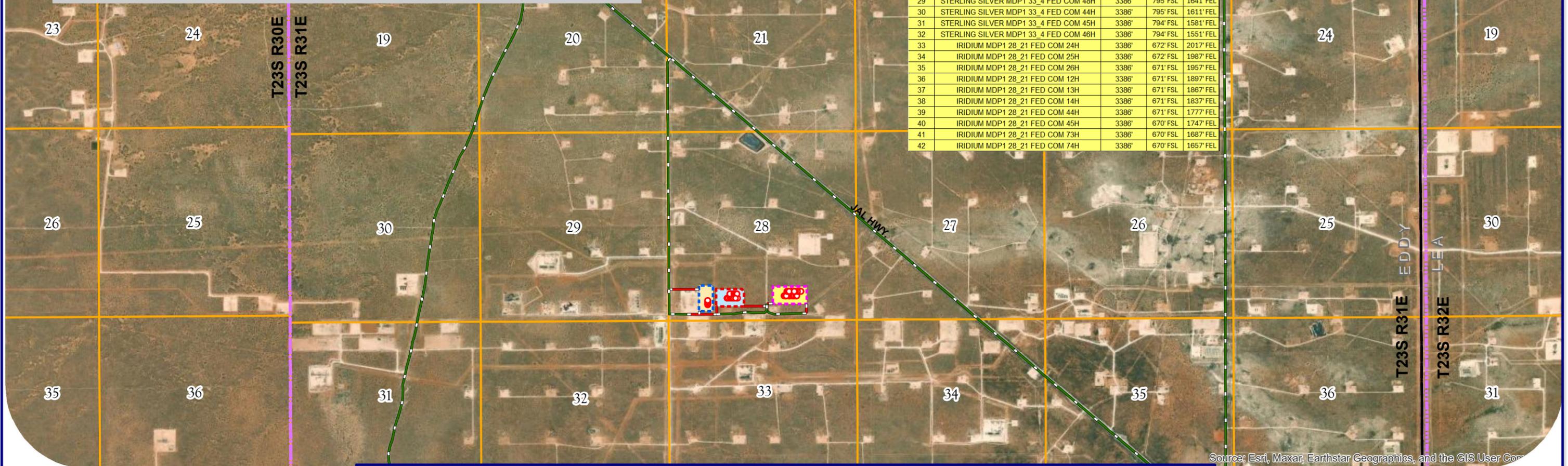
FROM THE INTERSECTION OF U.S. HWY 285 AND STATE HWY 387 / W. CEDAR STREET IN LOVING, NEW MEXICO, HEAD NORTH ON U.S. HWY 285 FOR APPROXIMATELY 2.3 MILES TO STATE HWY 31 / POTASH MINES ROAD. HEAD EAST ON STATE HWY 31 / POTASH MINES ROAD FOR APPROXIMATELY 7.7 MILES TO STATE HWY 128 / JAL HWY ON EAST SIDE 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\_14395



INDEX	WELL_NAME	ELEVATION	FEL/FWL	FNL/FSL
1	STERLING SILVER MDP1 33_4 FED COM 72H	3368'	555' FSL	1120' FWL
2	STERLING SILVER MDP1 33_4 FED COM 71H	3369'	525' FSL	1120' FWL
3	STERLING SILVER MDP1 33_4 FED COM 23H	3369'	495' FSL	1120' FWL
4	STERLING SILVER MDP1 33_4 FED COM 22H	3369'	465' FSL	1120' FWL
5	STERLING SILVER MDP1 33_4 FED COM 21H	3369'	435' FSL	1119' FWL
6	STERLING SILVER MDP1 33_4 FED COM 15H	3373'	736' FSL	1740' FWL
7	STERLING SILVER MDP1 33_4 FED COM 11H	3374'	735' FSL	1770' FWL
8	STERLING SILVER MDP1 33_4 FED COM 12H	3375'	735' FSL	1800' FWL
9	STERLING SILVER MDP1 33_4 FED COM 41H	3375'	735' FSL	1860' FWL
10	STERLING SILVER MDP1 33_4 FED COM 42H	3375'	735' FSL	1890' FWL
11	STERLING SILVER MDP1 33_4 FED COM 43H	3375'	734' FSL	1920' FWL
12	STERLING SILVER MDP1 33_4 FED COM 47H	3375'	734' FSL	1950' FWL
13	IRIDIUM MDP1 28_21 FED COM 22H	3370'	611' FSL	1664' FWL
14	IRIDIUM MDP1 28_21 FED COM 23H	3371'	611' FSL	1694' FWL
15	IRIDIUM MDP1 28_21 FED COM 42H	3372'	610' FSL	1754' FWL
16	IRIDIUM MDP1 28_21 FED COM 43H	3373'	610' FSL	1784' FWL
17	IRIDIUM MDP1 28_21 FED COM 48H	3373'	610' FSL	1814' FWL
18	IRIDIUM MDP1 28_21 FED COM 49H	3374'	610' FSL	1844' FWL
19	IRIDIUM MDP1 28_21 FED COM 71H	3375'	610' FSL	1904' FWL
20	IRIDIUM MDP1 28_21 FED COM 72H	3377'	609' FSL	1934' FWL
21	IRIDIUM MDP1 28_21 FED COM 75H	3377'	609' FSL	1964' FWL
22	STERLING SILVER MDP1 33_4 FED COM 24H	3386'	796' FSL	1941' FEL
23	STERLING SILVER MDP1 33_4 FED COM 25H	3386'	796' FSL	1911' FEL
24	STERLING SILVER MDP1 33_4 FED COM 26H	3386'	796' FSL	1881' FEL
25	STERLING SILVER MDP1 33_4 FED COM 13H	3386'	796' FSL	1821' FEL
26	STERLING SILVER MDP1 33_4 FED COM 14H	3386'	795' FSL	1791' FEL
27	STERLING SILVER MDP1 33_4 FED COM 74H	3386'	795' FSL	1731' FEL
28	STERLING SILVER MDP1 33_4 FED COM 73H	3386'	795' FSL	1701' FEL
29	STERLING SILVER MDP1 33_4 FED COM 48H	3386'	795' FSL	1641' FEL
30	STERLING SILVER MDP1 33_4 FED COM 44H	3386'	795' FSL	1611' FEL
31	STERLING SILVER MDP1 33_4 FED COM 45H	3386'	794' FSL	1581' FEL
32	STERLING SILVER MDP1 33_4 FED COM 46H	3386'	794' FSL	1551' FEL
33	IRIDIUM MDP1 28_21 FED COM 24H	3386'	672' FSL	2017' FEL
34	IRIDIUM MDP1 28_21 FED COM 25H	3386'	672' FSL	1987' FEL
35	IRIDIUM MDP1 28_21 FED COM 26H	3386'	671' FSL	1957' FEL
36	IRIDIUM MDP1 28_21 FED COM 12H	3386'	671' FSL	1897' FEL
37	IRIDIUM MDP1 28_21 FED COM 13H	3386'	671' FSL	1867' FEL
38	IRIDIUM MDP1 28_21 FED COM 14H	3386'	671' FSL	1837' FEL
39	IRIDIUM MDP1 28_21 FED COM 44H	3386'	671' FSL	1777' FEL
40	IRIDIUM MDP1 28_21 FED COM 45H	3386'	670' FSL	1747' FEL
41	IRIDIUM MDP1 28_21 FED COM 73H	3386'	670' FSL	1687' FEL
42	IRIDIUM MDP1 28_21 FED COM 74H	3386'	670' FSL	1657' FEL



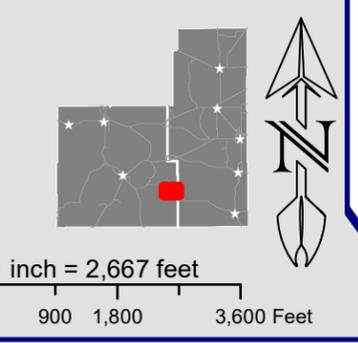
- WELLS
- EXISTING ROAD
- Proposed\_Road
- SNDDNS\_T23S31E\_2801-PAD
- SNDDNS\_T23S31E\_2803-PAD
- SNDDNS\_T23S31E\_2805-PAD
- County
- Township-Range
- SECTIONS

**IRIDIUM MDP1 28\_21/STERLING SILVER MDP1 33\_4 FED COM**

OVERALL IMAGERY MAP    Draft Date: 1/17/2025    Rev: 1

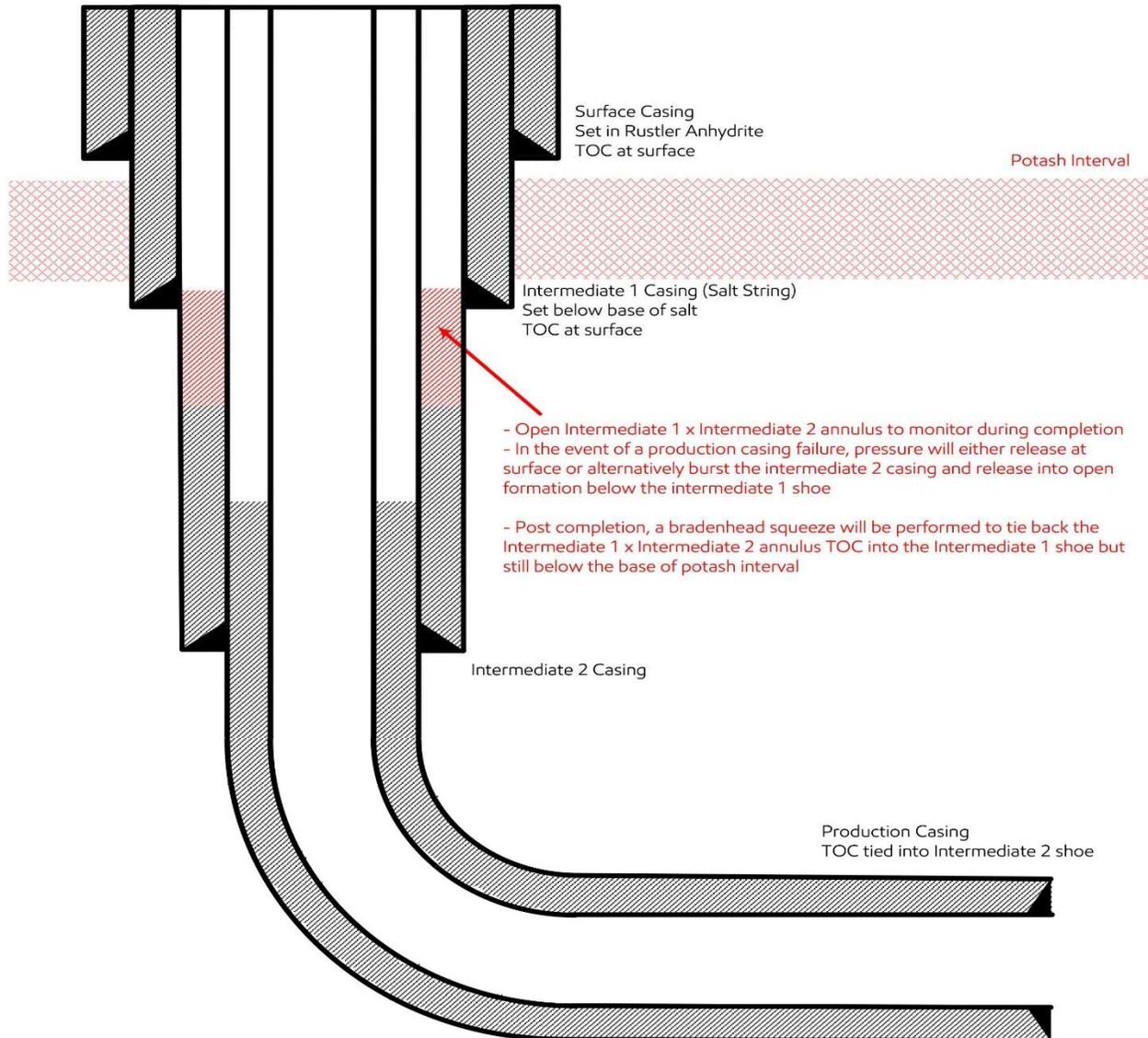
Section: 28    TWN-RNG: T23S - R31E    County: EDDY

TOTAL 30' WIDE PROPOSED LEASE ROAD EASEMENT:  
 3,238.43 FEET (196.27 RODS)



Revision Date – May 21, 2024

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

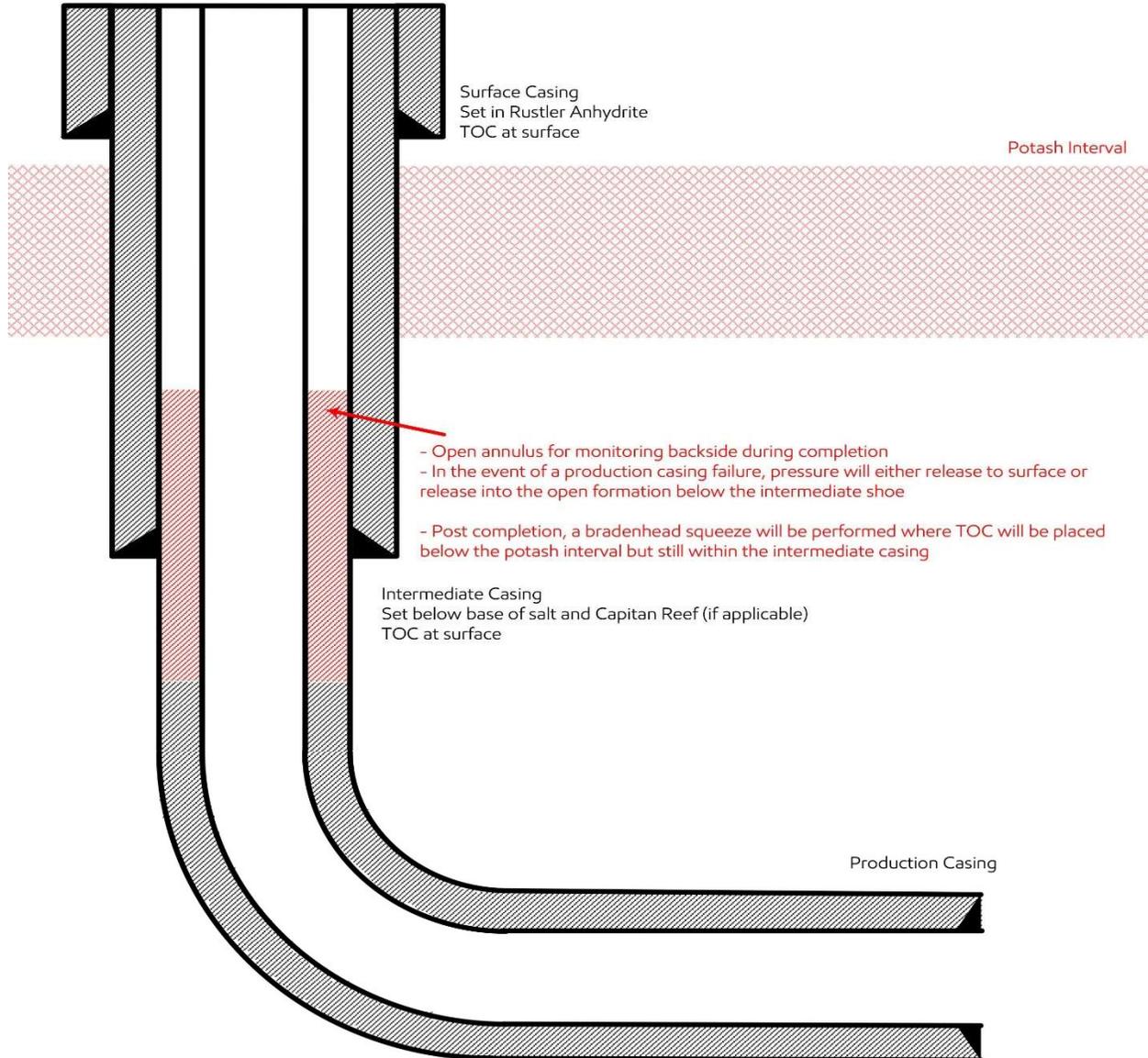
**Update May 2024:**

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):

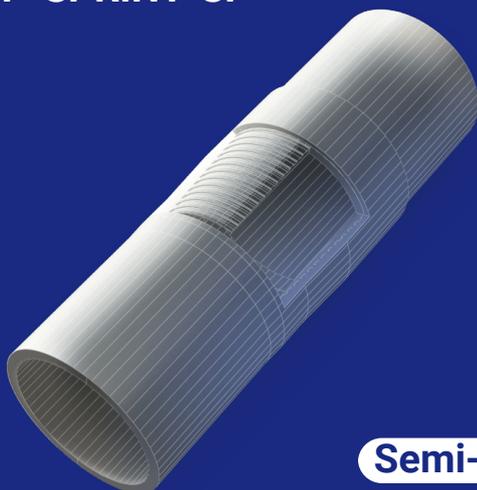
- 1) Alignment with KPLA requirements per schematic above, leaving open annulus for pressure monitoring during frac and utilizing new casing that meets API standards
- 2) Contingency plans in place to divert formation fluids away from salt interval in event of production casing failure
- 3) Bradenhead 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



# CONNECTION DATA SHEET

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

## VAM® SPRINT-SF



**Semi-Flush**

### Field Torque Values

#### Make-up Torque (ft-lb)

- 20,000 MIN
- 22,500 OPTI
- 25,000 MAX

#### Torque with Sealability (ft-lb)

- 36,000 MTS

#### Locked Flank Torque (ft-lb)

- 4,500 MIN
- 15,750 MAX

(2) MTS: Maximum Torque with Sealability.

### PIPE BODY PROPERTIES

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

### CONNECTION PROPERTIES

Connection Type	Semi-Premium Integral Semi-Flush	
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® FIELD SERVICE**

Scan the QR code  
to contact us



# Oxy USA Inc. - IRIDIUM MDP1 28\_21 FED COM 73H

## Drill Plan

### 1. Geologic Formations

TVD of Target (ft):	10621	Pilot Hole Depth (ft):	
Total Measured Depth (ft):	21311	Deepest Expected Fresh Water (ft):	468

### Delaware Basin

Formation	MD-RKB (ft)	TVD-RKB (ft)	Expected Fluids
Rustler	468	468	
Salado	826	826	Salt
Castile	2746	2746	Salt
Delaware	4250	4250	Oil/Gas/Brine
Bell Canyon	4278	4278	Oil/Gas/Brine
Cherry Canyon	5168	5166	Oil/Gas/Brine
Brushy Canyon	6472	6448	Losses
Bone Spring	8111	8057	Oil/Gas
Bone Spring 1st	9197	9123	Oil/Gas
Bone Spring 2nd	9852	9766	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	528	0	528	13.375	54.5	J-55	BTC
Salt	12.25	0	4250	0	4250	10.75	45.5	L-80 HC	BTC-SC
Intermediate	9.875	0	11039	0	10621	7.625	26.4	L-80 HC	BTC
Production	6.75	0	21311	0	10621	5.5	20	P-110	Sprint-SF

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

<i>All Casing SF Values will meet or exceed those below</i>			
<b>SF Collapse</b>	<b>SF Burst</b>	<b>Body SF Tension</b>	<b>Joint SF Tension</b>
1.00	1.100	1.4	1.4

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

### 3. Cementing Program

Section	Stage	Slurry:	Sacks	Yield (ft <sup>3</sup> /ft)	Density (lb/gal)	Excess:	TOC	Placement	Description
Surface	1	Surface - Tail	552	1.33	14.8	100%	-	Circulate	Class C+Accel.
Int.1	1	Intermediate - Tail	85	1.33	14.8	20%	3,750	Circulate	Class C+Accel.
Int.1	1	Intermediate - Lead	598	1.73	12.9	50%	-	Circulate	Class Pozz+Ret.
Int. 2	1	Intermediate 1S - Tail	579	1.68	13.2	5%	6,722	Circulate	Class C+Ret., Disper.
Int. 2	2	Intermediate 2S - Tail BH	453	1.71	13.3	25%	3,750	Bradenhead Post-Frac	Class C+Accel.
Prod.	1	Production - Tail	610	1.84	13.3	25%	10,539	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	4250
			Blind Ram	✓	250 psi / 5000 psi	
		5M	Pipe Ram			
			Double Ram	✓		
			Other*			
9.875" Hole	13-5/8"	5M	Annular	✓	70% of working pressure	10621
			Blind Ram	✓	250 psi / 5000 psi	
		5M	Pipe Ram			
			Double Ram	✓		
			Other*			
6.75" Hole	13-5/8"	5M	Annular	✓	100% of working pressure	10621
			Blind Ram	✓	250 psi / 10000 psi	
		10M	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.

	<p>Formation integrity test will be performed per 43 CFR part 3170 Subpart 3172.</p> <p>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.</p>
	<p>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.</p>
Y	<p>Are anchors required by manufacturer?</p>
	<p>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.</p> <p>See attached schematics.</p>

**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	528	0	528	Water-Based Mud	8.6 - 8.8	40-60	N/C
Intermediate 1	528	4250	528	4250	Saturated Brine-Based or Oil-Based Mud	8.0 - 10.0	35-45	N/C
Intermediate 2	4250	11039	4250	10621	Water-Based or Oil-Based Mud	8.0 - 10.0	38-50	N/C
Production	11039	21311	10621	10621	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	6904 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	165°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:** 1798 bbls

# **OXY**

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

**Iridium MDP1 28\_21 Fed Com**

**Iridium MDP1 28\_21 Fed Com 73H**

**Wellbore #1**

**Plan: Permitting Plan**

## **Standard Planning Report**

**31 January, 2025**

## OXY Planning Report

<b>Database:</b>	HOPSPP	<b>Local Co-ordinate Reference:</b>	Well Iridium MDP1 28_21 Fed Com 73H
<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 73H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Permitting Plan		

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

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

<b>Well</b> Iridium MDP1 28_21 Fed Com 73H			
<b>Well Position</b>	+N/-S	0.00 ft	<b>Northing:</b>
	+E/-W	0.00 ft	462,408.95 usf
			<b>Latitude:</b>
			32.270023
			<b>Longitude:</b>
			-103.779665
<b>Position Uncertainty</b>		2.00 ft	<b>Wellhead Elevation:</b>
			ft
			<b>Ground Level:</b>
			3,386.00 ft
<b>Grid Convergence:</b>		0.30 °	

<b>Wellbore</b> 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

<b>Design</b> Permitting Plan				
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	0.41

<b>Plan Survey Tool Program</b>		<b>Date</b>	1/31/2025		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	21,310.19	Permitting Plan (Wellbore #1)	B001Mc_MWD+HRGM_R5	MWD+HRGM

<b>Plan Sections</b>										
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	
4,418.00	0.00	0.00	4,418.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,518.07	11.00	173.05	5,511.33	-104.51	12.74	1.00	1.00	0.00	173.05	
10,029.25	11.00	173.05	9,939.61	-959.01	116.93	0.00	0.00	0.00	0.00	
11,038.52	90.00	359.68	10,621.00	-396.36	129.06	10.00	7.83	-17.18	-173.25	
21,310.52	90.00	359.68	10,621.00	9,875.48	71.32	0.00	0.00	0.00	0.00	PBHL (Iridium)

# OXY

## Planning Report

<b>Database:</b>	HOPSPP	<b>Local Co-ordinate Reference:</b>	Well Iridium MDP1 28_21 Fed Com 73H
<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 73H	<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)
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
4,418.00	0.00	0.00	4,418.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Build 1°/100'</b>									
4,500.00	0.82	173.05	4,500.00	-0.58	0.07	-0.58	1.00	1.00	0.00
4,600.00	1.82	173.05	4,599.97	-2.87	0.35	-2.87	1.00	1.00	0.00
4,700.00	2.82	173.05	4,699.89	-6.89	0.84	-6.88	1.00	1.00	0.00
4,800.00	3.82	173.05	4,799.72	-12.64	1.54	-12.62	1.00	1.00	0.00
4,900.00	4.82	173.05	4,899.43	-20.11	2.45	-20.09	1.00	1.00	0.00
5,000.00	5.82	173.05	4,999.00	-29.32	3.57	-29.29	1.00	1.00	0.00
5,100.00	6.82	173.05	5,098.39	-40.24	4.91	-40.21	1.00	1.00	0.00
5,200.00	7.82	173.05	5,197.57	-52.89	6.45	-52.84	1.00	1.00	0.00

# OXY

## Planning Report

<b>Database:</b>	HOPSP	<b>Local Co-ordinate Reference:</b>	Well Iridium MDP1 28_21 Fed Com 73H
<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 73H	<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	8.82	173.05	5,296.52	-67.25	8.20	-67.19	1.00	1.00	0.00
5,400.00	9.82	173.05	5,395.20	-83.33	10.16	-83.25	1.00	1.00	0.00
5,500.00	10.82	173.05	5,493.58	-101.11	12.33	-101.02	1.00	1.00	0.00
5,518.07	11.00	173.05	5,511.33	-104.51	12.74	-104.41	1.00	1.00	0.00
<b>Hold 11° Tangent</b>									
5,600.00	11.00	173.05	5,591.75	-120.03	14.63	-119.92	0.00	0.00	0.00
5,700.00	11.00	173.05	5,689.91	-138.97	16.94	-138.84	0.00	0.00	0.00
5,800.00	11.00	173.05	5,788.07	-157.91	19.25	-157.77	0.00	0.00	0.00
5,900.00	11.00	173.05	5,886.24	-176.85	21.56	-176.69	0.00	0.00	0.00
6,000.00	11.00	173.05	5,984.40	-195.79	23.87	-195.62	0.00	0.00	0.00
6,100.00	11.00	173.05	6,082.56	-214.74	26.18	-214.54	0.00	0.00	0.00
6,200.00	11.00	173.05	6,180.72	-233.68	28.49	-233.47	0.00	0.00	0.00
6,300.00	11.00	173.05	6,278.89	-252.62	30.80	-252.39	0.00	0.00	0.00
6,400.00	11.00	173.05	6,377.05	-271.56	33.11	-271.32	0.00	0.00	0.00
6,500.00	11.00	173.05	6,475.21	-290.50	35.42	-290.24	0.00	0.00	0.00
6,600.00	11.00	173.05	6,573.37	-309.45	37.73	-309.17	0.00	0.00	0.00
6,700.00	11.00	173.05	6,671.54	-328.39	40.04	-328.09	0.00	0.00	0.00
6,800.00	11.00	173.05	6,769.70	-347.33	42.35	-347.01	0.00	0.00	0.00
6,900.00	11.00	173.05	6,867.86	-366.27	44.66	-365.94	0.00	0.00	0.00
7,000.00	11.00	173.05	6,966.02	-385.21	46.97	-384.86	0.00	0.00	0.00
7,100.00	11.00	173.05	7,064.19	-404.15	49.28	-403.79	0.00	0.00	0.00
7,200.00	11.00	173.05	7,162.35	-423.10	51.59	-422.71	0.00	0.00	0.00
7,300.00	11.00	173.05	7,260.51	-442.04	53.89	-441.64	0.00	0.00	0.00
7,400.00	11.00	173.05	7,358.67	-460.98	56.20	-460.56	0.00	0.00	0.00
7,500.00	11.00	173.05	7,456.84	-479.92	58.51	-479.49	0.00	0.00	0.00
7,600.00	11.00	173.05	7,555.00	-498.86	60.82	-498.41	0.00	0.00	0.00
7,700.00	11.00	173.05	7,653.16	-517.81	63.13	-517.34	0.00	0.00	0.00
7,800.00	11.00	173.05	7,751.32	-536.75	65.44	-536.26	0.00	0.00	0.00
7,900.00	11.00	173.05	7,849.49	-555.69	67.75	-555.19	0.00	0.00	0.00
8,000.00	11.00	173.05	7,947.65	-574.63	70.06	-574.11	0.00	0.00	0.00
8,100.00	11.00	173.05	8,045.81	-593.57	72.37	-593.04	0.00	0.00	0.00
8,200.00	11.00	173.05	8,143.97	-612.52	74.68	-611.96	0.00	0.00	0.00
8,300.00	11.00	173.05	8,242.14	-631.46	76.99	-630.88	0.00	0.00	0.00
8,400.00	11.00	173.05	8,340.30	-650.40	79.30	-649.81	0.00	0.00	0.00
8,500.00	11.00	173.05	8,438.46	-669.34	81.61	-668.73	0.00	0.00	0.00
8,600.00	11.00	173.05	8,536.62	-688.28	83.92	-687.66	0.00	0.00	0.00
8,700.00	11.00	173.05	8,634.79	-707.22	86.23	-706.58	0.00	0.00	0.00
8,800.00	11.00	173.05	8,732.95	-726.17	88.54	-725.51	0.00	0.00	0.00
8,900.00	11.00	173.05	8,831.11	-745.11	90.85	-744.43	0.00	0.00	0.00
9,000.00	11.00	173.05	8,929.27	-764.05	93.16	-763.36	0.00	0.00	0.00
9,100.00	11.00	173.05	9,027.44	-782.99	95.47	-782.28	0.00	0.00	0.00
9,200.00	11.00	173.05	9,125.60	-801.93	97.77	-801.21	0.00	0.00	0.00
9,300.00	11.00	173.05	9,223.76	-820.88	100.08	-820.13	0.00	0.00	0.00
9,400.00	11.00	173.05	9,321.92	-839.82	102.39	-839.06	0.00	0.00	0.00
9,500.00	11.00	173.05	9,420.09	-858.76	104.70	-857.98	0.00	0.00	0.00
9,600.00	11.00	173.05	9,518.25	-877.70	107.01	-876.91	0.00	0.00	0.00
9,700.00	11.00	173.05	9,616.41	-896.64	109.32	-895.83	0.00	0.00	0.00
9,800.00	11.00	173.05	9,714.57	-915.59	111.63	-914.75	0.00	0.00	0.00
9,900.00	11.00	173.05	9,812.74	-934.53	113.94	-933.68	0.00	0.00	0.00
10,000.00	11.00	173.05	9,910.90	-953.47	116.25	-952.60	0.00	0.00	0.00
10,029.25	11.00	173.05	9,939.61	-959.01	116.93	-958.14	0.00	0.00	0.00
<b>KOP, Build &amp; Turn 10°/100'</b>									
10,100.00	4.06	161.25	10,009.71	-968.09	118.55	-967.21	10.00	-9.81	-16.68
10,200.00	6.28	11.44	10,109.54	-966.08	120.78	-965.18	10.00	2.22	-149.80
10,300.00	16.20	4.11	10,207.50	-946.76	122.87	-945.84	10.00	9.92	-7.33

# OXY

## Planning Report

<b>Database:</b>	HOPSPP	<b>Local Co-ordinate Reference:</b>	Well Iridium MDP1 28_21 Fed Com 73H
<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 73H	<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	26.18	2.29	10,300.63	-910.71	124.76	-909.79	10.00	9.98	-1.81	
10,500.00	36.17	1.44	10,386.08	-859.04	126.38	-858.11	10.00	9.99	-0.86	
10,600.00	46.16	0.91	10,461.26	-793.32	127.70	-792.37	10.00	9.99	-0.52	
10,700.00	56.16	0.54	10,523.90	-715.53	128.67	-714.58	10.00	10.00	-0.37	
10,754.38	61.59	0.37	10,552.00	-669.00	129.04	-668.05	10.00	10.00	-0.31	
<b>PPP-1 Cross</b>										
10,800.00	66.15	0.25	10,572.08	-628.05	129.26	-627.10	10.00	10.00	-0.28	
10,900.00	76.15	359.99	10,604.34	-533.53	129.45	-532.58	10.00	10.00	-0.25	
11,000.00	86.15	359.76	10,619.71	-434.85	129.24	-433.90	10.00	10.00	-0.23	
11,038.52	90.00	359.68	10,621.00	-396.36	129.06	-395.42	10.00	10.00	-0.22	
<b>Landing Point</b>										
11,100.00	90.00	359.68	10,621.00	-334.88	128.71	-333.94	0.00	0.00	0.00	
11,200.00	90.00	359.68	10,621.00	-234.88	128.15	-233.95	0.00	0.00	0.00	
11,300.00	90.00	359.68	10,621.00	-134.88	127.59	-133.96	0.00	0.00	0.00	
11,400.00	90.00	359.68	10,621.00	-34.88	127.02	-33.96	0.00	0.00	0.00	
11,500.00	90.00	359.68	10,621.00	65.12	126.46	66.03	0.00	0.00	0.00	
11,600.00	90.00	359.68	10,621.00	165.11	125.90	166.02	0.00	0.00	0.00	
11,700.00	90.00	359.68	10,621.00	265.11	125.34	266.01	0.00	0.00	0.00	
11,800.00	90.00	359.68	10,621.00	365.11	124.78	366.00	0.00	0.00	0.00	
11,900.00	90.00	359.68	10,621.00	465.11	124.21	465.99	0.00	0.00	0.00	
12,000.00	90.00	359.68	10,621.00	565.11	123.65	565.99	0.00	0.00	0.00	
12,100.00	90.00	359.68	10,621.00	665.11	123.09	665.98	0.00	0.00	0.00	
12,200.00	90.00	359.68	10,621.00	765.11	122.53	765.97	0.00	0.00	0.00	
12,300.00	90.00	359.68	10,621.00	865.10	121.97	865.96	0.00	0.00	0.00	
12,400.00	90.00	359.68	10,621.00	965.10	121.40	965.95	0.00	0.00	0.00	
12,500.00	90.00	359.68	10,621.00	1,065.10	120.84	1,065.95	0.00	0.00	0.00	
12,600.00	90.00	359.68	10,621.00	1,165.10	120.28	1,165.94	0.00	0.00	0.00	
12,700.00	90.00	359.68	10,621.00	1,265.10	119.72	1,265.93	0.00	0.00	0.00	
12,800.00	90.00	359.68	10,621.00	1,365.10	119.16	1,365.92	0.00	0.00	0.00	
12,900.00	90.00	359.68	10,621.00	1,465.09	118.59	1,465.91	0.00	0.00	0.00	
13,000.00	90.00	359.68	10,621.00	1,565.09	118.03	1,565.90	0.00	0.00	0.00	
13,100.00	90.00	359.68	10,621.00	1,665.09	117.47	1,665.90	0.00	0.00	0.00	
13,200.00	90.00	359.68	10,621.00	1,765.09	116.91	1,765.89	0.00	0.00	0.00	
13,300.00	90.00	359.68	10,621.00	1,865.09	116.35	1,865.88	0.00	0.00	0.00	
13,400.00	90.00	359.68	10,621.00	1,965.09	115.78	1,965.87	0.00	0.00	0.00	
13,500.00	90.00	359.68	10,621.00	2,065.08	115.22	2,065.86	0.00	0.00	0.00	
13,600.00	90.00	359.68	10,621.00	2,165.08	114.66	2,165.85	0.00	0.00	0.00	
13,700.00	90.00	359.68	10,621.00	2,265.08	114.10	2,265.85	0.00	0.00	0.00	
13,800.00	90.00	359.68	10,621.00	2,365.08	113.54	2,365.84	0.00	0.00	0.00	
13,900.00	90.00	359.68	10,621.00	2,465.08	112.97	2,465.83	0.00	0.00	0.00	
14,000.00	90.00	359.68	10,621.00	2,565.08	112.41	2,565.82	0.00	0.00	0.00	
14,100.00	90.00	359.68	10,621.00	2,665.08	111.85	2,665.81	0.00	0.00	0.00	
14,200.00	90.00	359.68	10,621.00	2,765.07	111.29	2,765.81	0.00	0.00	0.00	
14,300.00	90.00	359.68	10,621.00	2,865.07	110.73	2,865.80	0.00	0.00	0.00	
14,400.00	90.00	359.68	10,621.00	2,965.07	110.16	2,965.79	0.00	0.00	0.00	
14,500.00	90.00	359.68	10,621.00	3,065.07	109.60	3,065.78	0.00	0.00	0.00	
14,600.00	90.00	359.68	10,621.00	3,165.07	109.04	3,165.77	0.00	0.00	0.00	
14,700.00	90.00	359.68	10,621.00	3,265.07	108.48	3,265.76	0.00	0.00	0.00	
14,800.00	90.00	359.68	10,621.00	3,365.06	107.91	3,365.76	0.00	0.00	0.00	
14,900.00	90.00	359.68	10,621.00	3,465.06	107.35	3,465.75	0.00	0.00	0.00	
15,000.00	90.00	359.68	10,621.00	3,565.06	106.79	3,565.74	0.00	0.00	0.00	
15,100.00	90.00	359.68	10,621.00	3,665.06	106.23	3,665.73	0.00	0.00	0.00	
15,200.00	90.00	359.68	10,621.00	3,765.06	105.67	3,765.72	0.00	0.00	0.00	
15,300.00	90.00	359.68	10,621.00	3,865.06	105.10	3,865.71	0.00	0.00	0.00	
15,400.00	90.00	359.68	10,621.00	3,965.05	104.54	3,965.71	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 73H
<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 73H	<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	359.68	10,621.00	4,065.05	103.98	4,065.70	0.00	0.00	0.00
15,600.00	90.00	359.68	10,621.00	4,165.05	103.42	4,165.69	0.00	0.00	0.00
15,700.00	90.00	359.68	10,621.00	4,265.05	102.86	4,265.68	0.00	0.00	0.00
15,800.00	90.00	359.68	10,621.00	4,365.05	102.29	4,365.67	0.00	0.00	0.00
15,900.00	90.00	359.68	10,621.00	4,465.05	101.73	4,465.67	0.00	0.00	0.00
16,000.00	90.00	359.68	10,621.00	4,565.05	101.17	4,565.66	0.00	0.00	0.00
16,045.96	90.00	359.68	10,621.00	4,611.00	100.91	4,611.61	0.00	0.00	0.00
<b>PPP-2 Cross</b>									
16,100.00	90.00	359.68	10,621.00	4,665.04	100.61	4,665.65	0.00	0.00	0.00
16,200.00	90.00	359.68	10,621.00	4,765.04	100.05	4,765.64	0.00	0.00	0.00
16,300.00	90.00	359.68	10,621.00	4,865.04	99.48	4,865.63	0.00	0.00	0.00
16,400.00	90.00	359.68	10,621.00	4,965.04	98.92	4,965.62	0.00	0.00	0.00
16,500.00	90.00	359.68	10,621.00	5,065.04	98.36	5,065.62	0.00	0.00	0.00
16,600.00	90.00	359.68	10,621.00	5,165.04	97.80	5,165.61	0.00	0.00	0.00
16,700.00	90.00	359.68	10,621.00	5,265.03	97.24	5,265.60	0.00	0.00	0.00
16,800.00	90.00	359.68	10,621.00	5,365.03	96.67	5,365.59	0.00	0.00	0.00
16,900.00	90.00	359.68	10,621.00	5,465.03	96.11	5,465.58	0.00	0.00	0.00
17,000.00	90.00	359.68	10,621.00	5,565.03	95.55	5,565.57	0.00	0.00	0.00
17,100.00	90.00	359.68	10,621.00	5,665.03	94.99	5,665.57	0.00	0.00	0.00
17,200.00	90.00	359.68	10,621.00	5,765.03	94.43	5,765.56	0.00	0.00	0.00
17,300.00	90.00	359.68	10,621.00	5,865.02	93.86	5,865.55	0.00	0.00	0.00
17,400.00	90.00	359.68	10,621.00	5,965.02	93.30	5,965.54	0.00	0.00	0.00
17,500.00	90.00	359.68	10,621.00	6,065.02	92.74	6,065.53	0.00	0.00	0.00
17,600.00	90.00	359.68	10,621.00	6,165.02	92.18	6,165.52	0.00	0.00	0.00
17,700.00	90.00	359.68	10,621.00	6,265.02	91.62	6,265.52	0.00	0.00	0.00
17,800.00	90.00	359.68	10,621.00	6,365.02	91.05	6,365.51	0.00	0.00	0.00
17,900.00	90.00	359.68	10,621.00	6,465.02	90.49	6,465.50	0.00	0.00	0.00
18,000.00	90.00	359.68	10,621.00	6,565.01	89.93	6,565.49	0.00	0.00	0.00
18,100.00	90.00	359.68	10,621.00	6,665.01	89.37	6,665.48	0.00	0.00	0.00
18,200.00	90.00	359.68	10,621.00	6,765.01	88.81	6,765.48	0.00	0.00	0.00
18,300.00	90.00	359.68	10,621.00	6,865.01	88.24	6,865.47	0.00	0.00	0.00
18,400.00	90.00	359.68	10,621.00	6,965.01	87.68	6,965.46	0.00	0.00	0.00
18,500.00	90.00	359.68	10,621.00	7,065.01	87.12	7,065.45	0.00	0.00	0.00
18,600.00	90.00	359.68	10,621.00	7,165.00	86.56	7,165.44	0.00	0.00	0.00
18,700.00	90.00	359.68	10,621.00	7,265.00	86.00	7,265.43	0.00	0.00	0.00
18,800.00	90.00	359.68	10,621.00	7,365.00	85.43	7,365.43	0.00	0.00	0.00
18,900.00	90.00	359.68	10,621.00	7,465.00	84.87	7,465.42	0.00	0.00	0.00
19,000.00	90.00	359.68	10,621.00	7,565.00	84.31	7,565.41	0.00	0.00	0.00
19,100.00	90.00	359.68	10,621.00	7,665.00	83.75	7,665.40	0.00	0.00	0.00
19,200.00	90.00	359.68	10,621.00	7,764.99	83.19	7,765.39	0.00	0.00	0.00
19,300.00	90.00	359.68	10,621.00	7,864.99	82.62	7,865.38	0.00	0.00	0.00
19,400.00	90.00	359.68	10,621.00	7,964.99	82.06	7,965.38	0.00	0.00	0.00
19,500.00	90.00	359.68	10,621.00	8,064.99	81.50	8,065.37	0.00	0.00	0.00
19,600.00	90.00	359.68	10,621.00	8,164.99	80.94	8,165.36	0.00	0.00	0.00
19,700.00	90.00	359.68	10,621.00	8,264.99	80.38	8,265.35	0.00	0.00	0.00
19,800.00	90.00	359.68	10,621.00	8,364.99	79.81	8,365.34	0.00	0.00	0.00
19,900.00	90.00	359.68	10,621.00	8,464.98	79.25	8,465.34	0.00	0.00	0.00
20,000.00	90.00	359.68	10,621.00	8,564.98	78.69	8,565.33	0.00	0.00	0.00
20,100.00	90.00	359.68	10,621.00	8,664.98	78.13	8,665.32	0.00	0.00	0.00
20,200.00	90.00	359.68	10,621.00	8,764.98	77.57	8,765.31	0.00	0.00	0.00
20,300.00	90.00	359.68	10,621.00	8,864.98	77.00	8,865.30	0.00	0.00	0.00
20,400.00	90.00	359.68	10,621.00	8,964.98	76.44	8,965.29	0.00	0.00	0.00
20,500.00	90.00	359.68	10,621.00	9,064.97	75.88	9,065.29	0.00	0.00	0.00
20,600.00	90.00	359.68	10,621.00	9,164.97	75.32	9,165.28	0.00	0.00	0.00
20,700.00	90.00	359.68	10,621.00	9,264.97	74.76	9,265.27	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 73H
<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 73H	<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)	
20,800.00	90.00	359.68	10,621.00	9,364.97	74.19	9,365.26	0.00	0.00	0.00	
20,900.00	90.00	359.68	10,621.00	9,464.97	73.63	9,465.25	0.00	0.00	0.00	
21,000.00	90.00	359.68	10,621.00	9,564.97	73.07	9,565.24	0.00	0.00	0.00	
21,100.00	90.00	359.68	10,621.00	9,664.96	72.51	9,665.24	0.00	0.00	0.00	
21,200.00	90.00	359.68	10,621.00	9,764.96	71.95	9,765.23	0.00	0.00	0.00	
21,300.00	90.00	359.68	10,621.00	9,864.96	71.38	9,865.22	0.00	0.00	0.00	
21,310.52	90.00	359.68	10,621.00	9,875.48	71.32	9,875.73	0.00	0.00	0.00	
<b>TD at 21310.52' MD</b>										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
KOP (Iridium MDP1 - hit/miss target - Shape - Point - plan misses target center by 978.36ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)	0.00	0.00	0.00	-969.38	132.25	461,439.63	712,596.63	32.267357	-103.779253	
PBHL (Iridium MDP1 - plan hits target center - Point)	0.00	0.00	10,621.00	9,875.48	71.32	472,283.84	712,535.71	32.297166	-103.779269	
FTP (Iridium MDP1 - plan misses target center by 25.56ft at 10871.44ft MD (10596.82 TVD, -561.08 N, 129.44 E) - Point)	0.00	0.01	10,621.00	-569.35	130.03	461,839.63	712,594.41	32.268457	-103.779254	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
468.00	468.00	RUSTLER				
826.00	826.00	SALADO				
2,746.00	2,746.00	CASTILE				
4,250.00	4,250.00	DELAWARE				
4,278.00	4,278.00	BELL CANYON				
5,168.14	5,166.00	CHERRY CANYON				
6,472.28	6,448.00	BRUSHY CANYON				
8,111.40	8,057.00	BONE SPRING				
9,197.35	9,123.00	BONE SPRING 1ST				
9,852.39	9,766.00	BONE SPRING 2ND				

**OXY**  
Planning Report

<b>Database:</b>	HOPSPP	<b>Local Co-ordinate Reference:</b>	Well Iridium MDP1 28_21 Fed Com 73H
<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 73H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Permitting Plan		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
4,418.00	4,418.00	0.00	0.00	Build 1°/100'
5,518.07	5,511.33	-104.51	12.74	Hold 11° Tangent
10,029.25	9,939.61	-959.01	116.93	KOP, Build & Turn 10°/100'
10,754.38	10,552.00	-669.00	129.04	PPP-1 Cross
11,038.52	10,621.00	-396.36	129.06	Landing Point
16,045.96	10,621.00	4,611.00	100.91	PPP-2 Cross
21,310.52	10,621.00	9,875.48	71.32	TD at 21310.52' MD



# API BTC -Special Clearance

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

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

CONDITIONS

Action 446109

**CONDITIONS**

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 446109
	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