

**Notice of Intent** 

Sundry ID: 2836721

Type of Submission: Notice of Intent

Date Sundry Submitted: 02/13/2025

Date proposed operation will begin: 05/01/2025

Type of Action: APD Change Time Sundry Submitted: 02:10

**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 SESW 610' FSL & 1739' FWL to SESW 610' FSL & 1904' FWL. BHL updated from NWNW 20' FNL & 330' FWL to NWNW 20' FNL & 330' FWL. 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\_21FEDCOM71H\_C102\_20250213140838.pdf

IRIDIUMMDP128\_21FEDCOM71H\_APDCHGSUNDRYWORKSHEET\_20250213140826.pdf

IRIDIUMMDP128\_21FEDCOM71H\_VAM\_SPRINT\_SF\_5.5in\_20ppf\_P110RY\_20250213140816.pdf

IRIDIUMMDP128\_21FEDCOM71H\_ExistingRoads\_20250213140806.pdf

IRIDIUMMDP128\_21FEDCOM71H\_DrillPlan\_20250213140752.pdf

IridiumMDP128\_21FedCom71H\_DirectPlan\_20250213140742.pdf

IRIDIUMMDP128\_21FEDCOM71H\_API\_BTC\_SC\_10.750in\_45.50ppf\_L80IC\_20250213140653.pdf

IRIDIUMMDP128\_21FEDCOM71H\_2024\_KPLA\_Addendum\_WellboreSchematics\_20250213140640.pdf

 

 Hereinen in Direction MDP 128-21 FEDERAL COM
 Well Location: T23S / R31E / SEC 28 / SESW / 32.2698582 / -103.7856667
 County or Parish/State: EDE 7 of 89 NM

 Well Number: 71H
 Type of Well: OIL WELL
 Allottee or Tribe Name:

 Lease Number: NMNM40659
 Unit or CA Name:
 Unit or CA Number: NMNM138937

 US Well Number:
 Operator: OXY USA INCORPORATED

### **Conditions of Approval**

### Additional

IRIDIUM\_MDP1\_28\_21\_FEDERAL\_COM\_71H\_\_\_COA\_20250325163648.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** 

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:

Phone: (575)631-6618 Email address: michael\_wilson@oxy.com

**BLM Point of Contact** 

BLM POC Name: CHRISTOPHER WALLS BLM POC Phone: 5752342234 Disposition: Approved Signature: Chris Walls

Released to Imaging: 4/18/2025 7:24:25 AM

BLM POC Title: Petroleum Engineer BLM POC Email Address: cwalls@blm.gov

Disposition Date: 03/26/2025

Zip:

Signed on: FEB 13, 2025 02:08 PM

### Received by OCD: 3/27/2025 7:17:05 AM

| <i>ceeived by</i> 0 cb. 5/2//2  |  |   |   | 1 uge 5 0j .  |  |  |  |
|---|--|---|---|---|--|--|--|
| Form 3160-5<br>(June 2019)  | UNITED STATES<br>DEPARTMENT OF THE IN<br>BUREAU OF LAND MANA   | TERIOR<br>GEMENT  | FO<br>ON<br>Expir<br>5. Lease Serial No.  | DRM APPROVED<br>MB No. 1004-0137<br>res: October 31, 2021   |  |  |  |
| SUN<br>Do not use<br>abandoned  | DRY NOTICES AND REPOR<br>this form for proposals to<br>well. Use Form 3160-3 (API  | 6. If Indian, Allottee or Tribe Name  |   |   |  |  |  |
| SUE   | MIT IN TRIPLICATE - Other instruct   | tions on page 2   | 7. If Unit of CA/Agreement, Na  | me and/or No.   |  |  |  |
| 1. Type of Well   | Gas Well Other   |   | 8. Well Name and No.  |   |  |  |  |
| 2. Name of Operator   |  |   | 9. API Well No.   |   |  |  |  |
| 3a. Address   | 31   | 10. Field and Pool or Exploratory Area  |   |   |  |  |  |
| 4. Location of Well (Footage,   | Sec., T.,R.,M., or Survey Description)   |   | 11. Country or Parish, State  | 11. Country or Parish, State  |  |  |  |
|   | 12. CHECK THE APPROPRIATE BOX  | K(ES) TO INDICATE NATURE (  | DF NOTICE, REPORT OR OTHI   | ER DATA   |  |  |  |
| TYPE OF SUBMISSIO   | N  | TYPE  | E OF ACTION   |   |  |  |  |
| Notice of Intent  | Acidize  | Deepen [<br>Hydraulic Fracturing  | Production (Start/Resume)<br>Reclamation  | Water Shut-Off Well Integrity   |  |  |  |
| Subsequent Report   | Casing Repair<br>Change Plans  | New Construction         [           Plug and Abandon         [   | Recomplete<br>Temporarily Abandon   | Other   |  |  |  |
| Final Abandonment No  | tice Convert to Injection  | Plug Back   | Water Disposal  |   |  |  |  |
| <ol> <li>Describe Proposed or Con<br/>the proposal is to deepen<br/>the Bond under which the<br/>completion of the involve<br/>completed. Final Abandor<br/>is ready for final inspectio</li> </ol> | pleted Operation: Clearly state all pertin<br>irectionally or recomplete horizontally,<br>work will be perfonned or provide the B<br>operations. If the operation results in a<br>ment Notices must be filed only after all<br>1.) | nent details, including estimated s<br>give subsurface locations and me<br>Bond No. on file with BLM/BIA. I<br>multiple completion or recomple<br>I requirements, including reclama | starting date of any proposed worl<br>asured and true vertical depths of<br>Required subsequent reports must<br>tion in a new interval, a Form 310<br>tion, have been completed and the | k and approximate duration thereof. If<br>all pertinent markers and zones. Attach<br>be filed within 30 days following<br>50-4 must be filed once testing has been<br>e operator has detennined that the site |  |  |  |

| 14. I hereby certify that the foregoing is true and correct. Name ( <i>Printed/Typed</i> )  |  |  |
|---|--|--|
|   | Title  |  |
|   |  |  |
| Signature   | Date   |  |
| THE SPACE FOR FEDE  | RAL OR STATE OF                                | ICE USE  |
| Approved by   |  |  |
|   | Title  | Date   |
| Conditions of approval, if any, are attached. Approval of this notice does not warrant of 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. | or<br>se Office                                |  |
| Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any any false, fictitious or fraudulent statements or representations as to any matter within  | person knowingly and will<br>its jurisdiction. | fully to make to any department or agency of the United States |

#### **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: SESW / 610 FSL / 1739 FWL / TWSP: 23S / RANGE: 31E / SECTION: 28 / LAT: 32.2698582 / LONG: -103.7856667 (TVD: 0 feet, MD: 0 feet ) PPP: SWSW / 100 FSL / 330 FWL / TWSP: 23S / RANGE: 31E / SECTION: 28 / LAT: 32.2684541 / LONG: -103.7902235 (TVD: 10628 feet, MD: 11232 feet ) BHL: NWNW / 20 FNL / 330 FWL / TWSP: 23S / RANGE: 31E / SECTION: 21 / LAT: 32.2971634 / LONG: -103.790263 (TVD: 10558 feet, MD: 21677 feet )

### PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

# OPERATOR'S NAME:OXY USA INC.WELL NAME & NO.:IRIDIUM MDP1 28 21 FEDERAL COM 71HLOCATION:Sec28, T23S, R31ECOUNTY:Eddy County, New Mexico

### SUNDRY COA. ALL PREVIOUS COAs STILL APPLY

### COA

| $H_2S$       | 0  | No                                    | • Yes                |                     |  |  |
|--------------|--|---------------------------------------|----------------------|---------------------|--|--|
| Potash /     | ○ None   | O Secretary                           | • R-111-Q            | Open Annulus        |  |  |
| WIPP         | 4-String Design: Ope   | n 1st Int x 2nd Annulus (             | ICP 2 below Relief Z | Cone)               |  |  |
| Cave / Karst | • Low  | O Medium                              | O High               | Critical            |  |  |
| Wellhead     | Conventional   | Multibowl                             | O Both               | O Diverter          |  |  |
| Cementing    | Primary Squeeze  | 🗆 Cont. Squeeze                       | EchoMeter            | DV Tool             |  |  |
| Special Req  | 🗆 Capitan Reef   | Water Disposal                        | COM                  | 🗆 Unit              |  |  |
| Waste Prev.  | Prev.         O Self-Certification         O Waste Min. Plan         Image: APD Summary Self-Certification |                                       | • APD Submitted      | prior to 06/10/2024 |  |  |
| Additional   | Flex Hose  | Casing Clearance                      | Pilot Hole           | Break Testing       |  |  |
| Language     | Four-String  | <ul> <li>Offline Cementing</li> </ul> | 🗆 Fluid-Filled       |                     |  |  |

### A. HYDROGEN SULFIDE

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

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

### **B.** CASING 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 <u>8 hours</u> or <u>500 pounds compressive strength</u>, 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.
- 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.). Please ensure to keep well path vertical till past the salt interval. 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 **11,155** 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. <u>Operator must verify top of cement per R-111-Q</u> <u>requirements.</u> 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. <u>Operator must run Echo-meter to verify Cement Slurry/Fluid top in the</u> <u>annulus OR operator shall run a CBL from TD of the intermediate 2 casing to surface</u> <u>after the second stage BH to verify TOC.</u> 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. <u>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.</u>

## 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 **21,419** 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. <u>Operator must verify top of cement per R-111-Q</u> <u>requirements.</u> 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).
  - 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. <u>When the</u> <u>Communitization Agreement number is known, it shall also be on the sign.</u>

### **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; (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.
    - 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

 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.

- 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 <u>8 hours</u>. 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. <u>Wait on cement (WOC) for Water Basin:</u> 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 <u>8 hours</u>. 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.
  - 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

Received by OCD: 3/27/2025 7:17:05 AM

<u>C-102</u>

Submit Electronically Via OCD Permitting

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

Page 15 of 39 Revised July 9, 2024 PAGE 1 OF 2

Initial Submittal

Submittal Amended Report

As Drilled

|                         |                                       |  |                                       |                              | WELL LOCATIO  | N INFORMATION   |                    |                                |                   |  |  |  |
|-------------------------|---------------------------------------|--|---------------------------------------|------------------------------|---|---|--------------------|--------------------------------|-------------------|--|--|--|
| API Nu                  | mber                                  |  | Pool Code                             | •                            |   |   |                    |                                |                   |  |  |  |
| 30-0                    | 015                                   |  | 3374                                  | 0                            |   | INGLE WELLS; BONESPRING                               |                    |                                |                   |  |  |  |
| Propert                 | y Code                                |  | Property Na                           | ame                          |   | Well Number   |                    |                                |                   |  |  |  |
| IRIDIUM MDP1            |                                       |  |                                       | 28_21 FED COM                |   | 71F   | I                  |                                |                   |  |  |  |
| OGRID No. Operator Name |                                       |  |                                       |                              |   | Ground Level Elevat                                   | ion                |                                |                   |  |  |  |
|                         | 16690                                 | 5  |                                       |                              | OXY U   | SA INC.   |                    | 3375                           | 5'                |  |  |  |
| Surfac                  | e Owner:                              | State                                    | Fee Tr                                | ibal 🔽                       | Federal   | Mineral Owner: St                                     | tate 🗌 Fee [       | Tribal 🖌 Federal               | l                 |  |  |  |
|                         |                                       |  |                                       |                              |   |   |                    |                                |                   |  |  |  |
| Ш                       | Section                               | Township                                 | Pange                                 | Lot                          | Surface   | Location  | Latitude (NAD82)   | Longitude (NAD82)              | County            |  |  |  |
|                         | 20                                    | 225                                      |                                       | Lot                          |   |   | 22 2608550         | 102 78512200                   | EDDV              |  |  |  |
| IN                      | 28                                    | 235                                      | SIE                                   |                              | 610 FSL   | 1904 FWL  | 32.20983394        | + -105./8515509                | EDDY              |  |  |  |
|                         |                                       |  |                                       |                              | Bottom Ho   | le Location   |                    |                                |                   |  |  |  |
| UL                      | Section                               | Township                                 | Range                                 | Lot                          | Ft. from N/S  | Ft. from E/W  | Latitude (NAD83)   | Longitude (NAD83)              | County            |  |  |  |
| D                       | 21                                    | 23S                                      | 31E                                   |                              | 20' FNL   | 330' FWL  | 32.29716340        | -103.79026300                  | EDDY              |  |  |  |
|                         |                                       |  |                                       |                              |   |   |                    |                                |                   |  |  |  |
| Dedica                  | ted Acres                             | Infill or Defir                          | ning Well                             | Definir                      | g Well API  | Overlapping Spacing Unit (Y                           | (/N)               | Consolidation Code             |                   |  |  |  |
| 6                       | 40.00                                 |  | 8                                     | PENI                         | NG-IRIDII IM 72H                                      | VES   | ,                  |                                |                   |  |  |  |
|                         | N 1                                   |  | _                                     |                              |   |   |                    |                                |                   |  |  |  |
| Order                   | Numbers:                              |  |                                       |                              |   | Well setbacks are under C                             | common Owners      | ship: Yes No                   | 0                 |  |  |  |
|                         |                                       |  |                                       |                              | Kick Off P  | Point (KOP)   |                    |                                |                   |  |  |  |
| UL                      | Section                               | Township                                 | Range                                 | Lot                          | Ft. from N/S  | Ft. from E/W  | Latitude (NAD83)   | Longitude (NAD83)              | County            |  |  |  |
| D                       | 33                                    | 238                                      | 31E                                   |                              | 300' FNL  | 330' FWL  | 32.26735460        | 0 -103.79022198                | EDDY              |  |  |  |
|                         | •                                     | •  | •                                     |                              | Einst Talza   | Doint (FTD)   |                    | ·                              |                   |  |  |  |
| UL                      | Section                               | Township                                 | Range                                 | Lot                          | First Take<br>Ft. from N/S                            | Ft. from E/W  | Latitude (NAD83)   | Longitude (NAD83)              | County            |  |  |  |
| м                       | 28                                    | 238                                      | 31E                                   |                              | 100' FSL  | 330' FWL 32 26845411                                  |                    | 1 -103.79022338                | EDDY              |  |  |  |
|                         |                                       | -00                                      | 012                                   |                              | 100 1.52  | 0001112   | 02.200.10.11       | 1001//022000                   | 2221              |  |  |  |
|                         |                                       |  |                                       |                              | Last Take   | Point (LTP)   |                    |                                | -                 |  |  |  |
| UL                      | Section                               | Township                                 | Range                                 | Lot                          | Ft. from N/S  | Ft. from E/W  | Latitude (NAD83)   | Longitude (NAD83)              | County            |  |  |  |
| D                       | 21                                    | 238                                      | 31E                                   |                              | 100' FNL  | 330' FWL  | 32.29694349        | 9 -103.79026270                | EDDY              |  |  |  |
|                         |                                       |  |                                       |                              |   |   |                    |                                |                   |  |  |  |
| Unitize                 | d Area or Area                        | of Uniform Inte                          | rest                                  |                              |   |   | Ground Flo         | oor Elevation                  |                   |  |  |  |
|                         |                                       |  |                                       | Spacin                       | ig Unit Type: 🛛 🗙 Horiz                               | ontal Vertical  |                    | 3375'                          |                   |  |  |  |
|                         |                                       |  |                                       | -                            |   |   |                    |                                |                   |  |  |  |
|                         |                                       |  |                                       |                              |   | 1   |                    |                                |                   |  |  |  |
| OPE                     | RATOR CE                              | RTIFICATIO                               | NS                                    |                              |   | SURVEYOR CERTIFICATIONS                               |                    |                                |                   |  |  |  |
| I hereb                 | y certify that th                     | ne information co                        | ontained herein                       | is true and                  | l complete to the best of my                          | I hereby certify that the well l                      | location shown on  | this plat was plotted from fi  | eld notes of      |  |  |  |
| knowle                  | dge and belief,<br>was a working      | and, if the well i                       | is a vertical or                      | directional                  | well, that this organization                          | actual surveys made by me or<br>the best of my belief | r under my supervi | ision, and that the same is tr | ue and correct to |  |  |  |
| propos                  | ed bottom hole                        | location or has                          | a right to drill                      | this well a                  | this location pursuant to a                           | the best of my bettef.                                |                    |                                |                   |  |  |  |
| contrac<br>pooling      | ct with an owne<br>gagreement or      | er of a working in<br>a compulsory po    | nterest or unlea<br>ooling order he   | ised miner<br>retofore en    | al interest, or to a voluntary tered by the division. |   | IN P               | CI.                            |                   |  |  |  |
| 10.1.                   |                                       |  |                                       |                              |   |   | ( LOYD I           | SHOP                           |                   |  |  |  |
| lf this v<br>consen     | vell is a norizo<br>t of at least one | ntal well, I furthe<br>e lessee or owner | er certify that t<br>• of a working i | his organiz<br>interest or i | ation has received the unleased mineral interest in   | ,   | M WS               | Eta                            |                   |  |  |  |
| each tr                 | act (in the targ                      | et pool or forma<br>d or obtained a      | tion) in which                        | any part of                  | the well's completed                                  | /   |                    | 10/1                           |                   |  |  |  |
|                         |                                       |  | compuisory poo                        | ning order                   | jioni ine uivisi011.                                  |   | A 216              | 53                             |                   |  |  |  |
| Sa                      | <u>ra Gu</u> t                        | hrie                                     | 2/13/                                 | 2025                         |   | *   | R.                 | Shord 5                        |                   |  |  |  |
| Signa                   | ature                                 |  | Date                                  |                              |   |   | 15/                | 1541                           |                   |  |  |  |
| Sar                     | a Guthrie                             |  |                                       |                              |   |   | US/ONIA            | SUR                            |                   |  |  |  |
| Print                   | ed Name                               |  |                                       |                              |   |   | AVIE               |                                |                   |  |  |  |
|                         | _                                     | ~  |                                       |                              |   | Signature and Sector                                  | Professional S-    | INVALION                       |                   |  |  |  |
| sara                    | a_guthrie                             | @oxy.com                                 |                                       |                              |   | Certificate Number                                    | Data               | arveyor<br>of Survey           |                   |  |  |  |
| Emai                    | I Address                             |  |                                       |                              |   | Date of Survey  |                    |                                |                   |  |  |  |
| 1                       |                                       |  |                                       |                              |   | 210   | 555                | JANUARI 4                      | .1. 2023          |  |  |  |

Released to Imaging of All & Monopletion until all interests have been consolidated or a non-standard unit has been approved by the division.

### Received by OCD: 3/27/2025 7:17:05 AM ACREAGE DEDICATION PLATS IRIDIUM MDP1 28\_21 FED COM 71H



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

**Released to Imaging: 4/18/2025 7:24:25 AM** 

### OXY APD CHANGE SUNDRY LIST FORM

AFMSS Blurb

| DATE SUNDRY WORKSHEET CREATED | 2/12/2025                          |
|-------------------------------|------------------------------------|
| VELL NAME_NUMBER              | Iridium MDP1 28-21 Federal Com 71H |
| API NUMBER                    | Pending                            |
| STIMATED 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 Re       | gulatory to O                | Complete)                         |                              |                      |                        |                              |                         | SUI        | NDRY PLAN (Group | os to complete the l | atest plan)  |         |                      |                       |
|------|---------------------------------------|------------------------------------|--------------------------|-------|-------------------------|------------------------------|-----------------------------------|------------------------------|----------------------|------------------------|------------------------------|-------------------------|------------|------------------|----------------------|--------------|---------|----------------------|-----------------------|
|      | Date APD/BASE LINE APPROVED: DATE Sur |                                    |                          |       |                         |                              | DATE Sundry Worksheet : 2/12/2025 |                              |                      |                        |                              |                         |            |                  |                      |              |         |                      |                       |
|      | NAME                                  | Iridium MDP1 28-21 Federal Com 71H |                          |       |                         |                              |                                   | Iridium MDP1 28-21 Federal ( | Com 71H              |                        |                              |                         |            |                  |                      |              |         |                      |                       |
|      | NSL                                   | No                                 |                          |       |                         |                              |                                   | No                           |                      |                        |                              |                         |            |                  |                      |              |         |                      |                       |
| guiu | SHL                                   | SESW 610' FSL & 173                | 39' FWL                  |       |                         |                              |                                   |                              |                      |                        | SESW 610' FSL & 1904' FWL    |                         |            |                  |                      |              |         |                      |                       |
| anr  | PAD SNDDNS_T23S R31E_2803             |                                    |                          |       |                         |                              | SNDDNS_T23S R31E_2803             |                              |                      |                        |                              |                         |            |                  |                      |              |         |                      |                       |
| E a  | BHL NWNW 20' FNL & 330' FWL           |                                    |                          |       |                         |                              | NWNW 20' FNL & 330' FWL           |                              |                      |                        |                              |                         |            |                  |                      |              |         |                      |                       |
| face | HSU SIZE, ACRES 640                   |                                    |                          |       |                         |                              | 640                               |                              |                      |                        |                              |                         |            |                  |                      |              |         |                      |                       |
| Sur  | POOL                                  | Ingle Wells; Bonesp                | ring                     |       |                         |                              |                                   |                              |                      |                        | Ingle Wells; Bonespring      |                         |            |                  |                      |              |         |                      |                       |
| •,   | TVD                                   | 10,558                             |                          |       |                         |                              |                                   |                              |                      |                        | 10,556                       |                         |            |                  |                      |              |         |                      |                       |
|      | TARGET FORMATION                      | Bonespring                         |                          |       |                         |                              |                                   |                              |                      |                        | Bonespring                   |                         |            |                  |                      |              |         |                      |                       |
|      |                                       |                                    |                          |       | APD BAS                 | SE LINE                      |                                   |                              |                      |                        |                              |                         |            | SU               | INDRY PLAN           |              |         |                      |                       |
|      | RAN                                   | Section                            | Hole Size (in.)          | MD    | TVD                     | Csg OD                       | Csg WT                            | Grade                        | Cor                  | ın.                    | Section                      | Hole Size (in.)         | MD         | TVD              | Csg OD (in)          | Csg WT (ppf) | Grade   | Con                  | n.                    |
|      | 0                                     | Surface                            | 17.5                     | 486   | 486                     | 13.375                       | 54.5                              | J-55                         | BT                   | C                      | Surface                      | 17.5                    | 488        | 488              | 13.375               | 54.5         | J-55    | BT                   | C                     |
|      | Int                                   |                                    | 12.25                    | 4295  | 4295                    | 9.625                        | 40                                | L-80 HC                      | BT                   | C                      | Int                          | 12.25                   | 4197       | 4197             | 10.75                | 45.5         | L-80 HC | BTC-                 | SC                    |
|      | U Z                                   | Int2                               | 8.75                     | 10112 | 9859                    | 7.625 26.4 L-80 HC Wedge 425 |                                   | Int2                         | 9.875                | 11155                  | 10556                        | 7.625                   | 26.4       | L-80 HC          | BT                   | C            |         |                      |                       |
|      | ASI                                   | Prod                               | 6.75                     | 21677 | 10628                   | 5.5                          | 20                                | P-110                        | Wedg                 | e 461                  | Prod                         | 6.75                    | 21419      | 10556            | 5.5                  | 20           | P-110   | Sprin                | g-SF                  |
|      | Ŭ                                     | Liner                              |                          |       |                         |                              |                                   | Liner                        |                      |                        |                              |                         |            |                  |                      |              |         |                      |                       |
|      |                                       |                                    |                          |       | APD BAS                 | APD BASE LINE                |                                   |                              |                      | -                      | •                            | SU                      | INDRY PLAN | •                | 1                    | -            | 1       |                      |                       |
|      | Σ                                     | Section/Stage                      | Slurry                   | Sacks | Yield (ft^3/ft)         | Density (I                   | b Excess                          | тос                          | Placement            | Description            | Section/Stage                | Slurry                  | Sacks      | Yield (ft^3/ft)  | Density (lb/gal)     | Excess       | тос     | Placement            | Description           |
|      | ARA ARA                               | Surf                               | Surface- Tail            | 508   | 1.33                    | 14.8                         | 100%                              | 0                            | Circulate            | Class C+Accel.         | Surf                         | Surface- Tail           | 510        | 1.33             | 14.8                 | 100%         | 0       | Circulate            | Class C+Accel.        |
| 50   | ğ                                     | Int/1                              | Intermediate- Tail       | 141   | 1.33                    | 14.8                         | 20%                               | 3,795                        | Circulate            | Class C+Accel.         | Int                          | Intermediate- Tail      | 85         | 1.33             | 14.8                 | 20%          | 3,697   | Circulate            | Class C+Accel.        |
| Ĩ    | Ē                                     | Int/2                              | Intermediate- Lead       | 1000  | 1.73                    | 12.9                         | 50%                               | 0                            | Circulate            | Class Pozz+ Ret.       | Int                          | Intermediate- Lead      | 591        | 1.73             | 12.9                 | 50%          | 0       | Circulate            | Class Pozz+Ret.       |
| Dri  | Z<br>Z                                | Int2                               | Intermediate 1S- Tail    | 213   | 1.68                    | 13.2                         | 5%                                | 6,714                        | Circulate            | Class C+ Ret., Disper. | Int2                         | Intermediate 1S-Tail    | 596        | 1.68             | 13.2                 | 5%           | 6,714   | Circulate            | Class C+Ret., Disper. |
|      | E E                                   | Int2                               | Intermediate 2S- Tail BH | 209   | 1.71                    | 13.3                         | 25%                               | 3,795                        | Bradenhead Post-Frac | Class C+ Accel.        | Int2                         | Intermediate 2S-Tail BH | 460        | 1.71             | 13.3                 | 25%          | 3,697   | Bradenhean Post-Frac | Class C+Accel.        |
|      | U                                     | Prod                               | Production- Tail         | 683   | 1.84                    | 13.3                         | 25%                               | 9,612                        | Circulate            | Class C+ Ret.          | Prod                         | Production- Tail        | 610        | 1.84             | 13.3                 | 25%          | 10,655  | Circulate            | Class C+Ret.          |
|      |                                       |                                    |                          |       | APD BAS                 | SE LINE                      |                                   |                              |                      |                        |                              |                         | -          | SU               | INDRY PLAN           |              |         |                      |                       |
|      |                                       | BOP Break Tesing V                 | ariance                  | Y     | _                       |                              |                                   |                              |                      |                        | BOP Break Tesing Variance    |                         | Y          | _                |                      |              |         |                      |                       |
|      | CES                                   | 5M Annular BOP Va                  | ariance                  | Y     | _                       |                              |                                   |                              |                      |                        | 5M Annular BOP Variance      |                         | Υ          |                  |                      |              |         |                      |                       |
|      | Bradenhead CBL Variance Y             |                                    |                          |       | Bradenhead CBL Variance |                              | Y                                 |                              |                      |                        |                              |                         |            |                  |                      |              |         |                      |                       |
|      | ARI                                   | Offline Cementing \                | /ariance                 | Y     |                         |                              |                                   |                              |                      |                        | Offline Cementing Variance   |                         | Y          |                  |                      |              |         |                      |                       |
|      | >                                     | Production Annular                 | Clearance Variance       | Y     | _                       |                              |                                   |                              |                      |                        | Production Annular Clearanc  | e 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 8/30/2024

Generated on April 25, 2024



### CONNECTION DATA SHEET

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

Grade: P110 RY



### Semi-Flush

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                        | Controlle | ed 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-Pr | emium Integral Se |
|------------------------------|---------|-------------------|
| 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

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#### APPROXIMATELY 18.20 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 EASTE ON STATE HWY 128 / JAL HWY FOR APPROXIMATELY 1.9 MILES TO AN EXISTING LEASE ROAD ON 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 THE ROAD. HEAD EAST ON SAID LEASE ROAD FOR APPROXIMATELY 0.9 MILES TO AN EXISTING LEASE ROAD FOR THE HIGHWAY. HEAD SOUTH ON SAID LEASE ROAD FOR APPROXIMATELY 0.9 MILES TO A PROPOSED CENTERLINE ACCESS ROAD SURVEY ON THE WEST SIDE OF THE ROAD.



PREPARED BY: DELTA FIELD SERVICES, LLC 510 TRENTON STREET, WEST MONROE, LA 71291 318-323-6900 OFFICE JOB No. OXY\_0003\_IS01\_14393



### Oxy USA Inc. - IRIDIUM MDP1 28\_21 FED COM 71H Drill Plan

### **1. Geologic Formations**

| TVD of Target (ft):        | 10556 | Pilot Hole Depth (ft):             |     |
|----------------------------|-------|------------------------------------|-----|
| Total Measured Depth (ft): | 21419 | Deepest Expected Fresh Water (ft): | 428 |

#### **Delaware Basin**

| Formation       | MD-RKB (ft) | TVD-RKB (ft) | <b>Expected Fluids</b> |
|-----------------|-------------|--------------|------------------------|
| Rustler         | 428         | 428          |                        |
| Salado          | 784         | 784          | Salt                   |
| Castile         | 2728        | 2728         | Salt                   |
| Delaware        | 4197        | 4197         | Oil/Gas/Brine          |
| Bell Canyon     | 4218        | 4218         | Oil/Gas/Brine          |
| Cherry Canyon   | 5112        | 5103         | Oil/Gas/Brine          |
| Brushy Canyon   | 6464        | 6397         | Losses                 |
| Bone Spring     | 8166        | 8016         | Oil/Gas                |
| Bone Spring 1st | 9274        | 9070         | Oil/Gas                |
| Bone Spring 2nd | 9966        | 9728         | Oil/Gas                |
| Bone Spring 3rd |             |              | Oil/Gas                |
| Wolfcamp        |             |              | Oil/Gas                |
| Penn            |             |              | Oil/Gas                |
| Strawn          |             |              | Oil/Gas                |

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

#### 2. Casing Program

|              |           | N    | ID    | Τ١   | /D    |         |         |         |           |
|--------------|-----------|------|-------|------|-------|---------|---------|---------|-----------|
|              | Hole      | From | То    | From | То    | Csg.    | Csg Wt. |         |           |
| Section      | Size (in) | (ft) | (ft)  | (ft) | (ft)  | OD (in) | (ppf)   | Grade   | Conn.     |
| Surface      | 17.5      | 0    | 488   | 0    | 488   | 13.375  | 54.5    | J-55    | BTC       |
| Salt         | 12.25     | 0    | 4197  | 0    | 4197  | 10.75   | 45.5    | L-80 HC | BTC-SC    |
| Intermediate | 9.875     | 0    | 11155 | 0    | 10556 | 7.625   | 26.4    | L-80 HC | BTC       |
| Production   | 6.75      | 0    | 21419 | 0    | 10556 | 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                                       | SF    | Body SF | Joint SF |  |  |  |
| Collapse                                 | Burst | Tension | Tension  |  |  |  |
| 1 00                                     | 1 100 | 1/      | 1/       |  |  |  |

|   | 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?                            | v      |
| If not provide justification (loading assumptions, casing design criteria).                     | 1      |
| Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching           | v      |
| the collapse pressure rating of the casing?   | 1      |
|   |        |
| Is well located within Capitan Reef?  | Ν      |
| 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?   | Ν      |
| 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<br>(ft^3/ft) | Density<br>(Ib/gal) | Excess: | тос    | Placement            | Description           |
|---------|-------|---------------------------|-------|--------------------|---------------------|---------|--------|----------------------|-----------------------|
| Surface | 1     | Surface - Tail            | 510   | 1.33               | 14.8                | 100%    | -      | Circulate            | Class C+Accel.        |
| Int.1   | 1     | Intermediate - Tail       | 85    | 1.33               | 14.8                | 20%     | 3,697  | Circulate            | Class C+Accel.        |
| Int.1   | 1     | Intermediate - Lead       | 591   | 1.73               | 12.9                | 50%     | -      | Circulate            | Class Pozz+Ret.       |
| Int. 2  | 1     | Intermediate 1S - Tail    | 596   | 1.68               | 13.2                | 5%      | 6,714  | Circulate            | Class C+Ret., Disper. |
| Int. 2  | 2     | Intermediate 2S - Tail BH | 460   | 1.71               | 13.3                | 25%     | 3,697  | Bradenhead Post-Frac | Class C+Accel.        |
| Prod.   | 1     | Production - Tail         | 610   | 1.84               | 13.3                | 25%     | 10,655 | 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<br>tested before drilling<br>which hole? | Size?   | Min.<br>Required<br>WP |            | Туре       | ~   | Tested to:               | TVD Depth<br>(ft) per<br>Section: |
|--|---------|------------------------|------------|------------|---|--------------------------|-----------------------------------|
|  |         | 5M                     |            | Annular    | <b>&gt;</b>   | 70% of working pressure  |                                   |
|  |         |                        |            | Blind Ram  | ✓   |                          |                                   |
| 12.25" Hole  | 13-5/8" | 514                    |            | Pipe Ram   |   | 250 pci / 5000 pci       | 4197                              |
|  |         |                        |            | Double Ram | ✓   | 230 psi / 3000 psi       |                                   |
|  |         |                        | Other*     |            |   |                          |                                   |
|  |         | 5M                     |            | Annular    | <   | 70% of working pressure  |                                   |
|  | 13-5/8" | ,<br>5M                |            | Blind Ram  | <   |                          |                                   |
| 9.875" Hole  |         |                        | Pipe Ram   |            |   |                          | 10556                             |
|  |         |                        |            | Double Ram | <   | 250 psi / 5000 psi       |                                   |
|  |         |                        | Other*     |            |   |                          |                                   |
|  |         | 5M                     |            | Annular    | <ul> <li>Image: A start of the start of</li></ul> | 100% of working pressure |                                   |
| 6.75" Hole   |         |                        | Blind Ram  |            | ✓   |                          | 10556                             |
|  | 13-5/8" | 1014                   |            | Pipe Ram   |   | 250 poi / 10000 poi      |                                   |
|  |         | 10101                  | Double Ram |            | ✓   | 250 psi / 10000 psi      |                                   |
|  |         |                        | Other*     |            |   | ]                        |                                   |

\*Specify if additional ram is utilized

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

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

#### **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     |

A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.

Are anchors required by manufacturer?

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

See attached schematics.

#### **BOP Break Testing Request**

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

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

### 5. Mud Program

|                | Depth     |         | Depth - TVD |         |   | Weight     |           | Water |
|----------------|-----------|---------|-------------|---------|---|------------|-----------|-------|
| Section        | From (ft) | To (ft) | From (ft)   | To (ft) | Туре                                      | (ppg)      | Viscosity | Loss  |
| Surface        | 0         | 488     | 0           | 488     | Water-Based Mud                           | 8.6 - 8.8  | 40-60     | N/C   |
| Intermediate 1 | 488       | 4197    | 488         | 4197    | Saturated Brine-Based<br>or Oil-Based Mud | 8.0 - 10.0 | 35-45     | N/C   |
| Intermediate 2 | 4197      | 11155   | 4197        | 10556   | Water-Based or Oil-<br>Based Mud          | 8.0 - 10.0 | 38-50     | N/C   |
| Production     | 11155     | 21419   | 10556       | 10556   | Water-Based or Oil-<br>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 | BVT/MD Totco/Visual Monitoring  |
|----------------------------------|---------------------------------|
| loss or gain of fluid?           | 1 VI/WD Totco/Visual Wonitoning |

### 6. Logging and Testing Procedures

| Loggi  | ng, Coring and Testing.  |  |  |  |
|--|--|--|--|--|
| Vac  | 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  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

| Addit | tional 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    | 6862 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.

| Ν | 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 3 well pad in batch by section: all surface sections, intermediate        | Vac    |
| sections and production sections. The wellhead will be secured with a night cap whenever       | res    |
| the rig is not over the well.  |        |
| 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,    | Yes    |
| 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.  |        |
| Total Estimated Cuttings Volume: 1800 bbls   |        |

## OXY

PRD NM DIRECTIONAL PLANS (NAD 1983) Iridium MDP1 28\_21 Fed Com Iridium MDP1 28\_21 Fed Com 71H

Wellbore #1

**Plan: Permitting Plan** 

# **Standard Planning Report**

31 January, 2025

### **OXY** Planning Report

| Database:<br>Company:<br>Project:<br>Site:<br>Well:<br>Well:<br>Design:          | HOPSPP<br>ENGINEE<br>PRD NM<br>Iridium M<br>Iridium M<br>Wellbore<br>Permitting | ERING DES<br>DIRECTIO<br>DP1 28_21<br>DP1 28_21<br>#1<br>g Plan | BIGNS<br>NAL PLANS (I<br>Fed Com<br>Fed Com 71H                    | NAD 1983)<br>I  | Local Co-<br>TVD Refer<br>MD Refere<br>North Ref<br>Survey Ca                      | erence:<br>thod:                                      | Well Iridium MI<br>RKB=25' @ 34<br>RKB=25' @ 34<br>Grid<br>Minimum Curva | /ell Iridium MDP1 28_21 Fed Com 71H<br>KB=25' @ 3400.00ft<br>KB=25' @ 3400.00ft<br>irid<br>linimum Curvature |  |   |
|--|---|---|--|---|--|---|--|--|--|---|
| Project  | PRD NM D  | DIRECTION   | IAL PLANS (N   | IAD 1983)   |  |   |  |  |  |   |
| Map System:<br>Geo Datum:<br>Map Zone:   | US State Pl<br>North Ameri<br>New Mexico  | ane 1983<br>ican Datum<br>o Eastern Z                           | 1983<br>one  |   | System Datum:     Mean Sea Level       Using geodetic scale factor                 |   |  |  |  |   |
| Site   | Iridium MD  | P1 28_21  | Fed Com  |   |  |   |  |  |  |   |
| Site Position:<br>From:<br>Position Uncertaint                                   | Мар<br><b>у:</b>  | 0.89 f  | Northi<br>Eastin<br>t Slot R                                       | ng:<br>g:<br>adius:   | 462,153.25 usft Latitude: 32.20<br>709,519.68 usft Longitude: -103.78<br>13.200 in |   |  |  |  | 32.269362<br>-103.789196                |
| Well   | Iridium MD  | P1 28_21 F  | Fed Com 71H  |   |  |   |  |  |  |   |
| Well Position<br>Position Uncertaint<br>Grid Convergence:                        | +N/-S<br>+E/-W<br>y   | 0.0<br>0.0<br>2.0<br>0.2  | 0 ft No<br>0 ft Eas<br>0 ft We<br>9 °                              | rthing:<br>sting:<br>ellhead Elev                                     | ation:   | 462,339.38<br>710,774.55                              | usf Lat<br>usf Lor<br>ft Gro   | titude:<br>ngitude:<br>pund Level:   |  | 32.269856<br>-103.785133<br>3,375.00 ft |
| Wellbore   | Wellbore  | #1  |  |   |  |   |  |  |  |   |
| Magnetics  | Model   | Name  | Sample   | e Date  | Declinat<br>(°)  | tion  | Dip /<br>(   | Angle<br>°)  | Field S  | Strength<br>nT)                         |
|  | HD  | GM_FILE   |  | 2/6/2023  |  | 6.43  |  | 59.85  | 47,5   | 70.5000000                              |
| Design   | Permitting  | Plan  |  |   |  |   |  |  |  |   |
| Audit Notes:<br>Version:   |   |   | Phase  | ə:  | PROTOTYPE  | Tie   | On Depth:  |  | 0.00   |   |
| Vertical Section:  |   | De  | epth From (TV<br>(ft)  | /D)   | +N/-S<br>(ft)  | +E/<br>(ff  | -W<br>t)   | Dir  | ection<br>(°)                                    |   |
|  |   |   | 2.50   |   | 0.00   | 0.0   | 00   | 35   | 50.64  |   |
| Plan Survey Tool P<br>Depth From<br>(ft)<br>1 0.00                               | rogram<br>Depth To<br>(ft)<br>21,418.7  | Date<br>D<br>Survey<br>3 Permitti                               | 1/31/2025<br><b>(Wellbore)</b><br>ng Plan (Wellk                   | pore #1)  | Tool Name<br>B001Mc_MWI  | D+HRGM_R5   | Remarks  |  |  |   |
|  |   |   |  |   | MWD+HRGM   |   |  |  |  |   |
| Plan Sections  |   |   |  |   |  |   |  |  |  |   |
| Measured<br>Depth Inclin<br>(ft) (   | nation Az<br>°)   | timuth<br>(°)   | Vertical<br>Depth<br>(ft)  | +N/-S<br>(ft)   | +E/-W<br>(ft)  | Dogleg<br>Rate<br>(°/100ft)                           | Build<br>Rate<br>(°/100ft)   | Turn<br>Rate<br>(°/100ft)  | TFO<br>(°)                                       | Target                                  |
| 0.00<br>3,900.00<br>5,699.61<br>10,159.12<br>11,154.82<br>16,155.82<br>16 156 49 | 0.00<br>0.00<br>18.00<br>18.00<br>90.00<br>90.00                                | 0.00<br>0.00<br>237.09<br>237.09<br>359.65<br>359.65            | 0.00<br>3,900.00<br>5,670.17<br>9,911.50<br>10,556.00<br>10,556.00 | 0.00<br>0.00<br>-152.29<br>-900.84<br>-336.96<br>4,663.95<br>4 664.62 | 0.00<br>0.00<br>-235.33<br>-1,392.02<br>-1,571.95<br>-1,602.69<br>-1 602.69        | 0.00<br>0.00<br>1.00<br>0.00<br>10.00<br>0.00<br>1.50 | 0.00<br>0.00<br>1.00<br>7.23<br>0.00<br>0.00                             | 0.00<br>0.00<br>0.00<br>12.31<br>0.00  | 0.00<br>0.00<br>237.09<br>0.00<br>121.27<br>0.00 | PI-1 (Iridium MDP1                      |
| 10,100.40  | 55.55   | 000.04  | 10,000.00  | -,0002  | 1,002.09   | 0.00  | 0.00   | -1.00  | -30.00   |   |

.

| Databaso: | HOPSPP                      | Local Co-ordinate Reference: | Well Iridium MDP1 28, 21 Fed Com 71H |
|-----------|-----------------------------|------------------------------|--------------------------------------|
| Company:  | ENGINEERING DESIGNS         | TVD Poforonoo:               | RKB-25' @ 2400.00#                   |
| Project:  |                             | ND Reference.                | RKB-25' @ 3400.00ft                  |
| Sito:     | Iridium MDB1 29, 21 Eed Com | MD Reference.                | RKB-25 @ 3400.0011                   |
|           | Indian MDP1 20_211 ed Com   | North Reference.             | Gilu<br>Minimum Cum esture           |
| wen:      |                             | Survey Calculation Method:   | Minimum Curvature                    |
| Wellbore: | Wellbore #1                 |                              |                                      |
| Design:   | Permitting Plan             |                              |                                      |

| Measured<br>Depth<br>(ft)                                | Inclination<br>(°)                    | Azimuth<br>(°)   | Vertical<br>Depth<br>(ft)                                | +N/-S<br>(ft)                                  | +E/-W<br>(ft)                                  | Vertical<br>Section<br>(ft)                    | Dogleg<br>Rate<br>(°/100ft)          | Build<br>Rate<br>(°/100ft)           | Turn<br>Rate<br>(°/100ft)                    |
|--|---------------------------------------|--|--|--|--|--|--------------------------------------|--------------------------------------|--|
| 0.00<br>100.00<br>200.00                                 | 0.00<br>0.00<br>0.00                  | 0.00<br>0.00<br>0.00                                     | 0.00<br>100.00<br>200.00                                 | 0.00<br>0.00<br>0.00                           | 0.00<br>0.00<br>0.00                           | 0.00<br>0.00<br>0.00                           | 0.00<br>0.00<br>0.00                 | 0.00<br>0.00<br>0.00                 | 0.00<br>0.00<br>0.00                         |
| 400.00   | 0.00                                  | 0.00   | 400.00   | 0.00   | 0.00   | 0.00   | 0.00                                 | 0.00                                 | 0.00   |
| 600.00<br>700.00   | 0.00                                  | 0.00   | 600.00<br>700.00   | 0.00   | 0.00   | 0.00   | 0.00                                 | 0.00                                 | 0.00<br>0.00<br>0.00                         |
| 900.00   | 0.00                                  | 0.00   | 900.00   | 0.00   | 0.00   | 0.00   | 0.00                                 | 0.00                                 | 0.00   |
| 1,100.00<br>1,200.00<br>1,300.00                         | 0.00<br>0.00<br>0.00                  | 0.00<br>0.00<br>0.00                                     | 1,100.00<br>1,200.00<br>1,300.00                         | 0.00<br>0.00<br>0.00                           | 0.00<br>0.00<br>0.00                           | 0.00<br>0.00<br>0.00                           | 0.00<br>0.00<br>0.00                 | 0.00<br>0.00<br>0.00                 | 0.00<br>0.00<br>0.00<br>0.00                 |
| 1,400.00<br>1,500.00                                     | 0.00<br>0.00                          | 0.00<br>0.00   | 1,400.00<br>1,500.00                                     | 0.00<br>0.00                                   | 0.00<br>0.00                                   | 0.00<br>0.00                                   | 0.00<br>0.00                         | 0.00<br>0.00                         | 0.00<br>0.00                                 |
| 1,600.00<br>1,700.00<br>1,800.00<br>1,900.00             | 0.00<br>0.00<br>0.00<br>0.00          | 0.00<br>0.00<br>0.00<br>0.00                             | 1,600.00<br>1,700.00<br>1,800.00<br>1,900.00             | 0.00<br>0.00<br>0.00<br>0.00                   | 0.00<br>0.00<br>0.00<br>0.00                   | 0.00<br>0.00<br>0.00<br>0.00                   | 0.00<br>0.00<br>0.00<br>0.00         | 0.00<br>0.00<br>0.00<br>0.00         | 0.00<br>0.00<br>0.00<br>0.00                 |
| 2,000.00<br>2,100.00<br>2 200.00                         | 0.00<br>0.00<br>0.00                  | 0.00<br>0.00<br>0.00                                     | 2,000.00<br>2,100.00<br>2,200.00                         | 0.00<br>0.00<br>0.00                           | 0.00<br>0.00<br>0.00                           | 0.00<br>0.00<br>0.00                           | 0.00<br>0.00<br>0.00                 | 0.00<br>0.00<br>0.00                 | 0.00<br>0.00<br>0.00                         |
| 2,300.00<br>2,400.00                                     | 0.00 0.00                             | 0.00 0.00  | 2,300.00<br>2,400.00                                     | 0.00   | 0.00   | 0.00 0.00                                      | 0.00<br>0.00                         | 0.00 0.00                            | 0.00<br>0.00                                 |
| 2,500.00<br>2,600.00<br>2,700.00<br>2,800.00<br>2,900.00 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00  | 0.00<br>0.00<br>0.00<br>0.00<br>0.00                     | 2,500.00<br>2,600.00<br>2,700.00<br>2,800.00<br>2,900.00 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00           | 0.00<br>0.00<br>0.00<br>0.00<br>0.00           | 0.00<br>0.00<br>0.00<br>0.00<br>0.00           | 0.00<br>0.00<br>0.00<br>0.00<br>0.00 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00         |
| 3,000.00<br>3,100.00<br>3,200.00<br>3,300.00<br>3,400.00 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00  | 0.00<br>0.00<br>0.00<br>0.00<br>0.00                     | 3,000.00<br>3,100.00<br>3,200.00<br>3,300.00<br>3,400.00 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00           | 0.00<br>0.00<br>0.00<br>0.00<br>0.00           | 0.00<br>0.00<br>0.00<br>0.00<br>0.00           | 0.00<br>0.00<br>0.00<br>0.00<br>0.00 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00         |
| 3,500.00<br>3,600.00<br>3,700.00<br>3,800.00<br>3,900.00 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00  | 0.00<br>0.00<br>0.00<br>0.00<br>0.00                     | 3,500.00<br>3,600.00<br>3,700.00<br>3,800.00<br>3,900.00 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00           | 0.00<br>0.00<br>0.00<br>0.00<br>0.00           | 0.00<br>0.00<br>0.00<br>0.00<br>0.00           | 0.00<br>0.00<br>0.00<br>0.00<br>0.00 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00 |
| Build 1°/10  | 0'                                    |  |  |  |  |  |                                      |                                      |  |
| 4,000.00<br>4,100.00<br>4,200.00<br>4,300.00<br>4,400.00 | 1.00<br>2.00<br>3.00<br>4.00<br>5.00  | 237.09<br>237.09<br>237.09<br>237.09<br>237.09<br>237.09 | 4,000.00<br>4,099.96<br>4,199.86<br>4,299.68<br>4,399.37 | -0.47<br>-1.90<br>-4.27<br>-7.58<br>-11.85     | -0.73<br>-2.93<br>-6.59<br>-11.72<br>-18.30    | -0.35<br>-1.39<br>-3.14<br>-5.58<br>-8.71      | 1.00<br>1.00<br>1.00<br>1.00<br>1.00 | 1.00<br>1.00<br>1.00<br>1.00<br>1.00 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00 |
| 4,500.00<br>4,600.00<br>4,700.00<br>4,800.00<br>4,900.00 | 6.00<br>7.00<br>8.00<br>9.00<br>10.00 | 237.09<br>237.09<br>237.09<br>237.09<br>237.09           | 4,498.90<br>4,598.26<br>4,697.40<br>4,796.30<br>4,894.93 | -17.05<br>-23.20<br>-30.29<br>-38.33<br>-47.29 | -26.35<br>-35.85<br>-46.81<br>-59.22<br>-73.08 | -12.54<br>-17.06<br>-22.28<br>-28.19<br>-34.78 | 1.00<br>1.00<br>1.00<br>1.00<br>1.00 | 1.00<br>1.00<br>1.00<br>1.00<br>1.00 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00         |
| 5,000.00<br>5,100.00<br>5,200.00<br>5,300.00             | 11.00<br>12.00<br>13.00<br>14.00      | 237.09<br>237.09<br>237.09<br>237.09                     | 4,993.26<br>5,091.25<br>5,188.87<br>5,286.11             | -57.19<br>-68.02<br>-79.78<br>-92.47           | -88.38<br>-105.11<br>-123.28<br>-142.88        | -42.06<br>-50.03<br>-58.67<br>-68.00           | 1.00<br>1.00<br>1.00<br>1.00         | 1.00<br>1.00<br>1.00<br>1.00         | 0.00<br>0.00<br>0.00<br>0.00                 |

| Database: | HOPSPP                              | Local Co-ordinate Reference: | Well Iridium MDP1 28_21 Fed Com 71H |
|-----------|-------------------------------------|------------------------------|-------------------------------------|
| Company:  | ENGINEERING DESIGNS                 | TVD Reference:               | RKB=25' @ 3400.00ft                 |
| Project:  | PRD NM DIRECTIONAL PLANS (NAD 1983) | MD Reference:                | RKB=25' @ 3400.00ft                 |
| Site:     | Iridium MDP1 28_21 Fed Com          | North Reference:             | Grid                                |
| Well:     | Iridium MDP1 28_21 Fed Com 71H      | Survey Calculation Method:   | Minimum Curvature                   |
| Wellbore: | Wellbore #1                         |                              |                                     |
| Design:   | Permitting Plan                     |                              |                                     |

| Measured<br>Depth<br>(ft) | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(ft) | +N/-S<br>(ft) | +E/-W<br>(ft) | Vertical<br>Section<br>(ft) | Dogleg<br>Rate<br>(°/100ft) | Build<br>Rate<br>(°/100ft) | Turn<br>Rate<br>(°/100ft) |  |
|---------------------------|--------------------|----------------|---------------------------|---------------|---------------|-----------------------------|-----------------------------|----------------------------|---------------------------|--|
| 5.400.00                  | 15.00              | 237.09         | 5.382.92                  | -106.07       | -163.90       | -78.01                      | 1.00                        | 1.00                       | 0.00                      |  |
|                           |                    |                |                           |               |               |                             |                             |                            |                           |  |
| 5,500.00                  | 16.00              | 237.09         | 5,479.29                  | -120.59       | -186.34       | -88.68                      | 1.00                        | 1.00                       | 0.00                      |  |
| 5,600.00                  | 17.00              | 237.09         | 5,575.17                  | -136.02       | -210.18       | -100.03                     | 1.00                        | 1.00                       | 0.00                      |  |
| 5,699.61                  | 18.00              | 237.09         | 5,670.17                  | -152.29       | -235.33       | -112.00                     | 1.00                        | 1.00                       | 0.00                      |  |
| Hold 18° Ta               | ingent             |                |                           |               |               |                             |                             |                            |                           |  |
| 5,700.00                  | 18.00              | 237.09         | 5,670.54                  | -152.36       | -235.43       | -112.05                     | 0.00                        | 0.00                       | 0.00                      |  |
| 5,800.00                  | 18.00              | 237.09         | 5,765.64                  | -169.14       | -261.36       | -124.39                     | 0.00                        | 0.00                       | 0.00                      |  |
| 5,900.00                  | 18.00              | 237.09         | 5,860.75                  | -185.93       | -287.30       | -136.74                     | 0.00                        | 0.00                       | 0.00                      |  |
| 6.000.00                  | 18.00              | 237.09         | 5,955,86                  | -202.71       | -313.24       | -149.08                     | 0.00                        | 0.00                       | 0.00                      |  |
| 6,100.00                  | 18.00              | 237.09         | 6.050.97                  | -219.50       | -339.18       | -161.42                     | 0.00                        | 0.00                       | 0.00                      |  |
| 6.200.00                  | 18.00              | 237.09         | 6.146.08                  | -236.28       | -365.12       | -173.77                     | 0.00                        | 0.00                       | 0.00                      |  |
| 6,300.00                  | 18.00              | 237.09         | 6,241.18                  | -253.07       | -391.05       | -186.11                     | 0.00                        | 0.00                       | 0.00                      |  |
| 6 400 00                  | 10.00              | 227.00         | 6 226 20                  | 260.96        | 446.00        | 100.40                      | 0.00                        | 0.00                       | 0.00                      |  |
| 6,400.00                  | 18.00              | 237.09         | 0,330.29                  | -209.80       | -410.99       | -198.40                     | 0.00                        | 0.00                       | 0.00                      |  |
| 6,500.00                  | 18.00              | 237.09         | 6,431.40                  | -286.64       | -442.93       | -210.80                     | 0.00                        | 0.00                       | 0.00                      |  |
| 6,600.00                  | 18.00              | 237.09         | 6,526.51                  | -303.43       | -468.87       | -223.15                     | 0.00                        | 0.00                       | 0.00                      |  |
| 6,700.00                  | 18.00              | 237.09         | 6,621.61                  | -320.21       | -494.80       | -235.49                     | 0.00                        | 0.00                       | 0.00                      |  |
| 6,800.00                  | 18.00              | 237.09         | 6,716.72                  | -337.00       | -520.74       | -247.83                     | 0.00                        | 0.00                       | 0.00                      |  |
| 6,900.00                  | 18.00              | 237.09         | 6,811.83                  | -353.78       | -546.68       | -260.18                     | 0.00                        | 0.00                       | 0.00                      |  |
| 7,000.00                  | 18.00              | 237.09         | 6,906.94                  | -370.57       | -572.62       | -272.52                     | 0.00                        | 0.00                       | 0.00                      |  |
| 7,100.00                  | 18.00              | 237.09         | 7,002.05                  | -387.35       | -598.55       | -284.87                     | 0.00                        | 0.00                       | 0.00                      |  |
| 7,200.00                  | 18.00              | 237.09         | 7,097.15                  | -404.14       | -624.49       | -297.21                     | 0.00                        | 0.00                       | 0.00                      |  |
| 7,300.00                  | 18.00              | 237.09         | 7,192.26                  | -420.93       | -650.43       | -309.56                     | 0.00                        | 0.00                       | 0.00                      |  |
| 7 400 00                  | 18.00              | 237.00         | 7 287 37                  | 137 71        | 676 37        | 321.00                      | 0.00                        | 0.00                       | 0.00                      |  |
| 7,400.00                  | 18.00              | 237.09         | 7 382 48                  | -437.71       | -070.37       | -321.90                     | 0.00                        | 0.00                       | 0.00                      |  |
| 7,500.00                  | 18.00              | 237.09         | 7,302.40                  | 471.28        | 728.24        | 346 50                      | 0.00                        | 0.00                       | 0.00                      |  |
| 7,000.00                  | 18.00              | 237.03         | 7 572 60                  | -488.07       | -75/ 18       | -358 03                     | 0.00                        | 0.00                       | 0.00                      |  |
| 7,700.00                  | 18.00              | 237.09         | 7,672.03                  | -504 85       | -780 12       | -371 28                     | 0.00                        | 0.00                       | 0.00                      |  |
| 7,000.00                  | 10.00              | 201.00         | 7,007.00                  | 004.00        | 100.12        | 071.20                      | 0.00                        | 0.00                       | 0.00                      |  |
| 7,900.00                  | 18.00              | 237.09         | 7,762.91                  | -521.64       | -806.05       | -383.62                     | 0.00                        | 0.00                       | 0.00                      |  |
| 8,000.00                  | 18.00              | 237.09         | 7,858.02                  | -538.42       | -831.99       | -395.97                     | 0.00                        | 0.00                       | 0.00                      |  |
| 8,100.00                  | 18.00              | 237.09         | 7,953.12                  | -555.21       | -857.93       | -408.31                     | 0.00                        | 0.00                       | 0.00                      |  |
| 8,200.00                  | 18.00              | 237.09         | 8,048.23                  | -572.00       | -883.87       | -420.66                     | 0.00                        | 0.00                       | 0.00                      |  |
| 8,300.00                  | 18.00              | 237.09         | 8,143.34                  | -588.78       | -909.81       | -433.00                     | 0.00                        | 0.00                       | 0.00                      |  |
| 8,400.00                  | 18.00              | 237.09         | 8,238.45                  | -605.57       | -935.74       | -445.35                     | 0.00                        | 0.00                       | 0.00                      |  |
| 8,500.00                  | 18.00              | 237.09         | 8,333.55                  | -622.35       | -961.68       | -457.69                     | 0.00                        | 0.00                       | 0.00                      |  |
| 8,600.00                  | 18.00              | 237.09         | 8,428.66                  | -639.14       | -987.62       | -470.03                     | 0.00                        | 0.00                       | 0.00                      |  |
| 8,700.00                  | 18.00              | 237.09         | 8,523.77                  | -655.92       | -1,013.56     | -482.38                     | 0.00                        | 0.00                       | 0.00                      |  |
| 8,800.00                  | 18.00              | 237.09         | 8,618.88                  | -672.71       | -1,039.49     | -494.72                     | 0.00                        | 0.00                       | 0.00                      |  |
| 8 000 00                  | 18.00              | 237.00         | 8 713 00                  | 680 40        | 1 065 43      | 507.07                      | 0.00                        | 0.00                       | 0.00                      |  |
| 0,300.00                  | 18.00              | 237.09         | 8 800 00                  | 706.28        | 1 001 37      | 510/1                       | 0.00                        | 0.00                       | 0.00                      |  |
| 9,000.00                  | 18.00              | 237.09         | 8 904 20                  | -700.20       | -1,091.37     | -531 76                     | 0.00                        | 0.00                       | 0.00                      |  |
| 9 200 00                  | 18.00              | 237.09         | 8 999 31                  | -739.85       | -1 143 24     | -544 10                     | 0.00                        | 0.00                       | 0.00                      |  |
| 9,300,00                  | 18.00              | 237.09         | 9 094 42                  | -756.64       | -1 169 18     | -556 45                     | 0.00                        | 0.00                       | 0.00                      |  |
| 0,000.00                  | 10.00              | 201.00         | 0,001.12                  | 100.01        | 1,100.10      | 000.10                      | 0.00                        | 0.00                       | 0.00                      |  |
| 9,400.00                  | 18.00              | 237.09         | 9,189.52                  | -773.42       | -1,195.12     | -568.79                     | 0.00                        | 0.00                       | 0.00                      |  |
| 9,500.00                  | 18.00              | 237.09         | 9,284.63                  | -790.21       | -1,221.06     | -581.13                     | 0.00                        | 0.00                       | 0.00                      |  |
| 9,600.00                  | 18.00              | 237.09         | 9,379.74                  | -806.99       | -1,246.99     | -593.48                     | 0.00                        | 0.00                       | 0.00                      |  |
| 9,700.00                  | 18.00              | 237.09         | 9,474.85                  | -823.78       | -1,272.93     | -605.82                     | 0.00                        | 0.00                       | 0.00                      |  |
| 9,800.00                  | 18.00              | 237.09         | 9,569.96                  | -840.56       | -1,298.87     | -618.17                     | 0.00                        | 0.00                       | 0.00                      |  |
| 9,900.00                  | 18.00              | 237.09         | 9,665.06                  | -857.35       | -1,324.81     | -630.51                     | 0.00                        | 0.00                       | 0.00                      |  |
| 10,000.00                 | 18.00              | 237.09         | 9,760.17                  | -874.13       | -1,350.74     | -642.86                     | 0.00                        | 0.00                       | 0.00                      |  |
| 10,100.00                 | 18.00              | 237.09         | 9,855.28                  | -890.92       | -1,376.68     | -655.20                     | 0.00                        | 0.00                       | 0.00                      |  |
| 10,159.12                 | 18.00              | 237.09         | 9,911.50                  | -900.84       | -1,392.02     | -662.50                     | 0.00                        | 0.00                       | 0.00                      |  |
| KOP. Build                | & Turn 10°/100     | )'             |                           |               |               |                             |                             |                            |                           |  |
| 10,200.00                 | 16.24              | 249.68         | 9,950.59                  | -906.26       | -1,402.68     | -666.11                     | 10.00                       | -4.29                      | 30.78                     |  |
| 10,300.00                 | 15.95              | 286.31         | 10,046.91                 | -907.27       | -1,429.05     | -662.81                     | 10.00                       | -0.29                      | 36.63                     |  |
| <br>10,400.00             | 20.98              | 314.09         | 10,141.91                 | -890.91       | -1,455.16     | -642.43                     | 10.00                       | 5.03                       | 27.78                     |  |
|                           |                    |                |                           |               |               |                             |                             |                            |                           |  |

### **OXY** Planning Report

| Database: | HOPSPP                              | Local Co-ordinate Reference: | Well Iridium MDP1 28_21 Fed Com 71H |
|-----------|-------------------------------------|------------------------------|-------------------------------------|
| Company:  | ENGINEERING DESIGNS                 | TVD Reference:               | RKB=25' @ 3400.00ft                 |
| Project:  | PRD NM DIRECTIONAL PLANS (NAD 1983) | MD Reference:                | RKB=25' @ 3400.00ft                 |
| Site:     | Iridium MDP1 28_21 Fed Com          | North Reference:             | Grid                                |
| Well:     | Iridium MDP1 28_21 Fed Com 71H      | Survey Calculation Method:   | Minimum Curvature                   |
| Wellbore: | Wellbore #1                         |                              |                                     |
| Design:   | Permitting Plan                     |                              |                                     |

| Measured<br>Depth<br>(ft)                                     | Inclination<br>(°)                                 | Azimuth<br>(°)   | Vertical<br>Depth<br>(ft)  | +N/-S<br>(ft)  | +E/-W<br>(ft)   | Vertical<br>Section<br>(ft)                              | Dogleg<br>Rate<br>(°/100ft)                  | Build<br>Rate<br>(°/100ft)                   | Turn<br>Rate<br>(°/100ft)                    |
|---|--|--|--|--|---|--|--|--|--|
| 10,500.00<br>10,600.00<br>10,700.00                           | 28.65<br>37.37<br>46.55                            | 329.58<br>338.64<br>344.62                               | 10,232.71<br>10,316.53<br>10,390.84  | -857.70<br>-808.63<br>-745.21                            | -1,480.23<br>-1,503.48<br>-1,524.22                           | -605.58<br>-553.39<br>-487.44                            | 10.00<br>10.00<br>10.00                      | 7.67<br>8.72<br>9.18                         | 15.49<br>9.06<br>5.97                        |
| 10,800.00<br>10,860.93  | 55.95<br>61.75                                     | 348.99<br>351.19   | 10,453.38<br>10,484.88   | -669.35<br>-618.00                                       | -1,541.81<br>-1,550.75  | -409.73<br>-357.61                                       | 10.00<br>10.00                               | 9.40<br>9.51                                 | 4.37<br>3.61                                 |
| PPP-1 Cros  | S  |  |  |  |   |  |  |  |  |
| 10,900.00<br>11,000.00<br>11,100.00                           | 65.48<br>75.08<br>84.71                            | 352.47<br>355.46<br>358.20                               | 10,502.24<br>10,535.95<br>10,553.47  | -583.36<br>-489.86<br>-391.69                            | -1,555.71<br>-1,565.52<br>-1,570.92                           | -322.63<br>-228.78<br>-131.03                            | 10.00<br>10.00<br>10.00                      | 9.56<br>9.60<br>9.63                         | 3.29<br>2.99<br>2.73                         |
| 11,154.82   | 90.00  | 359.65   | 10,556.00  | -336.96  | -1,571.95   | -76.86   | 10.00  | 9.64   | 2.65   |
| Landing Po  | int  |  |  |  |   |  |  |  |  |
| 11,200.00<br>11,300.00<br>11,400.00<br>11,500.00              | 90.00<br>90.00<br>90.00<br>90.00                   | 359.65<br>359.65<br>359.65<br>359.65                     | 10,556.00<br>10,556.00<br>10,556.00<br>10,556.00                           | -291.78<br>-191.78<br>-91.78<br>8.22                     | -1,572.22<br>-1,572.84<br>-1,573.45<br>-1,574.07              | -32.24<br>66.53<br>165.30<br>264.07                      | 0.00<br>0.00<br>0.00<br>0.00                 | 0.00<br>0.00<br>0.00<br>0.00                 | 0.00<br>0.00<br>0.00<br>0.00                 |
| 11,600.00<br>11,700.00<br>11,800.00<br>11,900.00<br>12,000.00 | 90.00<br>90.00<br>90.00<br>90.00                   | 359.65<br>359.65<br>359.65<br>359.65<br>359.65           | 10,556.00<br>10,556.00<br>10,556.00<br>10,556.00<br>10,556.00              | 108.21<br>208.21<br>308.21<br>408.21<br>508.21           | -1,574.68<br>-1,575.30<br>-1,575.91<br>-1,576.53<br>-1,577.14 | 362.83<br>461.60<br>560.37<br>659.13<br>757.90           | 0.00<br>0.00<br>0.00<br>0.00                 | 0.00<br>0.00<br>0.00<br>0.00                 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00         |
| 12,100.00<br>12,200.00<br>12,300.00<br>12,400.00<br>12,500.00 | 90.00<br>90.00<br>90.00<br>90.00<br>90.00<br>90.00 | 359.65<br>359.65<br>359.65<br>359.65<br>359.65<br>359.65 | 10,556.00<br>10,556.00<br>10,556.00<br>10,556.00<br>10,556.00<br>10,556.00 | 608.21<br>708.20<br>808.20<br>908.20<br>1,008.20         | -1,577.76<br>-1,578.37<br>-1,578.99<br>-1,579.60<br>-1,580.22 | 856.67<br>955.44<br>1,054.20<br>1,152.97<br>1,251.74     | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00 |
| 12,600.00<br>12,700.00<br>12,800.00<br>12,900.00<br>13,000.00 | 90.00<br>90.00<br>90.00<br>90.00<br>90.00          | 359.65<br>359.65<br>359.65<br>359.65<br>359.65<br>359.65 | 10,556.00<br>10,556.00<br>10,556.00<br>10,556.00<br>10,556.00              | 1,108.20<br>1,208.19<br>1,308.19<br>1,408.19<br>1,508.19 | -1,580.83<br>-1,581.44<br>-1,582.06<br>-1,582.67<br>-1,583.29 | 1,350.50<br>1,449.27<br>1,548.04<br>1,646.81<br>1,745.57 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00         | 0.00<br>0.00<br>0.00<br>0.00<br>0.00         | 0.00<br>0.00<br>0.00<br>0.00<br>0.00         |
| 13,100.00<br>13,200.00<br>13,300.00<br>13,400.00<br>13,500.00 | 90.00<br>90.00<br>90.00<br>90.00<br>90.00          | 359.65<br>359.65<br>359.65<br>359.65<br>359.65<br>359.65 | 10,556.00<br>10,556.00<br>10,556.00<br>10,556.00<br>10,556.00              | 1,608.19<br>1,708.18<br>1,808.18<br>1,908.18<br>2,008.18 | -1,583.90<br>-1,584.52<br>-1,585.13<br>-1,585.75<br>-1,586.36 | 1,844.34<br>1,943.11<br>2,041.87<br>2,140.64<br>2,239.41 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00         | 0.00<br>0.00<br>0.00<br>0.00<br>0.00         | 0.00<br>0.00<br>0.00<br>0.00<br>0.00         |
| 13,600.00<br>13,700.00<br>13,800.00<br>13,900.00<br>14,000.00 | 90.00<br>90.00<br>90.00<br>90.00<br>90.00          | 359.65<br>359.65<br>359.65<br>359.65<br>359.65<br>359.65 | 10,556.00<br>10,556.00<br>10,556.00<br>10,556.00<br>10,556.00              | 2,108.18<br>2,208.17<br>2,308.17<br>2,408.17<br>2,508.17 | -1,586.98<br>-1,587.59<br>-1,588.21<br>-1,588.82<br>-1,589.44 | 2,338.18<br>2,436.94<br>2,535.71<br>2,634.48<br>2,733.24 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00         | 0.00<br>0.00<br>0.00<br>0.00<br>0.00         | 0.00<br>0.00<br>0.00<br>0.00<br>0.00         |
| 14,100.00<br>14,200.00<br>14,300.00<br>14,400.00<br>14,500.00 | 90.00<br>90.00<br>90.00<br>90.00<br>90.00          | 359.65<br>359.65<br>359.65<br>359.65<br>359.65<br>359.65 | 10,556.00<br>10,556.00<br>10,556.00<br>10,556.00<br>10,556.00              | 2,608.17<br>2,708.17<br>2,808.16<br>2,908.16<br>3,008.16 | -1,590.05<br>-1,590.66<br>-1,591.28<br>-1,591.89<br>-1,592.51 | 2,832.01<br>2,930.78<br>3,029.55<br>3,128.31<br>3,227.08 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00         | 0.00<br>0.00<br>0.00<br>0.00<br>0.00         | 0.00<br>0.00<br>0.00<br>0.00<br>0.00         |
| 14,600.00<br>14,700.00<br>14,800.00<br>14,900.00<br>15,000.00 | 90.00<br>90.00<br>90.00<br>90.00<br>90.00          | 359.65<br>359.65<br>359.65<br>359.65<br>359.65           | 10,556.00<br>10,556.00<br>10,556.00<br>10,556.00<br>10,556.00              | 3,108.16<br>3,208.16<br>3,308.15<br>3,408.15<br>3,508.15 | -1,593.12<br>-1,593.74<br>-1,594.35<br>-1,594.97<br>-1,595.58 | 3,325.85<br>3,424.61<br>3,523.38<br>3,622.15<br>3,720.92 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00         | 0.00<br>0.00<br>0.00<br>0.00<br>0.00         | 0.00<br>0.00<br>0.00<br>0.00<br>0.00         |
| 15,100.00<br>15,200.00<br>15,300.00<br>15,400.00<br>15,500.00 | 90.00<br>90.00<br>90.00<br>90.00<br>90.00          | 359.65<br>359.65<br>359.65<br>359.65<br>359.65           | 10,556.00<br>10,556.00<br>10,556.00<br>10,556.00<br>10,556.00              | 3,608.15<br>3,708.15<br>3,808.14<br>3,908.14<br>4,008.14 | -1,596.20<br>-1,596.81<br>-1,597.43<br>-1,598.04<br>-1,598.66 | 3,819.68<br>3,918.45<br>4,017.22<br>4,115.98<br>4,214.75 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00         | 0.00<br>0.00<br>0.00<br>0.00<br>0.00         | 0.00<br>0.00<br>0.00<br>0.00<br>0.00         |

### **OXY** Planning Report

| Database: | HOPSPP                              | Local Co-ordinate Reference: | Well Iridium MDP1 28_21 Fed Com 71H |
|-----------|-------------------------------------|------------------------------|-------------------------------------|
| Company:  | ENGINEERING DESIGNS                 | TVD Reference:               | RKB=25' @ 3400.00ft                 |
| Project:  | PRD NM DIRECTIONAL PLANS (NAD 1983) | MD Reference:                | RKB=25' @ 3400.00ft                 |
| Site:     | Iridium MDP1 28_21 Fed Com          | North Reference:             | Grid                                |
| Well:     | Iridium MDP1 28_21 Fed Com 71H      | Survey Calculation Method:   | Minimum Curvature                   |
| Wellbore: | Wellbore #1                         |                              |                                     |
| Design:   | Permitting Plan                     |                              |                                     |

| Measured<br>Depth<br>(ft) | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(ft) | +N/-S<br>(ft) | +E/-W<br>(ft) | Vertical<br>Section<br>(ft) | Dogleg<br>Rate<br>(°/100ft) | Build<br>Rate<br>(°/100ft) | Turn<br>Rate<br>(°/100ft) |  |
|---------------------------|--------------------|----------------|---------------------------|---------------|---------------|-----------------------------|-----------------------------|----------------------------|---------------------------|--|
| 15 600 00                 | 00.00              | 250.65         | 10 556 00                 | 4 109 14      | 1 500 27      | 4 212 52                    | 0.00                        | 0.00                       | 0.00                      |  |
| 15,000.00                 | 90.00              | 359.05         | 10,556.00                 | 4,100.14      | 1 500 88      | 4,313.32                    | 0.00                        | 0.00                       | 0.00                      |  |
| 15,700.00                 | 90.00              | 359.65         | 10,556.00                 | 4,200.14      | -1,000.50     | 4,412.25                    | 0.00                        | 0.00                       | 0.00                      |  |
| 15,000.00                 | 90.00              | 359.65         | 10,556.00                 | 4,300.14      | 1 601 11      | 4,511.05                    | 0.00                        | 0.00                       | 0.00                      |  |
| 15,900.00                 | 90.00              | 359.05         | 10,556.00                 | 4,400.13      | 1 601 73      | 4,009.02                    | 0.00                        | 0.00                       | 0.00                      |  |
| 10,000.00                 | 90.00              | 359.05         | 10,550.00                 | 4,500.15      | -1,001.73     | 4,700.59                    | 0.00                        | 0.00                       | 0.00                      |  |
| 16,100.00                 | 90.00              | 359.65         | 10,556.00                 | 4,608.13      | -1,602.34     | 4,807.35                    | 0.00                        | 0.00                       | 0.00                      |  |
| Turn 1 5%/10              | 90.00              | 359.05         | 10,556.00                 | 4,003.95      | -1,002.09     | 4,002.49                    | 0.00                        | 0.00                       | 0.00                      |  |
| 16 155 87                 | 90.00              | 359.65         | 10 556 00                 | 4 664 00      | -1 602 69     | 4 862 54                    | 0.00                        | 0.00                       | 0.00                      |  |
| PPP 2 Cros                | c                  | 000.00         | 10,000.00                 | 4,004.00      | 1,002.00      | 4,002.04                    | 0.00                        | 0.00                       | 0.00                      |  |
| 16 156 /0                 | 00.00              | 350.64         | 10 556 00                 | 4 664 62      | 1 602 60      | 4 863 15                    | 1.62                        | 0.00                       | 1.62                      |  |
| 10,130.49                 | 30.00              | 555.04         | 10,330.00                 | 4,004.02      | -1,002.09     | 4,005.15                    | 1.02                        | 0.00                       | -1.02                     |  |
| 16 200 00                 | 00.00              | 250.64         | 10 556 00                 | 1 709 12      | 1 602 07      | 4 006 12                    | 0.00                        | 0.00                       | 0.00                      |  |
| 10,200.00                 | 90.00              | 559.04         | 10,550.00                 | 4,700.13      | -1,002.97     | 4,900.12                    | 0.00                        | 0.00                       | 0.00                      |  |
| 16,300.00                 | 90.00              | 359.64         | 10,556.00                 | 4,808.13      | -1,603.60     | 5,004.89                    | 0.00                        | 0.00                       | 0.00                      |  |
| 16,400.00                 | 90.00              | 359.64         | 10,556.00                 | 4,908.12      | -1,604.23     | 5,103.66                    | 0.00                        | 0.00                       | 0.00                      |  |
| 16,500.00                 | 90.00              | 359.64         | 10,556.00                 | 5,008.12      | -1,604.86     | 5,202.43                    | 0.00                        | 0.00                       | 0.00                      |  |
| 16,600.00                 | 90.00              | 359.64         | 10,556.00                 | 5,108.12      | -1,605.49     | 5,301.20                    | 0.00                        | 0.00                       | 0.00                      |  |
| 16,700.00                 | 90.00              | 359.64         | 10,556.00                 | 5,208.12      | -1,606.13     | 5,399.97                    | 0.00                        | 0.00                       | 0.00                      |  |
| 16,800.00                 | 90.00              | 359.64         | 10,556.00                 | 5,308.12      | -1,606.76     | 5,498.74                    | 0.00                        | 0.00                       | 0.00                      |  |
| 16,900.00                 | 90.00              | 359.64         | 10,556.00                 | 5,408.11      | -1,607.39     | 5,597.51                    | 0.00                        | 0.00                       | 0.00                      |  |
| 17,000.00                 | 90.00              | 359.64         | 10,556.00                 | 5,508.11      | -1,608.02     | 5,696.28                    | 0.00                        | 0.00                       | 0.00                      |  |
| 17,100.00                 | 90.00              | 359.64         | 10,556.00                 | 5,608.11      | -1,608.66     | 5,795.05                    | 0.00                        | 0.00                       | 0.00                      |  |
| 17,200.00                 | 90.00              | 359.64         | 10,556.00                 | 5,708.11      | -1,609.29     | 5,893.82                    | 0.00                        | 0.00                       | 0.00                      |  |
| 17,300.00                 | 90.00              | 359.64         | 10,556.00                 | 5,808.11      | -1,609.92     | 5,992.59                    | 0.00                        | 0.00                       | 0.00                      |  |
| 17,400.00                 | 90.00              | 359.64         | 10,556.00                 | 5,908.10      | -1,610.55     | 6,091.36                    | 0.00                        | 0.00                       | 0.00                      |  |
| 17,500.00                 | 90.00              | 359.64         | 10,556.00                 | 6,008.10      | -1,611.18     | 6,190.13                    | 0.00                        | 0.00                       | 0.00                      |  |
| 17,600.00                 | 90.00              | 359.64         | 10,556.00                 | 6,108.10      | -1,611.82     | 6,288.90                    | 0.00                        | 0.00                       | 0.00                      |  |
| 17,700.00                 | 90.00              | 359.64         | 10,556.00                 | 6,208.10      | -1,612.45     | 6,387.67                    | 0.00                        | 0.00                       | 0.00                      |  |
| 17,800.00                 | 90.00              | 359.64         | 10,556.00                 | 6,308.10      | -1,613.08     | 6,486.44                    | 0.00                        | 0.00                       | 0.00                      |  |
| 17,900.00                 | 90.00              | 359.64         | 10,556.00                 | 6,408.09      | -1,613.71     | 6,585.21                    | 0.00                        | 0.00                       | 0.00                      |  |
| 18,000.00                 | 90.00              | 359.64         | 10,556.00                 | 6,508.09      | -1,614.35     | 6,683.98                    | 0.00                        | 0.00                       | 0.00                      |  |
| 18,100.00                 | 90.00              | 359.64         | 10,556.00                 | 6,608.09      | -1,614.98     | 6,782.75                    | 0.00                        | 0.00                       | 0.00                      |  |
| 18,200.00                 | 90.00              | 359.64         | 10,556.00                 | 6,708.09      | -1,615.61     | 6,881.52                    | 0.00                        | 0.00                       | 0.00                      |  |
| 18,300.00                 | 90.00              | 359.64         | 10,556.00                 | 6,808.09      | -1,616.24     | 6,980.29                    | 0.00                        | 0.00                       | 0.00                      |  |
| 18,400.00                 | 90.00              | 359.64         | 10,556.00                 | 6,908.08      | -1,616.87     | 7,079.06                    | 0.00                        | 0.00                       | 0.00                      |  |
| 18,500.00                 | 90.00              | 359.64         | 10,556.00                 | 7,008.08      | -1,617.51     | 7,177.83                    | 0.00                        | 0.00                       | 0.00                      |  |
| 18,600.00                 | 90.00              | 359.64         | 10,556.00                 | 7,108.08      | -1,618.14     | 7,276.60                    | 0.00                        | 0.00                       | 0.00                      |  |
| 18,700.00                 | 90.00              | 359.64         | 10,556.00                 | 7,208.08      | -1,618.77     | 7,375.37                    | 0.00                        | 0.00                       | 0.00                      |  |
| 18,800.00                 | 90.00              | 359.64         | 10,556.00                 | 7,308.08      | -1,619.40     | 7,474.14                    | 0.00                        | 0.00                       | 0.00                      |  |
| 18,900.00                 | 90.00              | 359.64         | 10,556.00                 | 7,408.07      | -1,620.03     | 7,572.91                    | 0.00                        | 0.00                       | 0.00                      |  |
| 19,000.00                 | 90.00              | 359.64         | 10,556.00                 | 7,508.07      | -1,620.67     | 7,671.68                    | 0.00                        | 0.00                       | 0.00                      |  |
| 19,100.00                 | 90.00              | 359.64         | 10,556.00                 | 7,608.07      | -1,621.30     | 7,770.45                    | 0.00                        | 0.00                       | 0.00                      |  |
| 19,200.00                 | 90.00              | 359.64         | 10,556.00                 | 7,708.07      | -1,621.93     | 7,869.22                    | 0.00                        | 0.00                       | 0.00                      |  |
| 19,300.00                 | 90.00              | 359.64         | 10,556.00                 | 7,808.07      | -1,622.56     | 7,967.99                    | 0.00                        | 0.00                       | 0.00                      |  |
| 19,400.00                 | 90.00              | 359.64         | 10,556.00                 | 7,908.06      | -1,623.20     | 8,066.76                    | 0.00                        | 0.00                       | 0.00                      |  |
| 19,500.00                 | 90.00              | 359.64         | 10,556.00                 | 8,008.06      | -1,623.83     | 8,165.53                    | 0.00                        | 0.00                       | 0.00                      |  |
| 19,600.00                 | 90.00              | 359.64         | 10,556.00                 | 8,108.06      | -1,624.46     | 8,264.30                    | 0.00                        | 0.00                       | 0.00                      |  |
| 19,700.00                 | 90.00              | 359.64         | 10,556.00                 | 8,208.06      | -1,625.09     | 8,363.07                    | 0.00                        | 0.00                       | 0.00                      |  |
| 19,800.00                 | 90.00              | 359.64         | 10,556.00                 | 8,308.06      | -1,625.72     | 8,461.84                    | 0.00                        | 0.00                       | 0.00                      |  |
| 19,900.00                 | 90.00              | 359.64         | 10,556.00                 | 8,408.05      | -1,626.36     | 8,560.61                    | 0.00                        | 0.00                       | 0.00                      |  |
| 20,000.00                 | 90.00              | 359.64         | 10,556.00                 | 8,508.05      | -1,626.99     | 8,659.38                    | 0.00                        | 0.00                       | 0.00                      |  |
| 20,100.00                 | 90.00              | 359.64         | 10,556.00                 | 8,608.05      | -1,627.62     | 8,758.15                    | 0.00                        | 0.00                       | 0.00                      |  |
| 20,200.00                 | 90.00              | 359.64         | 10,556.00                 | 8,708.05      | -1,628.25     | 8,856.92                    | 0.00                        | 0.00                       | 0.00                      |  |
| 20,300.00                 | 90.00              | 359.64         | 10,556.00                 | 8,808.05      | -1,628.89     | 8,955.69                    | 0.00                        | 0.00                       | 0.00                      |  |
| 20,400.00                 | 90.00              | 359.64         | 10,556.00                 | 8,908.04      | -1,629.52     | 9,054.46                    | 0.00                        | 0.00                       | 0.00                      |  |

| Database: | HOPSPP                              | Local Co-ordinate Reference: | Well Iridium MDP1 28_21 Fed Com 71H |
|-----------|-------------------------------------|------------------------------|-------------------------------------|
| Company:  | ENGINEERING DESIGNS                 | TVD Reference:               | RKB=25' @ 3400.00ft                 |
| Project:  | PRD NM DIRECTIONAL PLANS (NAD 1983) | MD Reference:                | RKB=25' @ 3400.00ft                 |
| Site:     | Iridium MDP1 28_21 Fed Com          | North Reference:             | Grid                                |
| Well:     | Iridium MDP1 28_21 Fed Com 71H      | Survey Calculation Method:   | Minimum Curvature                   |
| Wellbore: | Wellbore #1                         |                              |                                     |
| Design:   | Permitting Plan                     |                              |                                     |

### Planned Survey

| Measured<br>Depth<br>(ft) | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(ft) | +N/-S<br>(ft) | +E/-W<br>(ft) | Vertical<br>Section<br>(ft) | Dogleg<br>Rate<br>(°/100ft) | Build<br>Rate<br>(°/100ft) | Turn<br>Rate<br>(°/100ft) |
|---------------------------|--------------------|----------------|---------------------------|---------------|---------------|-----------------------------|-----------------------------|----------------------------|---------------------------|
| 20,500.00                 | 90.00              | 359.64         | 10,556.00                 | 9,008.04      | -1,630.15     | 9,153.23                    | 0.00                        | 0.00                       | 0.00                      |
| 20,600.00                 | 90.00              | 359.64         | 10,556.00                 | 9,108.04      | -1,630.78     | 9,252.00                    | 0.00                        | 0.00                       | 0.00                      |
| 20,700.00                 | 90.00              | 359.64         | 10,556.00                 | 9,208.04      | -1,631.41     | 9,350.77                    | 0.00                        | 0.00                       | 0.00                      |
| 20,800.00                 | 90.00              | 359.64         | 10,556.00                 | 9,308.04      | -1,632.05     | 9,449.54                    | 0.00                        | 0.00                       | 0.00                      |
| 20,900.00                 | 90.00              | 359.64         | 10,556.00                 | 9,408.03      | -1,632.68     | 9,548.31                    | 0.00                        | 0.00                       | 0.00                      |
| 21,000.00                 | 90.00              | 359.64         | 10,556.00                 | 9,508.03      | -1,633.31     | 9,647.08                    | 0.00                        | 0.00                       | 0.00                      |
| 21,100.00                 | 90.00              | 359.64         | 10,556.00                 | 9,608.03      | -1,633.94     | 9,745.85                    | 0.00                        | 0.00                       | 0.00                      |
| 21,200.00                 | 90.00              | 359.64         | 10,556.00                 | 9,708.03      | -1,634.58     | 9,844.62                    | 0.00                        | 0.00                       | 0.00                      |
| 21,300.00                 | 90.00              | 359.64         | 10,556.00                 | 9,808.03      | -1,635.21     | 9,943.39                    | 0.00                        | 0.00                       | 0.00                      |
| 21,400.00                 | 90.00              | 359.64         | 10,556.00                 | 9,908.02      | -1,635.84     | 10,042.16                   | 0.00                        | 0.00                       | 0.00                      |
| 21,418.73                 | 90.00              | 359.64         | 10,556.00                 | 9,926.76      | -1,635.96     | 10,060.66                   | 0.00                        | 0.00                       | 0.00                      |
| TD at 21418               | 3.73' MD           |                |                           |               |               |                             |                             |                            |                           |

### Design Targets

| Target Name<br>- hit/miss target<br>- Shape            | Dip Angle<br>(°)       | Dip Dir.<br>(°)      | TVD<br>(ft)              | +N/-S<br>(ft)            | +E/-W<br>(ft)              | Northing<br>(usft)          | Easting<br>(usft) | Latitude  | Longitude   |
|--|------------------------|----------------------|--------------------------|--------------------------|----------------------------|-----------------------------|-------------------|-----------|-------------|
| KOP (Iridium MDP1<br>- plan misses targe<br>- Point    | 0.00<br>t center by 18 | 0.00<br>317.29ft at  | 0.00<br>0.00ft MD (0     | -918.02<br>.00 TVD, 0.00 | -1,568.37<br>) N, 0.00 E)  | 461,421.42                  | 709,206.27        | 32.267355 | -103.790222 |
| FTP (Iridium MDP1<br>- plan misses targe<br>- Point    | 0.00<br>t center by 27 | 0.00<br>7.96ft at 10 | 10,556.00<br>980.92ft MD | -518.00<br>(10530.74 T∖  | -1,570.83<br>/D, -508.15 N | 461,821.41<br>, -1563.98 E) | 709,203.81        | 32.268454 | -103.790224 |
| PI-1 (Iridium MDP1<br>- plan hits target ce<br>- Point | 0.00<br>nter           | 0.01                 | 10,556.00                | 4,663.95                 | -1,602.69                  | 467,003.05                  | 709,171.96        | 32.282698 | -103.790242 |
| PBHL (Iridium MDP1<br>- plan hits target ce<br>- Point | 0.00<br>nter           | 0.00                 | 10,556.00                | 9,926.76                 | -1,635.96                  | 472,265.54                  | 709,138.69        | 32.297163 | -103.790263 |

#### Formations

| Measured<br>Depth<br>(ft) | Vertical<br>Depth<br>(ft) | Name            | Litt | nology | Dip<br>(°) | Dip<br>Direction<br>(°) |
|---------------------------|---------------------------|-----------------|------|--------|------------|-------------------------|
| 428.0                     | 0 428.00                  | RUSTLER         |      |        |            |                         |
| 784.0                     | 0 784.00                  | SALADO          |      |        |            |                         |
| 2,728.0                   | 0 2,728.00                | CASTILE         |      |        |            |                         |
| 4,197.1                   | 3 4,197.00                | DELAWARE        |      |        |            |                         |
| 4,218.1                   | 6 4,218.00                | BELL CANYON     |      |        |            |                         |
| 5,112.0                   | 2 5,103.00                | CHERRY CANYON   |      |        |            |                         |
| 6,463.8                   | 3 6,397.00                | BRUSHY CANYON   |      |        |            |                         |
| 8,166.1                   | 1 8,016.00                | BONE SPRING     |      |        |            |                         |
| 9,274.3                   | 3 9,070.00                | BONE SPRING 1ST |      |        |            |                         |
| 9,966.1                   | 9,728.00                  | BONE SPRING 2ND |      |        |            |                         |

### **OXY** Planning Report

| Database:<br>Company:<br>Project:<br>Site: | HOPSPP<br>ENGINEERING DESIGNS<br>PRD NM DIRECTIONAL PLANS (NAD 1983)<br>Iridium MDP1 28_21 Fed Com | Local Co-ordinate Reference:<br>TVD Reference:<br>MD Reference:<br>North Reference: | Well Iridium MDP1 28_21 Fed Com 71H<br>RKB=25' @ 3400.00ft<br>RKB=25' @ 3400.00ft<br>Grid |
|--|--|---|---|
| Well:                                      | Iridium MDP1 28_21 Fed Com 71H   | Survey Calculation Method:  | Minimum Curvature   |
| Wellbore:                                  | Wellbore #1  |   |   |
| Design:                                    | Permitting Plan  |   |   |
|  | , , , , , , , , , , , , , , , , , , ,  |   |   |
| Plan Annotations                           |  |   |   |
|  |  |   |   |

| Measured      | Vertical      | Local Coor    | dinates       |                            |
|---------------|---------------|---------------|---------------|----------------------------|
| Depth<br>(ft) | Depth<br>(ft) | +N/-S<br>(ft) | +E/-W<br>(ft) | Comment                    |
| 3,900.00      | 3,900.00      | 0.00          | 0.00          | Build 1°/100'              |
| 5,699.61      | 5,670.17      | -152.29       | -235.33       | Hold 18° Tangent           |
| 10,159.12     | 9,911.50      | -900.84       | -1,392.02     | KOP, Build & Turn 10°/100' |
| 10,860.93     | 10,484.88     | -618.00       | -1,550.75     | PPP-1 Cross                |
| 11,154.82     | 10,556.00     | -336.96       | -1,571.95     | Landing Point              |
| 16,155.82     | 10,556.00     | 4,663.95      | -1,602.69     | Turn 1.5°/100'             |
| 16,155.87     | 10,556.00     | 4,664.00      | -1,602.69     | PPP-2 Cross                |
| 16,156.49     | 10,556.00     | 4,664.62      | -1,602.69     | Hold                       |
| 21,418.73     | 10,556.00     | 9,926.76      | -1,635.96     | TD at 21418.73' MD         |

#### Received by OCD: 3/27/2025 7:17:05 AM

Tenaris

### **API BTC -Special** Clearance

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

9.875 in. 44.26 lb/ft

API

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|---------------------|-------|
|---------------------|-------|

| Outside Diameter    | 10.750 in. | Wall Thickness  | 0.400 in.         | Grade | L80-IC |
|---------------------|------------|-----------------|-------------------|-------|--------|
| Min. Wall Thickness | 87.50 %    | Pipe Body Drift | Alternative Drift | Туре  | Casing |
|                     |            |                 |                   |       |        |

Connection OD Option Special Clearance

#### **Pipe Body Data**

| Geometry       |              |                  |
|----------------|--------------|------------------|
| Nominal OD     | 10.750 in.   | Drift            |
| Wall Thickness | 0.400 in.    | Plain End Weight |
| Nominal Weight | 45.500 lb/ft | OD Tolerance     |
| Nominal ID     | 9.950 in.    |                  |
|                |              |                  |

| Performance                  |               |
|------------------------------|---------------|
| SMYS                         | 80,000 psi    |
| Min UTS                      | 95,000 psi    |
| Body Yield Strength          | 1040 x1000 lb |
| Min. Internal Yield Pressure | 5210 psi      |
| Collapse Pressure            | 2950 psi      |
| Max. Allowed Bending         | 34 °/100 ft   |

#### **Connection Data**

| 1 in.      | Internal Pressure Capacity | 4150 psi  |
|------------|----------------------------|---|
| 11.250 in. | Coupling Face Load         | 478 x1000 lb  |
| 5          | Joint Strength             | 1041 x1000 lb   |
|            | Performance                |   |
|            | 5<br>11.250 in.<br>1 in.   | Performance       5     Joint Strength       11.250 in.     Coupling Face Load       1 in.     Internal Pressure Capacity |

#### 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.

Couprings QD are shown according to Current APISCT 10th Edition. Tenaris has issued this document for general information only, and the information in this document, including, without limitation, any pictures, drawings or designs ("Information") is not intended to constitute professional or any other type of advice or recommendation and is provided on an "as is" basis. No warranty is given. Tenaris has not independently verified any information –if any- provided by the user in connection with, or for the purpose of, the Information contained hereunder. The use of the Information is at user's own risk and Tenaris does not assume any responsibility or liability of any kind for any loss, damage or injury resulting from, or in connection with any Information contained hereunder or any use thereof. The Information in this document is subject to change or modification without notice. Tenaris's products and services are subject to Tenaris's and conditions or otherwise to the terms resulting from the respective contracts of sale or services, as the case may be, between petitioner and Tenaris. For more complete information please contact a Tenaris's representative or visit our website at www.tenaris.com . ©Tenaris 2023. All rights reserved.

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

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

General Information Phone: (505) 629-6116

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

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

CONDITIONS

| Operator:             | OGRID:                               |
|-----------------------|--------------------------------------|
| OXY USA INC           | 16696                                |
| P.O. Box 4294         | Action Number:                       |
| Houston, TX 772104294 | 446103                               |
|                       | Action Type:                         |
|                       | [C-103] NOI Change of Plans (C-103A) |
|                       |                                      |

CONDITIONS

| Created By  | Condition  | Condition<br>Date |
|-------------|--|-------------------|
| ward.rikala | Any previous COA's not addressed within the updated COA's still apply. | 4/18/2025         |

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Action 446103