

GENERAL INSTRUCTIONS

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

SPECIFIC INSTRUCTIONS

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

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

NOTICES

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

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

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

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

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

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

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

Response to this request is mandatory.

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

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

Additional Information

Location of Well

0. SHL: SWSE / 669 FSL / 1567 FEL / TWSP: 23S / RANGE: 31E / SECTION: 28 / LAT: 32.2700215 / LONG: -103.7792763 (TVD: 0 feet, MD: 0 feet)

PPP: SESE / 0 FNL / 540 FEL / TWSP: 23S / RANGE: 31E / SECTION: 21 / LAT: 32.282688 / LONG: -103.775962 (TVD: 12418 feet, MD: 19489 feet)

PPP: SESE / 100 FSL / 540 FEL / TWSP: 23S / RANGE: 31E / SECTION: 28 / LAT: 32.268457 / LONG: -103.7759537 (TVD: 12445 feet, MD: 12946 feet)

BHL: NENE / 20 FNL / 540 FEL / TWSP: 23S / RANGE: 31E / SECTION: 21 / LAT: 32.2971665 / LONG: -103.775968 (TVD: 12402 feet, MD: 23392 feet)

CONFIDENTIAL

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102 Revised August 1, 2011
Submit one copy to appropriate
District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

Table with 3 columns: API Number (30-015-54942), Pool Code (98236), Pool Name (WC-015 G-08 S233135D; WOLFCAMP), Property Code (321632), Property Name (IRIDIUM MDP1 28_21 FED COM), Well Number (47H), OGRID No. (16696), Operator Name (OXY USA INC.), Elevation (3386')

Surface Location

Table with 10 columns: UL or lot no. (O), Section (28), Township (23S), Range (31E), Lot Idn, Feet from (669'), North/South line (SOUTH), Feet from (1537'), East/West line (EAST), County (EDDY)

Bottom Hole Location If Different From Surface

Table with 10 columns: UL or lot no. (A), Section (21), Township (23S), Range (31E), Lot Idn, Feet from (20'), North/South line (NORTH), Feet from (740'), East/West line (EAST), County (EDDY). Includes Dedicated Acres (640.00), Joint or Infill, Consolidation Code, and Order No.

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

Main plat diagram showing well location, section boundaries (Sec. 21, 28, 33), federal leases (NMNM 038464, 040659, 045236), and various well locations (BHL, LTP, PPP-2, FTP, SHL, PPP-1, KOP) with their respective bearings and distances. Includes a legend for symbols and a table of Federal Lease ID and Length.

OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.
Signature: Roni Mathew 4/11/2024
Printed Name: RONI MATHEW
E-mail Address: roni_mathew@oxy.com

SURVEYOR CERTIFICATION
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.
Signature: Lloyd P. Short
Date of Survey: APRIL 11, 2024
Signature and Seal of Professional Surveyor
Professional Surveyor Seal: LLOYD P. SHORT, NEW MEXICO, 21653

Table with 2 columns: FEDERAL LEASE ID, LENGTH. Rows include NMNM040659 (5181.65'), NMNM038464 (5182.75'), and TOTAL (10364.40').

Table with 2 columns: PRODUCTION LINE, BEARING/LENGTH. Row: L1, N 00°19'19" W ~ 10364.40'

Table with 2 columns: CORNER COORDINATES NAD 83, SPCS NM EAST and CORNER COORDINATES NAD 27, SPCS NM EAST. Lists coordinates for corners A through J.

Oxy USA Inc. - IRIDIUM MDP1 28_21 FED COM 47H

Drill Plan

1. Geologic Formations

TVD of Target (ft):	12492	Pilot Hole Depth (ft):	
Total Measured Depth (ft):	23216	Deepest Expected Fresh Water (ft):	479

Delaware Basin

Formation	MD-RKB (ft)	TVD-RKB (ft)	Expected Fluids
Rustler	479	479	
Salado	823	823	Salt
Castile	2751	2751	Salt
Delaware	4258	4258	Oil/Gas/Brine
Bell Canyon	4283	4283	Oil/Gas/Brine
Cherry Canyon	5186	5180	Oil/Gas/Brine
Brushy Canyon	6498	6448	Losses
Bone Spring	8182	8075	Oil/Gas
Bone Spring 1st	9271	9139	Oil/Gas
Bone Spring 2nd	9897	9764	Oil/Gas
Bone Spring 3rd	11070	10937	Oil/Gas
Wolfcamp	11536	11403	Oil/Gas
Penn			Oil/Gas
Strawn			Oil/Gas

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

2. Casing Program

Section	Hole Size (in)	MD		TVD		Csg. OD (in)	Csg. Wt. (ppf)	Grade	Conn.
		From (ft)	To (ft)	From (ft)	To (ft)				
Surface	17.5	0	539	0	539	13.375	54.5	J-55	BTC
Salt	12.25	0	4358	0	4358	10.75	45.5	L-80 HC	BTC-SC
Intermediate	9.875	0	11977	0	11843	7.625	26.4	L-80 HC	BTC
Production	6.75	0	23216	0	12492	5.5	20	P-110	Wedge 461

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

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

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

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

3. Cementing Program

Section	Stage	Slurry:	Sacks	Yield (ft ³ /ft)	Density (lb/gal)	Excess:	TOC	Placement	Description
Surface	1	Surface - Tail	563	1.33	14.8	100%	-	Circulate	Class C+Accel.
Int.1	1	Intermediate - Tail	85	1.33	14.8	20%	3,858	Circulate	Class C+Accel.
Int.1	1	Intermediate - Lead	616	1.73	12.9	50%	-	Circulate	Class Pozz+Ret.
Int. 2	1	Intermediate 1S - Tail	334	1.65	13.2	5%	6,748	Circulate	Class H+Accel., Disper., Salt
Int. 2	2	Intermediate 2S - Tail BH	744	1.71	13.3	25%	-	Bradenhead Post-Frac	Class C+Accel.
Prod.	1	Production - Tail	665	1.84	13.3	25%	11,477	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

Bradenhead CBL Request

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

4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	✓	Tested to:	TVD Depth (ft) per Section:
12.25" Hole	13-5/8"	5M	Annular	✓	70% of working pressure	4358
		5M	Blind Ram	✓	250 psi / 5000 psi	
			Pipe Ram			
			Double Ram	✓		
			Other*			
9.875" Hole	13-5/8"	5M	Annular	✓	70% of working pressure	11843
		5M	Blind Ram	✓	250 psi / 5000 psi	
			Pipe Ram			
			Double Ram	✓		
			Other*			
6.75" Hole	13-5/8"	5M	Annular	✓	100% of working pressure	12492
		10M	Blind Ram	✓	250 psi / 10000 psi	
			Pipe Ram			
			Double Ram	✓		
			Other*			

*Specify if additional ram is utilized

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

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

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

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

BOP Break Testing Request

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

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

5. Mud Program

Section	Depth		Depth - TVD		Type	Weight (ppg)	Viscosity	Water Loss
	From (ft)	To (ft)	From (ft)	To (ft)				
Surface	0	539	0	539	Water-Based Mud	8.6 - 8.8	40-60	N/C
Intermediate 1	539	4358	539	4358	Saturated Brine-Based or Oil-Based Mud	8.0 - 10.0	35-45	N/C
Intermediate 2	4358	11977	4358	11843	Water-Based or Oil-Based Mud	8.0 - 10.0	38-50	N/C
Production	11977	23216	11843	12492	Water-Based or Oil-Based Mud	9.5 - 13.5	38-50	N/C

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

What will be used to monitor the loss or gain of fluid?	PVT/MD Totco/Visual Monitoring
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6. Logging and Testing Procedures

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

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	8770 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	180°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

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

8. Other facets of operation

	Yes/No
Will the well be drilled with a walking/skidding operation? If yes, describe.	No
Will more than one drilling rig be used for drilling operations? If yes, describe.	No

Total Estimated Cuttings Volume: 1937 bbls

OXY

PRD NM DIRECTIONAL PLANS (NAD 1983)

Iridium MDP1 28_21 Fed Com

Iridium MDP1 28_21 Fed Com 47H

Wellbore #1

Plan: Permitting Plan

Standard Planning Report

11 April, 2024

OXY Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well Iridium MDP1 28_21 Fed Com 47H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=25' @ 3411.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=25' @ 3411.00ft
Site:	Iridium MDP1 28_21 Fed Com	North Reference:	Grid
Well:	Iridium MDP1 28_21 Fed Com 47H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

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

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

Well Iridium MDP1 28_21 Fed Com 47H			
Well Position	+N/-S	0.00 ft	Northing:
	+E/-W	0.00 ft	462,408.95 usf
			Latitude:
			32.270021
			Longitude:
			-103.779179
Position Uncertainty		0.89 ft	Wellhead Elevation:
			ft
			Ground Level:
			3,386.00 ft
Grid Convergence:		0.30 °	

Wellbore Wellbore #1					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM_FILE	3/2/2023	6.42	59.85	47,562.60000000

Design Permitting Plan				
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	-4.50	0.00	0.00	4.29

Plan Survey Tool Program		Date 4/11/2024		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	23,216.22 Permitting Plan (Wellbore #1)	SQC_C705Mb_MWD+IFR1	MWD+IFR1+Sag+FDIR

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,515.00	0.00	0.00	4,515.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,264.93	15.00	145.47	5,256.39	-80.41	55.32	2.00	2.00	0.00	145.47	
8,443.02	15.00	145.47	8,326.21	-758.01	521.49	0.00	0.00	0.00	0.00	
9,942.88	0.00	138.00	9,809.00	-918.83	632.12	1.00	-1.00	0.00	180.00	
12,076.86	0.00	138.00	11,942.98	-918.83	632.12	0.00	0.00	0.00	0.00	
12,485.95	45.00	30.00	12,311.29	-786.70	708.40	11.00	11.00	0.00	30.00	
12,966.22	90.50	359.68	12,491.98	-369.55	798.43	11.00	9.47	-6.31	-39.31	
23,216.22	90.50	359.68	12,402.54	9,879.90	741.18	0.00	0.00	0.00	0.00	PBHL (Iridium

OXY

Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well Iridium MDP1 28_21 Fed Com 47H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=25' @ 3411.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=25' @ 3411.00ft
Site:	Iridium MDP1 28_21 Fed Com	North Reference:	Grid
Well:	Iridium MDP1 28_21 Fed Com 47H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,515.00	0.00	0.00	4,515.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	1.70	145.47	4,599.99	-1.04	0.71	-0.98	2.00	2.00	0.00
4,700.00	3.70	145.47	4,699.87	-4.92	3.38	-4.65	2.00	2.00	0.00
4,800.00	5.70	145.47	4,799.53	-11.67	8.03	-11.04	2.00	2.00	0.00
4,900.00	7.70	145.47	4,898.84	-21.28	14.64	-20.13	2.00	2.00	0.00
5,000.00	9.70	145.47	4,997.69	-33.74	23.21	-31.91	2.00	2.00	0.00
5,100.00	11.70	145.47	5,095.94	-49.04	33.74	-46.38	2.00	2.00	0.00
5,200.00	13.70	145.47	5,193.49	-67.15	46.20	-63.51	2.00	2.00	0.00
5,264.93	15.00	145.47	5,256.39	-80.41	55.32	-76.04	2.00	2.00	0.00

OXY

Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well Iridium MDP1 28_21 Fed Com 47H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=25' @ 3411.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=25' @ 3411.00ft
Site:	Iridium MDP1 28_21 Fed Com	North Reference:	Grid
Well:	Iridium MDP1 28_21 Fed Com 47H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,300.00	15.00	145.47	5,290.27	-87.88	60.46	-83.11	0.00	0.00	0.00
5,400.00	15.00	145.47	5,386.86	-109.21	75.13	-103.28	0.00	0.00	0.00
5,500.00	15.00	145.47	5,483.46	-130.53	89.80	-123.44	0.00	0.00	0.00
5,600.00	15.00	145.47	5,580.05	-151.85	104.47	-143.61	0.00	0.00	0.00
5,700.00	15.00	145.47	5,676.64	-173.17	119.13	-163.77	0.00	0.00	0.00
5,800.00	15.00	145.47	5,773.24	-194.49	133.80	-183.94	0.00	0.00	0.00
5,900.00	15.00	145.47	5,869.83	-215.81	148.47	-204.10	0.00	0.00	0.00
6,000.00	15.00	145.47	5,966.42	-237.13	163.14	-224.26	0.00	0.00	0.00
6,100.00	15.00	145.47	6,063.02	-258.45	177.81	-244.43	0.00	0.00	0.00
6,200.00	15.00	145.47	6,159.61	-279.77	192.48	-264.59	0.00	0.00	0.00
6,300.00	15.00	145.47	6,256.20	-301.10	207.14	-284.76	0.00	0.00	0.00
6,400.00	15.00	145.47	6,352.80	-322.42	221.81	-304.92	0.00	0.00	0.00
6,500.00	15.00	145.47	6,449.39	-343.74	236.48	-325.08	0.00	0.00	0.00
6,600.00	15.00	145.47	6,545.98	-365.06	251.15	-345.25	0.00	0.00	0.00
6,700.00	15.00	145.47	6,642.57	-386.38	265.82	-365.41	0.00	0.00	0.00
6,800.00	15.00	145.47	6,739.17	-407.70	280.48	-385.58	0.00	0.00	0.00
6,900.00	15.00	145.47	6,835.76	-429.02	295.15	-405.74	0.00	0.00	0.00
7,000.00	15.00	145.47	6,932.35	-450.34	309.82	-425.90	0.00	0.00	0.00
7,100.00	15.00	145.47	7,028.95	-471.66	324.49	-446.07	0.00	0.00	0.00
7,200.00	15.00	145.47	7,125.54	-492.99	339.16	-466.23	0.00	0.00	0.00
7,300.00	15.00	145.47	7,222.13	-514.31	353.83	-486.40	0.00	0.00	0.00
7,400.00	15.00	145.47	7,318.73	-535.63	368.49	-506.56	0.00	0.00	0.00
7,500.00	15.00	145.47	7,415.32	-556.95	383.16	-526.72	0.00	0.00	0.00
7,600.00	15.00	145.47	7,511.91	-578.27	397.83	-546.89	0.00	0.00	0.00
7,700.00	15.00	145.47	7,608.51	-599.59	412.50	-567.05	0.00	0.00	0.00
7,800.00	15.00	145.47	7,705.10	-620.91	427.17	-587.22	0.00	0.00	0.00
7,900.00	15.00	145.47	7,801.69	-642.23	441.83	-607.38	0.00	0.00	0.00
8,000.00	15.00	145.47	7,898.29	-663.56	456.50	-627.55	0.00	0.00	0.00
8,100.00	15.00	145.47	7,994.88	-684.88	471.17	-647.71	0.00	0.00	0.00
8,200.00	15.00	145.47	8,091.47	-706.20	485.84	-667.87	0.00	0.00	0.00
8,300.00	15.00	145.47	8,188.07	-727.52	500.51	-688.04	0.00	0.00	0.00
8,400.00	15.00	145.47	8,284.66	-748.84	515.18	-708.20	0.00	0.00	0.00
8,443.02	15.00	145.47	8,326.21	-758.01	521.49	-716.88	0.00	0.00	0.00
8,500.00	14.43	145.47	8,381.33	-769.94	529.69	-728.15	1.00	-1.00	0.00
8,600.00	13.43	145.47	8,478.38	-789.77	543.33	-746.91	1.00	-1.00	0.00
8,700.00	12.43	145.47	8,575.85	-808.20	556.01	-764.34	1.00	-1.00	0.00
8,800.00	11.43	145.47	8,673.69	-825.23	567.73	-780.44	1.00	-1.00	0.00
8,900.00	10.43	145.47	8,771.87	-840.85	578.47	-795.22	1.00	-1.00	0.00
9,000.00	9.43	145.47	8,870.37	-855.05	588.25	-808.65	1.00	-1.00	0.00
9,100.00	8.43	145.47	8,969.16	-867.84	597.04	-820.74	1.00	-1.00	0.00
9,200.00	7.43	145.47	9,068.20	-879.20	604.86	-831.49	1.00	-1.00	0.00
9,300.00	6.43	145.47	9,167.47	-889.14	611.70	-840.89	1.00	-1.00	0.00
9,400.00	5.43	145.47	9,266.93	-897.65	617.55	-848.94	1.00	-1.00	0.00
9,500.00	4.43	145.47	9,366.56	-904.73	622.42	-855.63	1.00	-1.00	0.00
9,600.00	3.43	145.47	9,466.33	-910.38	626.31	-860.97	1.00	-1.00	0.00
9,700.00	2.43	145.47	9,566.20	-914.58	629.20	-864.95	1.00	-1.00	0.00
9,800.00	1.43	145.47	9,666.14	-917.36	631.11	-867.57	1.00	-1.00	0.00
9,900.00	0.43	145.47	9,766.12	-918.69	632.03	-868.84	1.00	-1.00	0.00
9,942.88	0.00	138.00	9,809.00	-918.83	632.12	-868.96	1.00	-1.00	0.00
10,000.00	0.00	0.00	9,866.12	-918.83	632.12	-868.96	0.00	0.00	0.00
10,100.00	0.00	0.00	9,966.12	-918.83	632.12	-868.96	0.00	0.00	0.00
10,200.00	0.00	0.00	10,066.12	-918.83	632.12	-868.96	0.00	0.00	0.00
10,300.00	0.00	0.00	10,166.12	-918.83	632.12	-868.96	0.00	0.00	0.00
10,400.00	0.00	0.00	10,266.12	-918.83	632.12	-868.96	0.00	0.00	0.00
10,500.00	0.00	0.00	10,366.12	-918.83	632.12	-868.96	0.00	0.00	0.00

OXY Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well Iridium MDP1 28_21 Fed Com 47H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=25' @ 3411.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=25' @ 3411.00ft
Site:	Iridium MDP1 28_21 Fed Com	North Reference:	Grid
Well:	Iridium MDP1 28_21 Fed Com 47H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,600.00	0.00	0.00	10,466.12	-918.83	632.12	-868.96	0.00	0.00	0.00
10,700.00	0.00	0.00	10,566.12	-918.83	632.12	-868.96	0.00	0.00	0.00
10,800.00	0.00	0.00	10,666.12	-918.83	632.12	-868.96	0.00	0.00	0.00
10,900.00	0.00	0.00	10,766.12	-918.83	632.12	-868.96	0.00	0.00	0.00
11,000.00	0.00	0.00	10,866.12	-918.83	632.12	-868.96	0.00	0.00	0.00
11,100.00	0.00	0.00	10,966.12	-918.83	632.12	-868.96	0.00	0.00	0.00
11,200.00	0.00	0.00	11,066.12	-918.83	632.12	-868.96	0.00	0.00	0.00
11,300.00	0.00	0.00	11,166.12	-918.83	632.12	-868.96	0.00	0.00	0.00
11,400.00	0.00	0.00	11,266.12	-918.83	632.12	-868.96	0.00	0.00	0.00
11,500.00	0.00	0.00	11,366.12	-918.83	632.12	-868.96	0.00	0.00	0.00
11,600.00	0.00	0.00	11,466.12	-918.83	632.12	-868.96	0.00	0.00	0.00
11,700.00	0.00	0.00	11,566.12	-918.83	632.12	-868.96	0.00	0.00	0.00
11,800.00	0.00	0.00	11,666.12	-918.83	632.12	-868.96	0.00	0.00	0.00
11,900.00	0.00	0.00	11,766.12	-918.83	632.12	-868.96	0.00	0.00	0.00
12,000.00	0.00	0.00	11,866.12	-918.83	632.12	-868.96	0.00	0.00	0.00
12,076.86	0.00	138.00	11,942.98	-918.83	632.12	-868.96	0.00	0.00	0.00
12,100.00	2.55	30.00	11,966.12	-918.38	632.38	-868.50	11.00	11.00	0.00
12,200.00	13.55	30.00	12,064.98	-906.28	639.36	-855.91	11.00	11.00	0.00
12,300.00	24.55	30.00	12,159.36	-878.06	655.65	-826.55	11.00	11.00	0.00
12,400.00	35.55	30.00	12,245.79	-834.77	680.65	-781.51	11.00	11.00	0.00
12,485.95	45.00	30.00	12,311.29	-786.70	708.40	-731.51	11.00	11.00	0.00
12,500.00	46.20	28.64	12,321.12	-777.95	713.31	-722.41	11.00	8.57	-9.65
12,600.00	55.15	20.35	12,384.49	-707.59	744.98	-649.88	11.00	8.95	-8.30
12,700.00	64.55	13.72	12,434.70	-625.00	770.04	-565.64	11.00	9.40	-6.62
12,800.00	74.21	8.08	12,469.90	-533.22	787.56	-472.81	11.00	9.65	-5.65
12,900.00	83.99	2.95	12,488.80	-435.63	796.91	-374.79	11.00	9.79	-5.12
12,966.22	90.50	359.68	12,491.98	-369.55	798.43	-308.79	11.00	9.83	-4.94
13,000.00	90.50	359.68	12,491.69	-335.77	798.24	-275.11	0.00	0.00	0.00
13,100.00	90.50	359.68	12,490.82	-235.78	797.68	-175.44	0.00	0.00	0.00
13,200.00	90.50	359.68	12,489.94	-135.78	797.12	-75.77	0.00	0.00	0.00
13,300.00	90.50	359.68	12,489.07	-35.79	796.56	23.90	0.00	0.00	0.00
13,400.00	90.50	359.68	12,488.20	64.21	796.01	123.58	0.00	0.00	0.00
13,500.00	90.50	359.68	12,487.33	164.20	795.45	223.25	0.00	0.00	0.00
13,600.00	90.50	359.68	12,486.45	264.20	794.89	322.92	0.00	0.00	0.00
13,700.00	90.50	359.68	12,485.58	364.19	794.33	422.59	0.00	0.00	0.00
13,800.00	90.50	359.68	12,484.71	464.19	793.77	522.27	0.00	0.00	0.00
13,900.00	90.50	359.68	12,483.84	564.18	793.21	621.94	0.00	0.00	0.00
14,000.00	90.50	359.68	12,482.96	664.18	792.65	721.61	0.00	0.00	0.00
14,100.00	90.50	359.68	12,482.09	764.17	792.10	821.28	0.00	0.00	0.00
14,200.00	90.50	359.68	12,481.22	864.16	791.54	920.96	0.00	0.00	0.00
14,300.00	90.50	359.68	12,480.35	964.16	790.98	1,020.63	0.00	0.00	0.00
14,400.00	90.50	359.68	12,479.47	1,064.15	790.42	1,120.30	0.00	0.00	0.00
14,500.00	90.50	359.68	12,478.60	1,164.15	789.86	1,219.98	0.00	0.00	0.00
14,600.00	90.50	359.68	12,477.73	1,264.14	789.30	1,319.65	0.00	0.00	0.00
14,700.00	90.50	359.68	12,476.85	1,364.14	788.75	1,419.32	0.00	0.00	0.00
14,800.00	90.50	359.68	12,475.98	1,464.13	788.19	1,518.99	0.00	0.00	0.00
14,900.00	90.50	359.68	12,475.11	1,564.13	787.63	1,618.67	0.00	0.00	0.00
15,000.00	90.50	359.68	12,474.24	1,664.12	787.07	1,718.34	0.00	0.00	0.00
15,100.00	90.50	359.68	12,473.36	1,764.12	786.51	1,818.01	0.00	0.00	0.00
15,200.00	90.50	359.68	12,472.49	1,864.11	785.95	1,917.68	0.00	0.00	0.00
15,300.00	90.50	359.68	12,471.62	1,964.11	785.39	2,017.36	0.00	0.00	0.00
15,400.00	90.50	359.68	12,470.75	2,064.10	784.84	2,117.03	0.00	0.00	0.00
15,500.00	90.50	359.68	12,469.87	2,164.09	784.28	2,216.70	0.00	0.00	0.00
15,600.00	90.50	359.68	12,469.00	2,264.09	783.72	2,316.37	0.00	0.00	0.00
15,700.00	90.50	359.68	12,468.13	2,364.08	783.16	2,416.05	0.00	0.00	0.00

OXY Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well Iridium MDP1 28_21 Fed Com 47H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=25' @ 3411.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=25' @ 3411.00ft
Site:	Iridium MDP1 28_21 Fed Com	North Reference:	Grid
Well:	Iridium MDP1 28_21 Fed Com 47H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
15,800.00	90.50	359.68	12,467.26	2,464.08	782.60	2,515.72	0.00	0.00	0.00
15,900.00	90.50	359.68	12,466.38	2,564.07	782.04	2,615.39	0.00	0.00	0.00
16,000.00	90.50	359.68	12,465.51	2,664.07	781.49	2,715.06	0.00	0.00	0.00
16,100.00	90.50	359.68	12,464.64	2,764.06	780.93	2,814.74	0.00	0.00	0.00
16,200.00	90.50	359.68	12,463.76	2,864.06	780.37	2,914.41	0.00	0.00	0.00
16,300.00	90.50	359.68	12,462.89	2,964.05	779.81	3,014.08	0.00	0.00	0.00
16,400.00	90.50	359.68	12,462.02	3,064.05	779.25	3,113.76	0.00	0.00	0.00
16,500.00	90.50	359.68	12,461.15	3,164.04	778.69	3,213.43	0.00	0.00	0.00
16,600.00	90.50	359.68	12,460.27	3,264.04	778.13	3,313.10	0.00	0.00	0.00
16,700.00	90.50	359.68	12,459.40	3,364.03	777.58	3,412.77	0.00	0.00	0.00
16,800.00	90.50	359.68	12,458.53	3,464.02	777.02	3,512.45	0.00	0.00	0.00
16,900.00	90.50	359.68	12,457.66	3,564.02	776.46	3,612.12	0.00	0.00	0.00
17,000.00	90.50	359.68	12,456.78	3,664.01	775.90	3,711.79	0.00	0.00	0.00
17,100.00	90.50	359.68	12,455.91	3,764.01	775.34	3,811.46	0.00	0.00	0.00
17,200.00	90.50	359.68	12,455.04	3,864.00	774.78	3,911.14	0.00	0.00	0.00
17,300.00	90.50	359.68	12,454.17	3,964.00	774.22	4,010.81	0.00	0.00	0.00
17,400.00	90.50	359.68	12,453.29	4,063.99	773.67	4,110.48	0.00	0.00	0.00
17,500.00	90.50	359.68	12,452.42	4,163.99	773.11	4,210.15	0.00	0.00	0.00
17,600.00	90.50	359.68	12,451.55	4,263.98	772.55	4,309.83	0.00	0.00	0.00
17,700.00	90.50	359.68	12,450.67	4,363.98	771.99	4,409.50	0.00	0.00	0.00
17,800.00	90.50	359.68	12,449.80	4,463.97	771.43	4,509.17	0.00	0.00	0.00
17,900.00	90.50	359.68	12,448.93	4,563.97	770.87	4,608.85	0.00	0.00	0.00
18,000.00	90.50	359.68	12,448.06	4,663.96	770.32	4,708.52	0.00	0.00	0.00
18,100.00	90.50	359.68	12,447.18	4,763.96	769.76	4,808.19	0.00	0.00	0.00
18,200.00	90.50	359.68	12,446.31	4,863.95	769.20	4,907.86	0.00	0.00	0.00
18,300.00	90.50	359.68	12,445.44	4,963.94	768.64	5,007.54	0.00	0.00	0.00
18,400.00	90.50	359.68	12,444.57	5,063.94	768.08	5,107.21	0.00	0.00	0.00
18,500.00	90.50	359.68	12,443.69	5,163.93	767.52	5,206.88	0.00	0.00	0.00
18,600.00	90.50	359.68	12,442.82	5,263.93	766.96	5,306.55	0.00	0.00	0.00
18,700.00	90.50	359.68	12,441.95	5,363.92	766.41	5,406.23	0.00	0.00	0.00
18,800.00	90.50	359.68	12,441.08	5,463.92	765.85	5,505.90	0.00	0.00	0.00
18,900.00	90.50	359.68	12,440.20	5,563.91	765.29	5,605.57	0.00	0.00	0.00
19,000.00	90.50	359.68	12,439.33	5,663.91	764.73	5,705.24	0.00	0.00	0.00
19,100.00	90.50	359.68	12,438.46	5,763.90	764.17	5,804.92	0.00	0.00	0.00
19,200.00	90.50	359.68	12,437.59	5,863.90	763.61	5,904.59	0.00	0.00	0.00
19,300.00	90.50	359.68	12,436.71	5,963.89	763.06	6,004.26	0.00	0.00	0.00
19,400.00	90.50	359.68	12,435.84	6,063.89	762.50	6,103.94	0.00	0.00	0.00
19,500.00	90.50	359.68	12,434.97	6,163.88	761.94	6,203.61	0.00	0.00	0.00
19,600.00	90.50	359.68	12,434.09	6,263.87	761.38	6,303.28	0.00	0.00	0.00
19,700.00	90.50	359.68	12,433.22	6,363.87	760.82	6,402.95	0.00	0.00	0.00
19,800.00	90.50	359.68	12,432.35	6,463.86	760.26	6,502.63	0.00	0.00	0.00
19,900.00	90.50	359.68	12,431.48	6,563.86	759.70	6,602.30	0.00	0.00	0.00
20,000.00	90.50	359.68	12,430.60	6,663.85	759.15	6,701.97	0.00	0.00	0.00
20,100.00	90.50	359.68	12,429.73	6,763.85	758.59	6,801.64	0.00	0.00	0.00
20,200.00	90.50	359.68	12,428.86	6,863.84	758.03	6,901.32	0.00	0.00	0.00
20,300.00	90.50	359.68	12,427.99	6,963.84	757.47	7,000.99	0.00	0.00	0.00
20,400.00	90.50	359.68	12,427.11	7,063.83	756.91	7,100.66	0.00	0.00	0.00
20,500.00	90.50	359.68	12,426.24	7,163.83	756.35	7,200.33	0.00	0.00	0.00
20,600.00	90.50	359.68	12,425.37	7,263.82	755.80	7,300.01	0.00	0.00	0.00
20,700.00	90.50	359.68	12,424.50	7,363.82	755.24	7,399.68	0.00	0.00	0.00
20,800.00	90.50	359.68	12,423.62	7,463.81	754.68	7,499.35	0.00	0.00	0.00
20,900.00	90.50	359.68	12,422.75	7,563.80	754.12	7,599.03	0.00	0.00	0.00
21,000.00	90.50	359.68	12,421.88	7,663.80	753.56	7,698.70	0.00	0.00	0.00
21,100.00	90.50	359.68	12,421.00	7,763.79	753.00	7,798.37	0.00	0.00	0.00
21,200.00	90.50	359.68	12,420.13	7,863.79	752.44	7,898.04	0.00	0.00	0.00

OXY

Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well Iridium MDP1 28_21 Fed Com 47H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=25' @ 3411.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=25' @ 3411.00ft
Site:	Iridium MDP1 28_21 Fed Com	North Reference:	Grid
Well:	Iridium MDP1 28_21 Fed Com 47H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
21,300.00	90.50	359.68	12,419.26	7,963.78	751.89	7,997.72	0.00	0.00	0.00
21,400.00	90.50	359.68	12,418.39	8,063.78	751.33	8,097.39	0.00	0.00	0.00
21,500.00	90.50	359.68	12,417.51	8,163.77	750.77	8,197.06	0.00	0.00	0.00
21,600.00	90.50	359.68	12,416.64	8,263.77	750.21	8,296.73	0.00	0.00	0.00
21,700.00	90.50	359.68	12,415.77	8,363.76	749.65	8,396.41	0.00	0.00	0.00
21,800.00	90.50	359.68	12,414.90	8,463.76	749.09	8,496.08	0.00	0.00	0.00
21,900.00	90.50	359.68	12,414.02	8,563.75	748.53	8,595.75	0.00	0.00	0.00
22,000.00	90.50	359.68	12,413.15	8,663.75	747.98	8,695.42	0.00	0.00	0.00
22,100.00	90.50	359.68	12,412.28	8,763.74	747.42	8,795.10	0.00	0.00	0.00
22,200.00	90.50	359.68	12,411.41	8,863.74	746.86	8,894.77	0.00	0.00	0.00
22,300.00	90.50	359.68	12,410.53	8,963.73	746.30	8,994.44	0.00	0.00	0.00
22,400.00	90.50	359.68	12,409.66	9,063.72	745.74	9,094.12	0.00	0.00	0.00
22,500.00	90.50	359.68	12,408.79	9,163.72	745.18	9,193.79	0.00	0.00	0.00
22,600.00	90.50	359.68	12,407.91	9,263.71	744.63	9,293.46	0.00	0.00	0.00
22,700.00	90.50	359.68	12,407.04	9,363.71	744.07	9,393.13	0.00	0.00	0.00
22,800.00	90.50	359.68	12,406.17	9,463.70	743.51	9,492.81	0.00	0.00	0.00
22,900.00	90.50	359.68	12,405.30	9,563.70	742.95	9,592.48	0.00	0.00	0.00
23,000.00	90.50	359.68	12,404.42	9,663.69	742.39	9,692.15	0.00	0.00	0.00
23,100.00	90.50	359.68	12,403.55	9,763.69	741.83	9,791.82	0.00	0.00	0.00
23,200.00	90.50	359.68	12,402.68	9,863.68	741.27	9,891.50	0.00	0.00	0.00
23,216.22	90.50	359.68	12,402.54	9,879.90	741.18	9,907.66	0.00	0.00	0.00

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
KOP (Iridium MDP1 - hi/miss target - Shape - Point)	0.00	0.00	0.00	-964.97	802.11	461,444.04	713,416.62	32.267358	-103.776601
- plan misses target center by 1254.81ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)									
PBHL (Iridium MDP1 - plan hits target center - Point)	0.00	0.00	12,402.54	9,879.90	741.18	472,288.26	713,355.70	32.297166	-103.776616
FTP (Iridium MDP1 - plan misses target center by 25.35ft at 12762.75ft MD (12458.64 TVD, -568.28 N, 781.96 E) - Point)	0.00	0.00	12,441.00	-564.95	799.87	461,844.03	713,414.38	32.268457	-103.776601

OXY Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well Iridium MDP1 28_21 Fed Com 47H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=25' @ 3411.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=25' @ 3411.00ft
Site:	Iridium MDP1 28_21 Fed Com	North Reference:	Grid
Well:	Iridium MDP1 28_21 Fed Com 47H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
478.50	478.50	RUSTLER				
822.50	822.50	SALADO				
2,750.50	2,750.50	CASTILE				
4,257.50	4,257.50	DELAWARE				
4,282.50	4,282.50	BELL CANYON				
5,185.61	5,179.50	CHERRY CANYON				
6,498.05	6,447.50	BRUSHY CANYON				
8,182.43	8,074.50	BONE SPRING				
9,270.84	9,138.50	BONE SPRING 1ST				
9,897.38	9,763.50	BONE SPRING 2ND				
11,070.38	10,936.50	BONE SPRING 3RD				
11,536.38	11,402.50	WOLFCAMP				
11,686.38	11,552.50	WOLFCAMP A				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
4,515.00	4,515.00	0.00	0.00	Build 2°/100'	
5,264.93	5,256.39	-80.41	55.32	Hold 15° Tangent	
8,443.02	8,326.21	-758.01	521.49	Drop 1°/100'	
9,942.88	9,809.00	-918.83	632.12	Hold Vertical	
12,076.86	11,942.98	-918.83	632.12	KOP, Build & Turn 11°/100'	
12,485.95	12,311.29	-786.70	708.40	Continue 11°/100'	
12,966.22	12,491.98	-369.55	798.43	Landing Point	
23,216.22	12,402.54	9,879.90	741.18	TD at 23216.22' MD	

Form 3160-3
(June 2015)

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. NMNM40659	
6. If Indian, Allottee or Tribe Name	
7. If Unit or CA Agreement, Name and No.	
8. Lease Name and Well No. IRIDIUM MDP 1 28-21 FEDERAL COM 47H	
9. API Well No.	
1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER	
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other	
1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone	
2. Name of Operator OXY USA INCORPORATED	
3a. Address 5 Greenway Plaza, Suite 110, Houston, TX 77046	3b. Phone No. (include area code) (713) 366-5716
10. Field and Pool, or Exploratory WC-015 G-08 S233135D;WOLFCAMP	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SWSE / 669 FSL / 1537 FEL / LAT 32.27002119 / LONG -103.77917898 At proposed prod. zone NENE / 20 FNL / 740 FEL / LAT 32.29716642 / LONG -103.77661526	
11. Sec., T. R. M. or Blk. and Survey or Area SEC 28/T23S/R31E/NMP	
14. Distance in miles and direction from nearest town or post office* 8 miles	12. County or Parish EDDY
	13. State NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 20 FT	16. No of acres in lease
	640
17. Spacing Unit dedicated to this well	
	640
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 30 FT	19. Proposed Depth 23216' MD / 12492' TVD
	20. BLM/BIA Bond No. in file FED: ESB000226
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3386 FT	22. Approximate date work will start* 04/13/2024
	23. Estimated duration 15 DAYS
24. Attachments	

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

- | | |
|---|---|
| <ul style="list-style-type: none"> 1. Well plat certified by a registered surveyor. 2. A Drilling Plan. 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | <ul style="list-style-type: none"> 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 5. Operator certification. 6. Such other site specific information and/or plans as may be requested by the BLM. |
|---|---|

25. Signature <i>Roni Mathew</i>	Name (Printed/Typed) RONI MATHEW	Date 04/11/2024
Title REGULATORY ADVISOR		
Approved by (Signature)	Name (Printed/Typed)	Date
Title REGULATORY ADVISOR	Office	

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

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

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws 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, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: 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 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., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

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

The BLM connects this information to a new evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. 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 Connection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	OXY USA Incorporated
LEASE NO.:	NMNM40659
LOCATION:	Section 28, T.23 S., R.31 E., NMPM
COUNTY:	Eddy County, New Mexico ▼

WELL NAME & NO.:	Iridium MDP1 28-21 Federal Com 47H
SURFACE HOLE FOOTAGE:	669'S & 1537'E
BOTTOM HOLE FOOTAGE:	20'N & 740'E
ATS/API ID:	N/a
APD ID:	N/a
Sundry ID:	2784747

COA

H2S	No ▼		
Potash	R-111-P ▼		
Cave/Karst Potential	Low ▼		
Cave/Karst Potential	<input type="checkbox"/> Critical		
Variance	<input checked="" type="checkbox"/> None	<input checked="" type="checkbox"/> Flex Hose	<input checked="" type="checkbox"/> Other
Wellhead	Conventional and Multibowl ▼		
Other	<input checked="" type="checkbox"/> 4 String	Capitan Reef None ▼	<input type="checkbox"/> WIPP
Other	Pilot Hole None ▼	<input checked="" type="checkbox"/> Open Annulus	
Cementing	Contingency Squeeze None ▼	Echo-Meter Int 2 ▼	Primary Cement Squeeze None ▼
Special Requirements	<input type="checkbox"/> Water Disposal/Injection	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit
Special Requirements	<input type="checkbox"/> Batch Sundry		
Special Requirements Variance	<input checked="" type="checkbox"/> Break Testing	<input checked="" type="checkbox"/> Offline Cementing	<input checked="" type="checkbox"/> Casing Clearance

Report the new API number and expected date of Spud to the BLM.**A. HYDROGEN SULFIDE**

Hydrogen Sulfide (H₂S) monitors shall be installed prior to drilling out the surface shoe. If H₂S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet **43 CFR part 3170 Subpart 3176**, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **590 feet** (a minimum of **70 feet (Eddy County)** into the Rustler Anhydrite and above the salt when present, and below usable fresh water) and cemented to the surface. The surface hole shall be **17 1/2** inch in diameter.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **24 hours in the Potash Area** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the **10-3/4** inch intermediate casing shall be set at approximately **4358 feet** is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash. Only Saturated Brine-Based is approved when drilling the 10-3/4 inch hole section.**

Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

3. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:

Option 1 (Single Stage):

- Cement to surface. If cement does not circulate see B.1.a, c-d above.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.
Cement excess is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

Option 2:

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

- a. First stage: Operator will cement with intent to reach the top of the **Brushy Canyon at 6784' (710 sxs Class H/C+ additives)**.
- b. Second stage:
 - Operator will perform bradenhead squeeze and top-out. Cement to surface. If cement does not reach surface, the appropriate BLM office shall be notified. **(Squeeze 950 sxs Class C)**
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.
Cement excess is less than 25%, more cement is required if washout occurs. 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 to pump down 10-3/4" X 7-5/8" annulus post completion. Operator must run Echo-meter to verify Cement Slurry/Fluid top in the annulus. Submit results to the BLM. No displacement fluid/wash out shall be utilized at the top of the cement slurry between second stage BH and top out. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore. Report the amount of fluid utilized to pump the cement slurry and the calculated top of cement slurry to the BLM.

Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.

Operator has proposed an open annulus completion in R111P. Submit results to the BLM. Pressure monitoring device and Pressure Safety Valves must be installed at surface on the 10-3/4" x 7-5/8" annulus for the life of the well.

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

4. The minimum required fill of cement behind the 5-1/2 inch production casing is:
- Cement should tie-back at least **500 feet** into previous casing string. Operator shall provide method of verification.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash. Cement excess is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'
- 2.

Option 1:

- a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M) psi. Annular which shall be tested to 2100 (70% Working Pressure) psi.**
- b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **10-3/4** intermediate casing shoe shall be **5000 (5M) psi.**
- c. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **7-5/8** inch intermediate casing shoe shall be **10,000 (10M) psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**

Option 2:

- a. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the **13-3/8** inch surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **10,000 (10M) psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) 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 3172.6(b)(9) 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 part 3170 Subpart 3171**
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

BOPE Break Testing Variance (Approved only above the Bone Springs formations)

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

- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (**575-361-2822 Eddy County**) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at **21-day** intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per **43 CFR part 3170 Subpart 3172**.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

Offline Cementing

Operator has been (**Approved**) to pump the proposed cement program offline in the **Surface and 1st Intermediate** interval.

Offline cementing should commence within 24 hours of landing the casing for the interval.

Notify the BLM 4hrs prior to cementing offline at **Eddy County: 575-361-2822**.

Casing Clearance

Operator casing variance is approved for the utilization of **5-1/2 inch Wedge 461** connection. The **9.875"** intermediate shall be set 100' from the KOP.

Operator shall clean up cycles until wellbore is clear of cuttings and any large debris, ensure cutting sizes are less than 0.5 micron before cementing.

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)

Eddy County

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
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per **43 CFR part 3170 Subpart 3172** as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report when present.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P 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 part 3170 Subpart 3172 and API STD 53 Sec. 5.3**.
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:
 - 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. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
 - e. 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.
 - a. 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).

- b. 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.)
- c. 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 part 3170 Subpart 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 water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. 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.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. 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.
- g. 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.
- h. 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 part 3170 Subpart 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.

Long Vo (LVO) 4/12/2024

District I
 1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720

District II
 811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720

District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
 1220 S. St Francis Dr., Santa Fe, NM 87505
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 332971

CONDITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 332971
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	All original COA's still apply. Additionally, if cement is not circulated to surface during cementing operations, then a CBL is required.	4/12/2024