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

Sundry Print Report

10/03/2024

Well Name: PRECIOUS 30-18 FEDERAL COM

Well Location: T23S / R31E / SEC 31 / NENW / 32.266615 / -103.817544

County or Parish/State: EDDY / NM

Well Number: 53H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM21640

Unit or CA Name:

Unit or CA Number:

US Well Number:

Operator: OXY USA INCORPORATED

Notice of Intent

Sundry ID: 2806552

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 08/13/2024

Time Sundry Submitted: 06:33

Date proposed operation will begin: 08/13/2024

Procedure Description: OXY USA INC. REQUESTS A CHANGE TO THE APPROVED APD. THE 2ND INTERMEDIATE CASING POINT DEPTH CHANGING FROM THE ORIGINAL APD APPROVAL. THE UPDATES ARE DETAILED IN THE ATTACHMENT LABELED 'OXY APD CHANGE SUNDRY'. THE CEMENT VOLUMES HAVE BEEN ADJUSTED ACCORDINGLY. NO CHANGES TO THE SURFACE HOLE LOCATION.

NOI Attachments

Procedure Description

PRECIOUS_30_18_FED_COM_53H____OXY_APD_CHANGE_SUNDRY_LIST_8.13.24_20240813062951.pdf

PRECIOUS30_18FEDCOM53H_DrillPlan_20240813062951.pdf

PRECIOUS30_18FEDCOM53H_DirectPlan_20240813062951.pdf

PRECIOUS30_18FEDCOM53H_VAM_SPRINT_SF_5.5in_23ppf_P110RY_20240813062951.pdf

PRECIOUS30_18FEDCOM53H_2024_KPLA_Addendum_WellboreSchematics_20240813062951.pdf

Well Name: PRECIOUS 30-18 FEDERAL COM

Well Location: T23S / R31E / SEC 31 / NENW / 32.266615 / -103.817544

County or Parish/State: EDDY / NM

Well Number: 53H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM21640

Unit or CA Name:

Unit or CA Number:

US Well Number:

Operator: OXY USA INCORPORATED

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: RONI MATHEW

Signed on: AUG 13, 2024 06:30 AM

Name: OXY USA INCORPORATED

Title: REGULATORY SPECIALIST

Street Address: 5 Greenway Plaza, Suite 110

City: Houston **State:** TX

Phone: (713) 215-7827

Email address: RONI_MATHEW@OXY.COM

Field

Representative Name: JIM WILSON

Street Address: 6001 DEAUVILLE BLVD.

City: MIDLAND **State:** TX **Zip:** 79710

Phone: (575)631-2442

Email address: JIM_WILSON@OXY.COM

BLM Point of Contact

BLM POC Name: KEITH P IMMATTY

BLM POC Title: ENGINEER

BLM POC Phone: 5759884722

BLM POC Email Address: KIMMATTY@BLM.GOV

Disposition: Approved

Disposition Date: 10/02/2024

Signature: KEITH IMMATTY

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE *- Other instructions on page 2*

5. Lease Serial No.

6. If Indian, Allottee or Tribe Name

7. If Unit of CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.

2. Name of Operator

9. API Well No.

3a. Address

3b. Phone No. *(include area code)*

10. Field and Pool or Exploratory Area

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*

11. Country or Parish, State

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

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

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

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

Title

Signature

Date

THE SPACE FOR FEDERAL OR STATE OFICE USE

Approved by

Title

Date

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

Office

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

(Instructions on page 2)

GENERAL INSTRUCTIONS

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

SPECIFIC INSTRUCTIONS

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

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

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.
AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.
PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.
ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.
EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.
Response to this request is mandatory.
The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect ofthis form to U.S. Department ofthe Interior, Bureau ofLand 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: NENW / 568 FNL / 2503 FWL / TWSP: 23S / RANGE: 31E / SECTION: 31 / LAT: 32.266615 / LONG: -103.817544 (TVD: 0 feet, MD: 0 feet)

PPP: SESW / 1 FSL / 2171 FWL / TWSP: 23S / RANGE: 31E / SECTION: 18 / LAT: 32.297217 / LONG: -103.81861 (TVD: 12051 feet, MD: 22876 feet)

PPP: SENW / 2642 FSL / 2170 FWL / TWSP: 23S / RANGE: 31E / SECTION: 30 / LAT: 32.275435 / LONG: -103.818619 (TVD: 12051 feet, MD: 14950 feet)

PPP: SESW / 100 FSL / 2170 FWL / TWSP: 23S / RANGE: 31E / SECTION: 30 / LAT: 32.268449 / LONG: -103.818622 (TVD: 12051 feet, MD: 12407 feet)

PPP: NESW / 1321 FSL / 2170 FWL / TWSP: 23S / RANGE: 31E / SECTION: 19 / LAT: 32.286328 / LONG: -103.818615 (TVD: 12051 feet, MD: 18914 feet)

BHL: NESW / 2621 FSL / 2170 FWL / TWSP: 23S / RANGE: 31E / SECTION: 18 / LAT: 32.304419 / LONG: -103.818607 (TVD: 12051 feet, MD: 25493 feet)

OXY APD CHANGE SUNDRY LIST

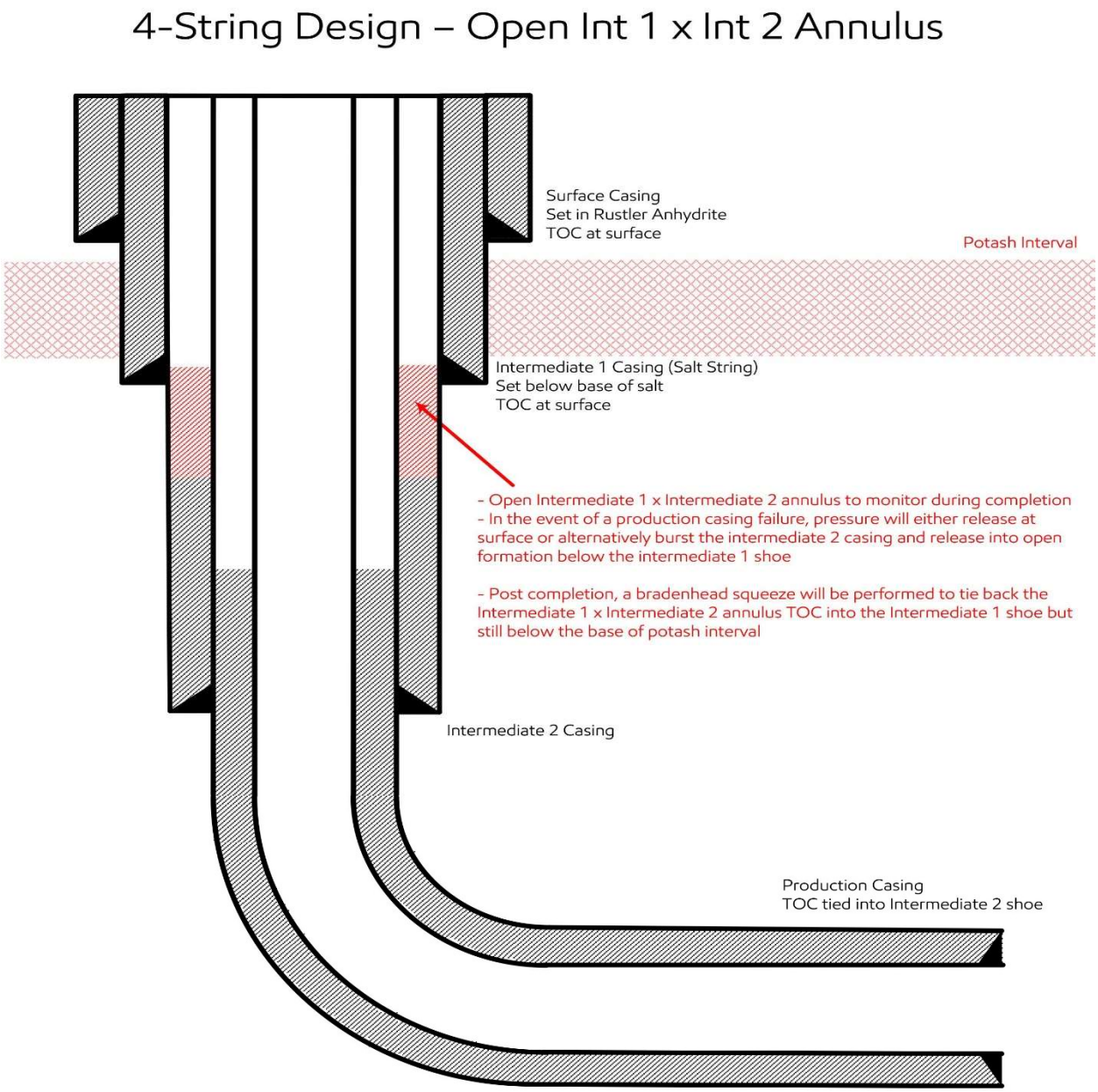
DATE	8/13/2024
WELL NAME	PRECIOUS 30-18 FEDERAL COM 53H
API NUMBER	30-015-55312

ITEM	PREVIOUS	UPDATE
NAME	NA	
NSL	NA	
SHL	NA	
PAD	NA	
BHL	NA	
HSU SIZE, ACRES	NA	
POOL	NA	
TARGET FORMATION	NA	
TVD	12051'	12046'
SURFACE CASING	NA	
INTERMEDIATE CASING	NA	
INTERMEDIATE 2 CASING	11421'	11700'
PRODUCTION CASING	NA	
LINER OR TIE BACK	NA	
CEMENT - SURFACE (TAIL)	NA	
CEMENT - INTERM 1ST (TAIL)	NA	
CEMENT - INTERM 1ST (LEAD)	NA	
CEMENT - INTERM 2ND (TAIL)	310 SX, 13.2 LBS, 1.68 YLD, Class C + RETARDER, DISP, EXCESS 5%	329 SX, 13.2 LBS, 1.68 YLD, Class C + RETARDER, DISP, EXCESS 5%
CEMENT - INTERM 2ND (BH)	239 SX, 13.3 LBS, 1.71 YLD, Class C + ACCELERATOR, EXCESS 25%	242 SX, 13.3 LBS, 1.71 YLD, Class C + ACCELERATOR, EXCESS 25%
CEMENT - PROD (TAIL)	822 SX, 13.3 LBS, 1.84 YLD, Class C + RETARDER, EXCESS 25%	792 SX, 13.3 LBS, 1.84 YLD, Class C + RETARDER, EXCESS 25%
FACILITIES	NA	NA
OTHER	NA	NA

OTHER COMMENTS
2ND INTERMEDIATE CASING POINT DEPTH CHANGING FROM ORIGINAL APD APPROVAL. CEMENT VOLUMES ADJUSTED ACCORDINGLY.

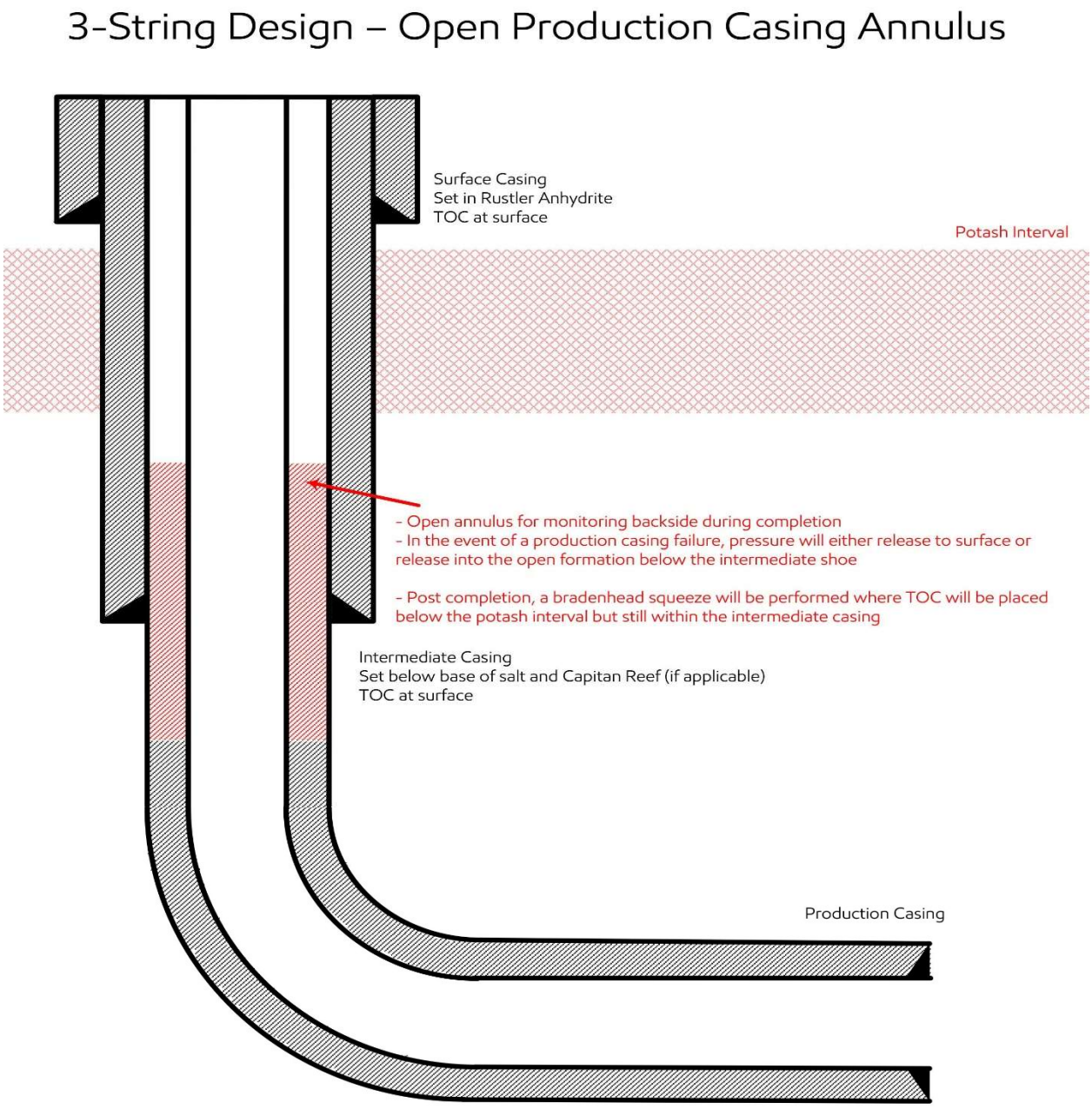
ATTACHMENTS
DRILL PLAN, DIRECTIONAL PLAN ARE ATTACHED.

Revision Date – May 21, 2024



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



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

OXY

PRD NM DIRECTIONAL PLANS (NAD 1983)
Precious 30_18
Precious 30_18 Fed Com 53H

Wellbore #1

Plan: Permitting Plan

Standard Planning Report

12 August, 2024

OXY

Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Precious 30_18 Fed Com 53H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB = 25' @ 3373.70ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB = 25' @ 3373.70ft
Site:	Precious 30_18	**North Reference:**	Grid
Well:	Precious 30_18 Fed Com 53H	**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 Precious 30_18

Site Position:		**Northing:**	461,098.38 usft	**Latitude:**	32.266607
From:	Map	**Easting:**	698,809.83 usft	**Longitude:**	-103.823862
Position Uncertainty:	0.00 ft	**Slot Radius:**	13.200 in		

Well Precious 30_18 Fed Com 53H

Well Position	**+N/-S**	0.00 ft	**Northing:**	461,110.52 usf	**Latitude:**	32.266615
	+E/-W	0.00 ft	**Easting:**	700,762.46 usf	**Longitude:**	-103.817545
Position Uncertainty		2.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	3,348.70 ft
Grid Convergence:		0.28 °				

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM_FILE	11/17/2023	6.42	59.83	47,486.00000000

Design Permitting Plan

Audit Notes:

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

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	358.36

Plan Survey Tool Program **Date** 8/12/2024

	Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	25,286.31	Permitting Plan (Wellbore #1)	B005Mc_MWD+HRGM+SA MWD+HRGM+Sag+MSA	

OXY

Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Precious 30_18 Fed Com 53H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB = 25' @ 3373.70ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB = 25' @ 3373.70ft
Site:	Precious 30_18	**North Reference:**	Grid
Well:	Precious 30_18 Fed Com 53H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

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	
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,300.04	10.00	292.62	4,297.51	16.74	-40.18	2.00	2.00	0.00	292.62	
7,290.97	10.00	292.62	7,242.99	216.52	-519.64	0.00	0.00	0.00	0.00	
8,291.05	0.00	0.00	8,238.00	250.00	-600.00	1.00	-1.00	0.00	180.00	
11,013.05	0.00	0.00	10,960.00	250.00	-600.00	0.00	0.00	0.00	0.00	
11,513.05	20.00	15.00	11,449.91	333.44	-577.64	4.00	4.00	0.00	15.00	
11,813.05	20.00	15.00	11,731.82	432.55	-551.09	0.00	0.00	0.00	0.00	
12,400.38	90.40	10.00	12,046.43	876.16	-462.66	12.00	11.99	-0.85	-5.31	
12,855.38	90.40	10.00	12,043.25	1,324.24	-383.65	0.00	0.00	0.00	0.00	
13,368.44	90.40	359.74	12,039.64	1,834.76	-340.16	2.00	0.00	-2.00	-89.94	
25,286.31	90.40	359.74	11,955.45	13,752.20	-394.57	0.00	0.00	0.00	0.00	PBHL (Precious

OXY
Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Precious 30_18 Fed Com 53H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB = 25' @ 3373.70ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB = 25' @ 3373.70ft
Site:	Precious 30_18	**North Reference:**	Grid
Well:	Precious 30_18 Fed Com 53H	**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	2.00	292.62	3,899.98	0.67	-1.61	0.72	2.00	2.00	0.00
4,000.00	4.00	292.62	3,999.84	2.68	-6.44	2.87	2.00	2.00	0.00
4,100.00	6.00	292.62	4,099.45	6.04	-14.49	6.45	2.00	2.00	0.00
4,200.00	8.00	292.62	4,198.70	10.72	-25.74	11.46	2.00	2.00	0.00
4,300.00	10.00	292.62	4,297.47	16.74	-40.17	17.88	2.00	2.00	0.00
4,300.04	10.00	292.62	4,297.51	16.74	-40.18	17.89	2.00	2.00	0.00
4,400.00	10.00	292.62	4,395.95	23.42	-56.21	25.02	0.00	0.00	0.00
4,500.00	10.00	292.62	4,494.43	30.10	-72.24	32.16	0.00	0.00	0.00
4,600.00	10.00	292.62	4,592.91	36.78	-88.27	39.29	0.00	0.00	0.00
4,700.00	10.00	292.62	4,691.39	43.46	-104.30	46.43	0.00	0.00	0.00
4,800.00	10.00	292.62	4,789.87	50.14	-120.33	53.57	0.00	0.00	0.00
4,900.00	10.00	292.62	4,888.35	56.82	-136.36	60.70	0.00	0.00	0.00
5,000.00	10.00	292.62	4,986.83	63.49	-152.39	67.84	0.00	0.00	0.00
5,100.00	10.00	292.62	5,085.31	70.17	-168.42	74.98	0.00	0.00	0.00
5,200.00	10.00	292.62	5,183.79	76.85	-184.45	82.11	0.00	0.00	0.00
5,300.00	10.00	292.62	5,282.27	83.53	-200.48	89.25	0.00	0.00	0.00

OXY

Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Precious 30_18 Fed Com 53H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB = 25' @ 3373.70ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB = 25' @ 3373.70ft
Site:	Precious 30_18	**North Reference:**	Grid
Well:	Precious 30_18 Fed Com 53H	**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)
5,400.00	10.00	292.62	5,380.75	90.21	-216.51	96.38	0.00	0.00	0.00
5,500.00	10.00	292.62	5,479.23	96.89	-232.54	103.52	0.00	0.00	0.00
5,600.00	10.00	292.62	5,577.71	103.57	-248.57	110.66	0.00	0.00	0.00
5,700.00	10.00	292.62	5,676.19	110.25	-264.60	117.79	0.00	0.00	0.00
5,800.00	10.00	292.62	5,774.67	116.93	-280.63	124.93	0.00	0.00	0.00
5,900.00	10.00	292.62	5,873.15	123.61	-296.66	132.07	0.00	0.00	0.00
6,000.00	10.00	292.62	5,971.63	130.29	-312.69	139.20	0.00	0.00	0.00
6,100.00	10.00	292.62	6,070.12	136.97	-328.72	146.34	0.00	0.00	0.00
6,200.00	10.00	292.62	6,168.60	143.65	-344.75	153.47	0.00	0.00	0.00
6,300.00	10.00	292.62	6,267.08	150.33	-360.78	160.61	0.00	0.00	0.00
6,400.00	10.00	292.62	6,365.56	157.00	-376.81	167.75	0.00	0.00	0.00
6,500.00	10.00	292.62	6,464.04	163.68	-392.84	174.88	0.00	0.00	0.00
6,600.00	10.00	292.62	6,562.52	170.36	-408.87	182.02	0.00	0.00	0.00
6,700.00	10.00	292.62	6,661.00	177.04	-424.90	189.16	0.00	0.00	0.00
6,800.00	10.00	292.62	6,759.48	183.72	-440.93	196.29	0.00	0.00	0.00
6,900.00	10.00	292.62	6,857.96	190.40	-456.96	203.43	0.00	0.00	0.00
7,000.00	10.00	292.62	6,956.44	197.08	-472.99	210.56	0.00	0.00	0.00
7,100.00	10.00	292.62	7,054.92	203.76	-489.02	217.70	0.00	0.00	0.00
7,200.00	10.00	292.62	7,153.40	210.44	-505.05	224.84	0.00	0.00	0.00
7,290.97	10.00	292.62	7,242.99	216.52	-519.64	231.33	0.00	0.00	0.00
7,300.00	9.91	292.62	7,251.88	217.12	-521.08	231.97	1.00	-1.00	0.00
7,400.00	8.91	292.62	7,350.54	223.40	-536.17	238.69	1.00	-1.00	0.00
7,500.00	7.91	292.62	7,449.46	229.03	-549.67	244.70	1.00	-1.00	0.00
7,600.00	6.91	292.62	7,548.62	233.99	-561.58	250.00	1.00	-1.00	0.00
7,700.00	5.91	292.62	7,648.00	238.29	-571.88	254.59	1.00	-1.00	0.00
7,800.00	4.91	292.62	7,747.55	241.91	-580.59	258.46	1.00	-1.00	0.00
7,900.00	3.91	292.62	7,847.25	244.87	-587.69	261.62	1.00	-1.00	0.00
8,000.00	2.91	292.62	7,947.07	247.16	-593.18	264.07	1.00	-1.00	0.00
8,100.00	1.91	292.62	8,046.98	248.78	-597.06	265.80	1.00	-1.00	0.00
8,200.00	0.91	292.62	8,146.95	249.72	-599.33	266.81	1.00	-1.00	0.00
8,291.05	0.00	0.00	8,238.00	250.00	-600.00	267.10	1.00	-1.00	0.00
8,300.00	0.00	0.00	8,246.95	250.00	-600.00	267.10	0.00	0.00	0.00
8,400.00	0.00	0.00	8,346.95	250.00	-600.00	267.10	0.00	0.00	0.00
8,500.00	0.00	0.00	8,446.95	250.00	-600.00	267.10	0.00	0.00	0.00
8,600.00	0.00	0.00	8,546.95	250.00	-600.00	267.10	0.00	0.00	0.00
8,700.00	0.00	0.00	8,646.95	250.00	-600.00	267.10	0.00	0.00	0.00
8,800.00	0.00	0.00	8,746.95	250.00	-600.00	267.10	0.00	0.00	0.00
8,900.00	0.00	0.00	8,846.95	250.00	-600.00	267.10	0.00	0.00	0.00
9,000.00	0.00	0.00	8,946.95	250.00	-600.00	267.10	0.00	0.00	0.00
9,100.00	0.00	0.00	9,046.95	250.00	-600.00	267.10	0.00	0.00	0.00
9,200.00	0.00	0.00	9,146.95	250.00	-600.00	267.10	0.00	0.00	0.00
9,300.00	0.00	0.00	9,246.95	250.00	-600.00	267.10	0.00	0.00	0.00
9,400.00	0.00	0.00	9,346.95	250.00	-600.00	267.10	0.00	0.00	0.00
9,500.00	0.00	0.00	9,446.95	250.00	-600.00	267.10	0.00	0.00	0.00
9,600.00	0.00	0.00	9,546.95	250.00	-600.00	267.10	0.00	0.00	0.00
9,700.00	0.00	0.00	9,646.95	250.00	-600.00	267.10	0.00	0.00	0.00
9,800.00	0.00	0.00	9,746.95	250.00	-600.00	267.10	0.00	0.00	0.00
9,900.00	0.00	0.00	9,846.95	250.00	-600.00	267.10	0.00	0.00	0.00
10,000.00	0.00	0.00	9,946.95	250.00	-600.00	267.10	0.00	0.00	0.00
10,100.00	0.00	0.00	10,046.95	250.00	-600.00	267.10	0.00	0.00	0.00
10,200.00	0.00	0.00	10,146.95	250.00	-600.00	267.10	0.00	0.00	0.00
10,300.00	0.00	0.00	10,246.95	250.00	-600.00	267.10	0.00	0.00	0.00
10,400.00	0.00	0.00	10,346.95	250.00	-600.00	267.10	0.00	0.00	0.00
10,500.00	0.00	0.00	10,446.95	250.00	-600.00	267.10	0.00	0.00	0.00
10,600.00	0.00	0.00	10,546.95	250.00	-600.00	267.10	0.00	0.00	0.00

OXY
Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Precious 30_18 Fed Com 53H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB = 25' @ 3373.70ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB = 25' @ 3373.70ft
Site:	Precious 30_18	**North Reference:**	Grid
Well:	Precious 30_18 Fed Com 53H	**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)
10,700.00	0.00	0.00	10,646.95	250.00	-600.00	267.10	0.00	0.00	0.00
10,800.00	0.00	0.00	10,746.95	250.00	-600.00	267.10	0.00	0.00	0.00
10,900.00	0.00	0.00	10,846.95	250.00	-600.00	267.10	0.00	0.00	0.00
11,000.00	0.00	0.00	10,946.95	250.00	-600.00	267.10	0.00	0.00	0.00
11,013.05	0.00	0.00	10,960.00	250.00	-600.00	267.10	0.00	0.00	0.00
11,100.00	3.48	15.00	11,046.89	252.55	-599.32	269.63	4.00	4.00	0.00
11,200.00	7.48	15.00	11,146.42	261.77	-596.85	278.78	4.00	4.00	0.00
11,300.00	11.48	15.00	11,245.03	277.67	-592.59	294.55	4.00	4.00	0.00
11,400.00	15.48	15.00	11,342.26	300.18	-586.55	316.88	4.00	4.00	0.00
11,500.00	19.48	15.00	11,437.62	329.18	-578.78	345.65	4.00	4.00	0.00
11,513.05	20.00	15.00	11,449.91	333.44	-577.64	349.87	4.00	4.00	0.00
11,600.00	20.00	15.00	11,531.61	362.17	-569.95	378.36	0.00	0.00	0.00
11,700.00	20.00	15.00	11,625.58	395.20	-561.09	411.13	0.00	0.00	0.00
11,800.00	20.00	15.00	11,719.55	428.24	-552.24	443.90	0.00	0.00	0.00
11,813.05	20.00	15.00	11,731.82	432.55	-551.09	448.18	0.00	0.00	0.00
11,900.00	30.40	13.10	11,810.38	468.44	-542.22	483.80	12.00	11.97	-2.18
12,000.00	42.39	12.00	11,890.73	526.27	-529.43	541.23	12.00	11.98	-1.10
12,100.00	54.38	11.31	11,957.03	599.36	-514.40	613.86	12.00	11.99	-0.69
12,200.00	66.37	10.81	12,006.37	684.52	-497.78	698.51	12.00	11.99	-0.51
12,300.00	78.36	10.39	12,036.62	778.02	-480.30	791.48	12.00	11.99	-0.42
12,400.00	90.35	10.00	12,046.43	875.79	-462.72	888.70	12.00	11.99	-0.38
12,400.38	90.40	10.00	12,046.43	876.16	-462.66	889.07	12.00	11.99	-0.38
12,500.00	90.40	10.00	12,045.73	974.27	-445.36	986.64	0.00	0.00	0.00
12,600.00	90.40	10.00	12,045.03	1,072.75	-427.99	1,084.58	0.00	0.00	0.00
12,700.00	90.40	10.00	12,044.34	1,171.22	-410.63	1,182.52	0.00	0.00	0.00
12,800.00	90.40	10.00	12,043.64	1,269.70	-393.26	1,280.46	0.00	0.00	0.00
12,855.38	90.40	10.00	12,043.25	1,324.24	-383.65	1,334.70	0.00	0.00	0.00
12,900.00	90.40	9.11	12,042.94	1,368.24	-376.24	1,378.47	2.00	0.00	-2.00
13,000.00	90.40	7.11	12,042.24	1,467.23	-362.14	1,477.01	2.00	0.00	-2.00
13,100.00	90.40	5.11	12,041.53	1,566.66	-351.50	1,576.09	2.00	0.00	-2.00
13,200.00	90.40	3.11	12,040.83	1,666.39	-344.34	1,675.58	2.00	0.00	-2.00
13,300.00	90.40	1.11	12,040.12	1,766.32	-340.66	1,775.36	2.00	0.00	-2.00
13,368.44	90.40	359.74	12,039.64	1,834.76	-340.16	1,843.76	2.00	0.00	-2.00
13,400.00	90.40	359.74	12,039.42	1,866.31	-340.30	1,875.30	0.00	0.00	0.00
13,500.00	90.40	359.74	12,038.71	1,966.31	-340.76	1,975.27	0.00	0.00	0.00
13,600.00	90.40	359.74	12,038.00	2,066.30	-341.21	2,075.24	0.00	0.00	0.00
13,700.00	90.40	359.74	12,037.30	2,166.30	-341.67	2,175.21	0.00	0.00	0.00
13,800.00	90.40	359.74	12,036.59	2,266.30	-342.13	2,275.18	0.00	0.00	0.00
13,900.00	90.40	359.74	12,035.88	2,366.29	-342.58	2,375.15	0.00	0.00	0.00
14,000.00	90.40	359.74	12,035.18	2,466.29	-343.04	2,475.11	0.00	0.00	0.00
14,100.00	90.40	359.74	12,034.47	2,566.29	-343.50	2,575.08	0.00	0.00	0.00
14,200.00	90.40	359.74	12,033.76	2,666.28	-343.95	2,675.05	0.00	0.00	0.00
14,300.00	90.40	359.74	12,033.06	2,766.28	-344.41	2,775.02	0.00	0.00	0.00
14,400.00	90.40	359.74	12,032.35	2,866.28	-344.87	2,874.99	0.00	0.00	0.00
14,500.00	90.40	359.74	12,031.64	2,966.27	-345.32	2,974.96	0.00	0.00	0.00
14,600.00	90.40	359.74	12,030.94	3,066.27	-345.78	3,074.92	0.00	0.00	0.00
14,700.00	90.40	359.74	12,030.23	3,166.27	-346.24	3,174.89	0.00	0.00	0.00
14,800.00	90.40	359.74	12,029.53	3,266.26	-346.69	3,274.86	0.00	0.00	0.00
14,900.00	90.40	359.74	12,028.82	3,366.26	-347.15	3,374.83	0.00	0.00	0.00
15,000.00	90.40	359.74	12,028.11	3,466.26	-347.61	3,474.80	0.00	0.00	0.00
15,100.00	90.40	359.74	12,027.41	3,566.25	-348.06	3,574.77	0.00	0.00	0.00
15,200.00	90.40	359.74	12,026.70	3,666.25	-348.52	3,674.74	0.00	0.00	0.00
15,300.00	90.40	359.74	12,025.99	3,766.24	-348.97	3,774.70	0.00	0.00	0.00
15,400.00	90.40	359.74	12,025.29	3,866.24	-349.43	3,874.67	0.00	0.00	0.00
15,500.00	90.40	359.74	12,024.58	3,966.24	-349.89	3,974.64	0.00	0.00	0.00

OXY
Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Precious 30_18 Fed Com 53H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB = 25' @ 3373.70ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB = 25' @ 3373.70ft
Site:	Precious 30_18	**North Reference:**	Grid
Well:	Precious 30_18 Fed Com 53H	**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)
15,600.00	90.40	359.74	12,023.87	4,066.23	-350.34	4,074.61	0.00	0.00	0.00
15,700.00	90.40	359.74	12,023.17	4,166.23	-350.80	4,174.58	0.00	0.00	0.00
15,800.00	90.40	359.74	12,022.46	4,266.23	-351.26	4,274.55	0.00	0.00	0.00
15,900.00	90.40	359.74	12,021.76	4,366.22	-351.71	4,374.51	0.00	0.00	0.00
16,000.00	90.40	359.74	12,021.05	4,466.22	-352.17	4,474.48	0.00	0.00	0.00
16,100.00	90.40	359.74	12,020.34	4,566.22	-352.63	4,574.45	0.00	0.00	0.00
16,200.00	90.40	359.74	12,019.64	4,666.21	-353.08	4,674.42	0.00	0.00	0.00
16,300.00	90.40	359.74	12,018.93	4,766.21	-353.54	4,774.39	0.00	0.00	0.00
16,400.00	90.40	359.74	12,018.22	4,866.21	-354.00	4,874.36	0.00	0.00	0.00
16,500.00	90.40	359.74	12,017.52	4,966.20	-354.45	4,974.32	0.00	0.00	0.00
16,600.00	90.40	359.74	12,016.81	5,066.20	-354.91	5,074.29	0.00	0.00	0.00
16,700.00	90.40	359.74	12,016.10	5,166.19	-355.37	5,174.26	0.00	0.00	0.00
16,800.00	90.40	359.74	12,015.40	5,266.19	-355.82	5,274.23	0.00	0.00	0.00
16,900.00	90.40	359.74	12,014.69	5,366.19	-356.28	5,374.20	0.00	0.00	0.00
17,000.00	90.40	359.74	12,013.98	5,466.18	-356.74	5,474.17	0.00	0.00	0.00
17,100.00	90.40	359.74	12,013.28	5,566.18	-357.19	5,574.14	0.00	0.00	0.00
17,200.00	90.40	359.74	12,012.57	5,666.18	-357.65	5,674.10	0.00	0.00	0.00
17,300.00	90.40	359.74	12,011.87	5,766.17	-358.11	5,774.07	0.00	0.00	0.00
17,400.00	90.40	359.74	12,011.16	5,866.17	-358.56	5,874.04	0.00	0.00	0.00
17,500.00	90.40	359.74	12,010.45	5,966.17	-359.02	5,974.01	0.00	0.00	0.00
17,600.00	90.40	359.74	12,009.75	6,066.16	-359.47	6,073.98	0.00	0.00	0.00
17,700.00	90.40	359.74	12,009.04	6,166.16	-359.93	6,173.95	0.00	0.00	0.00
17,800.00	90.40	359.74	12,008.33	6,266.16	-360.39	6,273.91	0.00	0.00	0.00
17,900.00	90.40	359.74	12,007.63	6,366.15	-360.84	6,373.88	0.00	0.00	0.00
18,000.00	90.40	359.74	12,006.92	6,466.15	-361.30	6,473.85	0.00	0.00	0.00
18,100.00	90.40	359.74	12,006.21	6,566.15	-361.76	6,573.82	0.00	0.00	0.00
18,200.00	90.40	359.74	12,005.51	6,666.14	-362.21	6,673.79	0.00	0.00	0.00
18,300.00	90.40	359.74	12,004.80	6,766.14	-362.67	6,773.76	0.00	0.00	0.00
18,400.00	90.40	359.74	12,004.10	6,866.13	-363.13	6,873.72	0.00	0.00	0.00
18,500.00	90.40	359.74	12,003.39	6,966.13	-363.58	6,973.69	0.00	0.00	0.00
18,600.00	90.40	359.74	12,002.68	7,066.13	-364.04	7,073.66	0.00	0.00	0.00
18,700.00	90.40	359.74	12,001.98	7,166.12	-364.50	7,173.63	0.00	0.00	0.00
18,800.00	90.40	359.74	12,001.27	7,266.12	-364.95	7,273.60	0.00	0.00	0.00
18,900.00	90.40	359.74	12,000.56	7,366.12	-365.41	7,373.57	0.00	0.00	0.00
19,000.00	90.40	359.74	11,999.86	7,466.11	-365.87	7,473.54	0.00	0.00	0.00
19,100.00	90.40	359.74	11,999.15	7,566.11	-366.32	7,573.50	0.00	0.00	0.00
19,200.00	90.40	359.74	11,998.44	7,666.11	-366.78	7,673.47	0.00	0.00	0.00
19,300.00	90.40	359.74	11,997.74	7,766.10	-367.24	7,773.44	0.00	0.00	0.00
19,400.00	90.40	359.74	11,997.03	7,866.10	-367.69	7,873.41	0.00	0.00	0.00
19,500.00	90.40	359.74	11,996.32	7,966.10	-368.15	7,973.38	0.00	0.00	0.00
19,600.00	90.40	359.74	11,995.62	8,066.09	-368.61	8,073.35	0.00	0.00	0.00
19,700.00	90.40	359.74	11,994.91	8,166.09	-369.06	8,173.31	0.00	0.00	0.00
19,800.00	90.40	359.74	11,994.21	8,266.09	-369.52	8,273.28	0.00	0.00	0.00
19,900.00	90.40	359.74	11,993.50	8,366.08	-369.98	8,373.25	0.00	0.00	0.00
20,000.00	90.40	359.74	11,992.79	8,466.08	-370.43	8,473.22	0.00	0.00	0.00
20,100.00	90.40	359.74	11,992.09	8,566.07	-370.89	8,573.19	0.00	0.00	0.00
20,200.00	90.40	359.74	11,991.38	8,666.07	-371.34	8,673.16	0.00	0.00	0.00
20,300.00	90.40	359.74	11,990.67	8,766.07	-371.80	8,773.12	0.00	0.00	0.00
20,400.00	90.40	359.74	11,989.97	8,866.06	-372.26	8,873.09	0.00	0.00	0.00
20,500.00	90.40	359.74	11,989.26	8,966.06	-372.71	8,973.06	0.00	0.00	0.00
20,600.00	90.40	359.74	11,988.55	9,066.06	-373.17	9,073.03	0.00	0.00	0.00
20,700.00	90.40	359.74	11,987.85	9,166.05	-373.63	9,173.00	0.00	0.00	0.00
20,800.00	90.40	359.74	11,987.14	9,266.05	-374.08	9,272.97	0.00	0.00	0.00
20,900.00	90.40	359.74	11,986.44	9,366.05	-374.54	9,372.94	0.00	0.00	0.00
21,000.00	90.40	359.74	11,985.73	9,466.04	-375.00	9,472.90	0.00	0.00	0.00

OXY
Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Precious 30_18 Fed Com 53H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB = 25' @ 3373.70ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB = 25' @ 3373.70ft
Site:	Precious 30_18	**North Reference:**	Grid
Well:	Precious 30_18 Fed Com 53H	**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)
21,100.00	90.40	359.74	11,985.02	9,566.04	-375.45	9,572.87	0.00	0.00	0.00
21,200.00	90.40	359.74	11,984.32	9,666.04	-375.91	9,672.84	0.00	0.00	0.00
21,300.00	90.40	359.74	11,983.61	9,766.03	-376.37	9,772.81	0.00	0.00	0.00
21,400.00	90.40	359.74	11,982.90	9,866.03	-376.82	9,872.78	0.00	0.00	0.00
21,500.00	90.40	359.74	11,982.20	9,966.03	-377.28	9,972.75	0.00	0.00	0.00
21,600.00	90.40	359.74	11,981.49	10,066.02	-377.74	10,072.71	0.00	0.00	0.00
21,700.00	90.40	359.74	11,980.78	10,166.02	-378.19	10,172.68	0.00	0.00	0.00
21,800.00	90.40	359.74	11,980.08	10,266.01	-378.65	10,272.65	0.00	0.00	0.00
21,900.00	90.40	359.74	11,979.37	10,366.01	-379.11	10,372.62	0.00	0.00	0.00
22,000.00	90.40	359.74	11,978.67	10,466.01	-379.56	10,472.59	0.00	0.00	0.00
22,100.00	90.40	359.74	11,977.96	10,566.00	-380.02	10,572.56	0.00	0.00	0.00
22,200.00	90.40	359.74	11,977.25	10,666.00	-380.48	10,672.52	0.00	0.00	0.00
22,300.00	90.40	359.74	11,976.55	10,766.00	-380.93	10,772.49	0.00	0.00	0.00
22,400.00	90.40	359.74	11,975.84	10,865.99	-381.39	10,872.46	0.00	0.00	0.00
22,500.00	90.40	359.74	11,975.13	10,965.99	-381.84	10,972.43	0.00	0.00	0.00
22,600.00	90.40	359.74	11,974.43	11,065.99	-382.30	11,072.40	0.00	0.00	0.00
22,700.00	90.40	359.74	11,973.72	11,165.98	-382.76	11,172.37	0.00	0.00	0.00
22,800.00	90.40	359.74	11,973.01	11,265.98	-383.21	11,272.34	0.00	0.00	0.00
22,900.00	90.40	359.74	11,972.31	11,365.98	-383.67	11,372.30	0.00	0.00	0.00
23,000.00	90.40	359.74	11,971.60	11,465.97	-384.13	11,472.27	0.00	0.00	0.00
23,100.00	90.40	359.74	11,970.89	11,565.97	-384.58	11,572.24	0.00	0.00	0.00
23,200.00	90.40	359.74	11,970.19	11,665.97	-385.04	11,672.21	0.00	0.00	0.00
23,300.00	90.40	359.74	11,969.48	11,765.96	-385.50	11,772.18	0.00	0.00	0.00
23,400.00	90.40	359.74	11,968.78	11,865.96	-385.95	11,872.15	0.00	0.00	0.00
23,500.00	90.40	359.74	11,968.07	11,965.95	-386.41	11,972.11	0.00	0.00	0.00
23,600.00	90.40	359.74	11,967.36	12,065.95	-386.87	12,072.08	0.00	0.00	0.00
23,700.00	90.40	359.74	11,966.66	12,165.95	-387.32	12,172.05	0.00	0.00	0.00
23,800.00	90.40	359.74	11,965.95	12,265.94	-387.78	12,272.02	0.00	0.00	0.00
23,900.00	90.40	359.74	11,965.24	12,365.94	-388.24	12,371.99	0.00	0.00	0.00
24,000.00	90.40	359.74	11,964.54	12,465.94	-388.69	12,471.96	0.00	0.00	0.00
24,100.00	90.40	359.74	11,963.83	12,565.93	-389.15	12,571.93	0.00	0.00	0.00
24,200.00	90.40	359.74	11,963.12	12,665.93	-389.61	12,671.89	0.00	0.00	0.00
24,300.00	90.40	359.74	11,962.42	12,765.93	-390.06	12,771.86	0.00	0.00	0.00
24,400.00	90.40	359.74	11,961.71	12,865.92	-390.52	12,871.83	0.00	0.00	0.00
24,500.00	90.40	359.74	11,961.01	12,965.92	-390.98	12,971.80	0.00	0.00	0.00
24,600.00	90.40	359.74	11,960.30	13,065.92	-391.43	13,071.77	0.00	0.00	0.00
24,700.00	90.40	359.74	11,959.59	13,165.91	-391.89	13,171.74	0.00	0.00	0.00
24,800.00	90.40	359.74	11,958.89	13,265.91	-392.35	13,271.70	0.00	0.00	0.00
24,900.00	90.40	359.74	11,958.18	13,365.91	-392.80	13,371.67	0.00	0.00	0.00
25,000.00	90.40	359.74	11,957.47	13,465.90	-393.26	13,471.64	0.00	0.00	0.00
25,100.00	90.40	359.74	11,956.77	13,565.90	-393.71	13,571.61	0.00	0.00	0.00
25,200.00	90.40	359.74	11,956.06	13,665.89	-394.17	13,671.58	0.00	0.00	0.00
25,286.31	90.40	359.74	11,955.45	13,752.20	-394.57	13,757.86	0.00	0.00	0.00

OXY
Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Precious 30_18 Fed Com 53H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB = 25' @ 3373.70ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB = 25' @ 3373.70ft
Site:	Precious 30_18	**North Reference:**	Grid
Well:	Precious 30_18 Fed Com 53H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
KOP (Precious 30_18 - plan misses target center by 701.51ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E) - Point	0.00	0.00	0.00	615.83	-335.96	461,726.31	700,426.52	32.268312	-103.818622
PBHL (Precious 30_18 - plan hits target center - Point	0.00	0.01	11,955.45	13,752.20	-394.57	474,861.84	700,367.92	32.304419	-103.818608
FTP (Precious 30_18 - plan misses target center by 165.58ft at 12223.07ft MD (12015.11 TVD, 705.49 N, -493.79 E) - Point	0.00	0.00	12,046.79	665.82	-336.19	461,776.30	700,426.29	32.268449	-103.818622

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
361.70	361.70	RUSTLER			
677.70	677.70	SALADO			
2,604.70	2,604.70	CASTILE			
4,043.99	4,043.70	DELAWARE			
4,080.15	4,079.70	BELL CANYON			
4,985.65	4,972.70	CHERRY CANYON			
6,294.54	6,261.70	BRUSHY CANYON			
7,997.62	7,944.70	BONE SPRING			
9,030.75	8,977.70	BONE SPRING 1ST			
9,671.75	9,618.70	BONE SPRING 2ND			
10,876.75	10,823.70	BONE SPRING 3RD			
11,351.90	11,295.70	WOLFCAMP			
11,509.64	11,446.70	WOLFCAMP A			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
3,800.00	3,800.00	0.00	0.00	Build 2°/100'
4,300.04	4,297.51	16.74	-40.18	Hold 10° Tangent
7,290.97	7,242.99	216.52	-519.64	Drop 1°/100'
8,291.05	8,238.00	250.00	-600.00	Hold Vertical
11,013.05	10,960.00	250.00	-600.00	Build 4°/100'
11,513.05	11,449.91	333.44	-577.64	Hold 20°
11,813.05	11,731.82	432.55	-551.09	KOP, Build & Turn 12°/100'
12,400.38	12,046.43	876.16	-462.66	Landing Point
12,855.38	12,043.25	1,324.24	-383.65	Turn 2°/100'
13,368.44	12,039.64	1,834.76	-340.16	Hold
25,286.31	11,955.45	13,752.20	-394.57	TD at 25286.31' MD

Oxy USA Inc. - PRECIOUS 30_18 FED COM 53H
Drill Plan

1. Geologic Formations

TVD of Target (ft):	12046	Pilot Hole Depth (ft):	
Total Measured Depth (ft):	25286	Deepest Expected Fresh Water (ft):	362

Delaware Basin

Formation	MD-RKB (ft)	TVD-RKB (ft)	Expected Fluids
Rustler	362	362	
Salado	678	678	Salt
Castile	2605	2605	Salt
Delaware	4044	4044	Oil/Gas/Brine
Bell Canyon	4080	4080	Oil/Gas/Brine
Cherry Canyon	4986	4973	Oil/Gas/Brine
Brushy Canyon	6295	6262	Losses
Bone Spring	7998	7945	Oil/Gas
Bone Spring 1st	9031	8978	Oil/Gas
Bone Spring 2nd	9672	9619	Oil/Gas
Bone Spring 3rd	10877	10824	Oil/Gas
Wolfcamp	11352	11296	Oil/Gas
Penn			Oil/Gas
Strawn			Oil/Gas

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

2. Casing Program

		MD		TVD					
Section	Hole Size (in)	From (ft)	To (ft)	From (ft)	To (ft)	Csg. OD (in)	Csg Wt. (ppf)	Grade	Conn.
Surface	17.5	0	422	0	422	13.375	54.5	J-55	BTC
Salt	12.25	0	4144	0	4143	10.75	45.5	L-80 HC	BTC-SC
Intermediate	9.875	0	11780	0	11700	7.625	29.7	L-80 HC	BTC
Production	6.75	0	25286	0	12046	5.5	23	P-110	Sprint-SF

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

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

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

3. Cementing Program

Section	Stage	Slurry:	Sacks	Yield (ft^3/ft)	Density (lb/gal)	Excess:	TOC	Placement	Description
Surface	1	Surface - Tail	441	1.33	14.8	100%	-	Circulate	Class C+Accel.
Int.1	1	Intermediate - Tail	85	1.33	14.8	20%	3,644	Circulate	Class C+Accel.
Int.1	1	Intermediate - Lead	584	1.73	12.9	50%	-	Circulate	Class Pozz+Ret.
Int. 2	1	Intermediate 1S - Tail	329	1.68	13.2	5%	6,545	Circulate	Class C+Ret., Disper.
Int. 2	2	Intermediate 2S - Tail BH	242	1.71	13.3	25%	3,644	Bradenhead Post-Frac	Class C+Accel.
Prod.	1	Production - Tail	792	1.84	13.3	25%	11,280	Circulate	Class C+Ret.

Offline Cementing Request

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

Bradenhead CBL Request

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

4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	✓	Tested to:	TVD Depth (ft) per Section:
12.25" Hole	13-5/8”	5M	Annular	✓	70% of working pressure	4143
		5M	Blind Ram	✓	250 psi / 5000 psi	
			Pipe Ram			
			Double Ram	✓		
			Other*			
9.875" Hole	13-5/8”	5M	Annular	✓	70% of working pressure	11700
		5M	Blind Ram	✓	250 psi / 5000 psi	
			Pipe Ram			
			Double Ram	✓		
			Other*			
6.75" Hole	13-5/8”	5M	Annular	✓	100% of working pressure	12046
		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 maintained at all times. Please see Annular BOP Variance attachment for further details.

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

BOP Break Testing Request

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

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

5. Mud Program

Section	Depth		Depth - TVD		Type	Weight (ppg)	Viscosity	Water Loss
	From (ft)	To (ft)	From (ft)	To (ft)				
Surface	0	422	0	422	Water-Based Mud	8.6 - 8.8	40-60	N/C
Intermediate 1	422	4144	422	4143	Saturated Brine-Based or Oil-Based Mud	8.0 - 10.0	35-45	N/C
Intermediate 2	4144	11780	4143	11700	Water-Based or Oil-Based Mud	8.0 - 10.0	38-50	N/C
Production	11780	25286	11700	12046	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,

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

6. Logging and Testing Procedures

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

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

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	8457 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	177°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. We plan to drill the 6 well pad in batch by section: all surface sections, intermediate sections and production sections. The wellhead will be secured with a night cap whenever the rig is not over the well.	Yes
Will more than one drilling rig be used for drilling operations? If yes, describe. Oxy requests the option to contract a Surface Rig to drill, set surface casing, and cement for this well. If the timing between rigs is such that Oxy would not be able to preset surface, the Primary Rig will MIRU and drill the well in its entirety per the APD. Please see the attached document for information on the spudder rig.	Yes

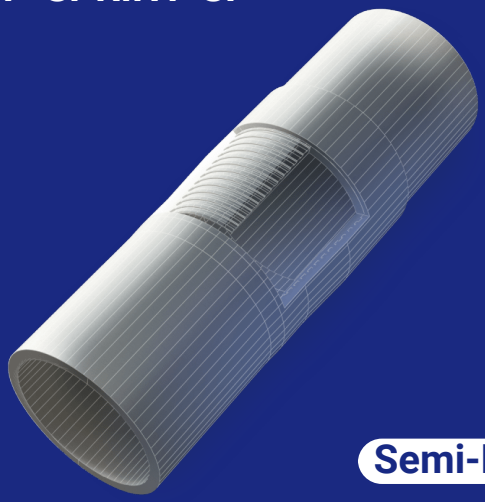
Total Estimated Cuttings Volume: 1990 bbls

Generated on April 25, 2024

CONNECTION DATA SHEET

OD: **5.500 in.** Grade: **P110 RY**
Weight: **23.00 lb/ft** Drift: **4.545 in. (API)**
Wall Th.: **0.415 in.**

VAM® SPRINT-SF



Semi-Flush

Field Torque Values

Make-up Torque (ft-lb)
20,250 **MIN**
22,750 **OPTI**
25,250 **MAX**

Torque with Sealability (ft-lb)
40,000 **MTS**

Locked Flank Torque (ft-lb)
4,550 **MIN**
15,920 **MAX**

(2) MTS: Maximum Torque with Sealability.

PIPE BODY PROPERTIES

Nominal OD	5.500	*in.*
Nominal ID	4.670	*in.*
Nominal Wall Thickness	0.415	*in.*
Minimum Wall Thickness	87.5	*%*
Nominal Weight (API)	23.00	*lb/ft*
Plain End Weight	22.56	*lb/ft*
Drift	4.545	*in.*
Grade Type	Controlled Yield	
Minimum Yield Strength	110	*ksi*
Maximum Yield Strength	125	*ksi*
Minimum Ultimate Tensile Strength	140	*ksi*
Pipe Body Yield Strength	729	*klb*
Internal Yield Pressure	14,530	*psi*
Collapse Pressure	14,540	*psi*

CONNECTION PROPERTIES

Connection Type	Semi-Premium Integral Semi-Flu	
Nominal Connection OD	5.779	*in.*
Nominal Connection ID	4.615	*in.*
Make-up Loss	5.606	*in.*
Tension Efficiency	92	*% Pipe Body*
Compression Efficiency	92	*% Pipe Body*
Internal Pressure Efficiency	100	*% Pipe Body*
External Pressure Efficiency	100	*% Pipe Body*

JOINT PERFORMANCES

Tension Strength	671	*klb*
Compression Strength	671	*klb*
Internal Pressure Resistance	14,530	*psi*
External Pressure Resistance	14,540	*psi*
Maximum Bending, Structural	80	*°/100 ft*
Maximum Bending, with Sealability(1)	30	*°/100 ft*

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

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

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Action 389711

CONDITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 389711
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	If cement is not circulated to surface during cementing operations, a Cement Bond Log (CBL) is required.	1/27/2025