

NSL Initial Application

Received March 5, 2019

This application is only placed in file. It MAY or MAY NOT have been reviewed to be determined Administratively Complete

RECEIVED: 03/05/19	REVIEWER: LRL	TYPE: NSL	APP NO: pLEL1906647663
---------------------------	----------------------	------------------	-------------------------------

ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
 - Geological & Engineering Bureau -
 1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Applicant: OXY USA INC. **OGRID Number:** 16696
Well Name: STERLING SILVER MDP1 33-4 FEDERAL COM 177H **API:** 30-015-PENDING
Pool: PURPLE SAGE WOLFCAMP **Pool Code:** 98220

SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED BELOW

- 1) **TYPE OF APPLICATION:** Check those which apply for [A]
 A. Location – Spacing Unit – Simultaneous Dedication
 NSL NSP (PROJECT AREA) NSP (PRORATION UNIT) SD
- B. Check one only for [I] or [II]
 [I] Commingling – Storage – Measurement
 DHC CTB PLC PC OLS OLM
 [II] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery
 WFX PMX SWD IPI EOR PPR

FOR OCD ONLY	
<input type="checkbox"/>	Notice Complete
<input type="checkbox"/>	Application Content Complete

- 2) **NOTIFICATION REQUIRED TO:** Check those which apply.
 A. Offset operators or lease holders
 B. Royalty, overriding royalty owners, revenue owners
 C. Application requires published notice
 D. Notification and/or concurrent approval by SLO
 E. Notification and/or concurrent approval by BLM
 F. Surface owner
 G. For all of the above, proof of notification or publication is attached, and/or,
 H. No notice required

3) **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

SARAH CHAPMAN
 Print or Type Name

2/28/2019
 Date

(713) 350-4997
 Phone Number

Sarah Chapman
 Signature

SARAH_CHAPMAN@OXY.COM
 e-mail Address



OXY USA Inc

5 Greenway Plaza, Suite 110
Houston, TX 77046-0521

February 21, 2019

New Mexico Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Attention: Leonard Lowe

Re: ***Application for Administrative Approval of Non-Standard Location
Sterling Silver MDP1 33-4 Federal Com 177H – Purple Sage Wolfcamp
Surface – 69’ FNL 2504’ FWL Unit C Sec 33 T23S R31E
First Take Point – 100’ FNL 2200’ FEL Unit B Sec 33 T23S R31E
Last Take Point – 100’ FSL 2200’ FEL Unit O Sec 4 T24S R31E
Bottom Hole – 20’ FSL 2200’ FEL Unit O Sec 4 T24S R31E
Eddy County, New Mexico***

Dear Mr. Lowe:

OXY USA Inc. respectfully requests administrative approval of a non-standard location on the Sterling Silver MDP1 33-4 Federal Com 177H well, API Number 30-015-Pending, Property Code 322740. The 177H well is proposed to be completed in the Purple Sage Wolfcamp pool, Pool Code 98220, which has special pool rules specifying the completed interval must be located 330 feet from the exterior boundary of the applicable spacing unit. The proposed completed interval is projected as follows:

Surface – 69’ FNL 2504’ FWL Unit C Sec 33 T23S R31E
First Take Point – 100’ FNL 2200’ FEL Unit B Sec 33 T23S R31E
Last Take Point – 100’ FSL 2200’ FEL Unit O Sec 4 T24S R31E
Bottom Hole – 20’ FSL 2200’ FEL Unit O Sec 4 T24S R31E

The adjoining units towards which the unorthodox location encroaches are located in T23S R31E, Section 28 - Units J, I, P and O and T24S R31E Section 09 - Units A, B, G and H.

Approval of the unorthodox completed interval will allow for efficient spacing of horizontal wells and thereby prevent waste.

To support this request, the following information has been submitted for your review:

1. Application for Permit to Drill.
2. C-102 Plat for the proposed well and additional plats with offsetting well and affected spacing units.
3. List of affected offset parties in each adjoining spacing unit in the same pool or formation located closer to the unorthodox well location than the minimum distance prescribed by applicable rule or order, copies of the signed certified return receipts will be furnished upon request.
4. Proposed Directional Survey
5. Statement from Oxy Production Engineer

If you need any additional information, please call me at 713-350-4997.

Sincerely,

Sarah Chapman
Regulatory Specialist

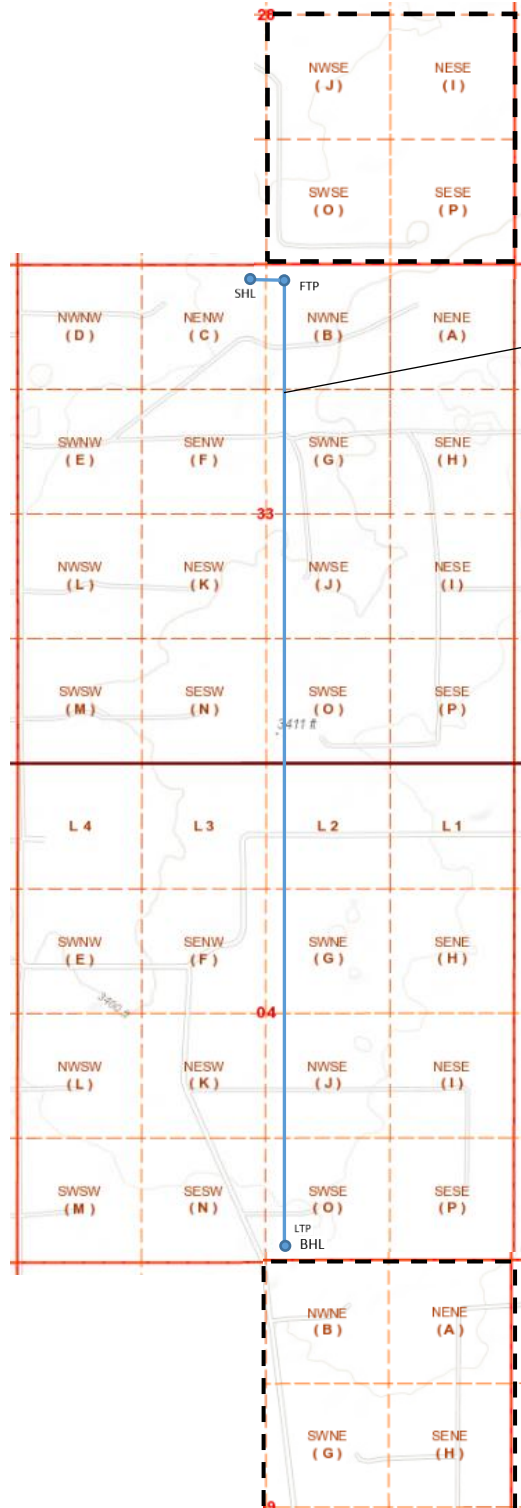
Attachments

CC: NMOCD-Artesia, BLM-Carlsbad, Service List

OXY USA Inc.

Sterling Silver MDP1 33-4 Federal Com 177H

Section 28 Township 23 South, Range 31 East and Section 09 Township 24 South, Range 31 East, N.M.P.M.
Eddy County, New Mexico



Sterling Silver MDP1 33-4 Federal Com 177H

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

API Number 30-015-Pending	Pool Code 98220	Pool Name Purple Sage Wolfcamp
Property Code 322740	Property Name STERLING SILVER MDP1 "33-4" FEDERAL COM	Well Number 177H
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 3386.5'

Surface Location

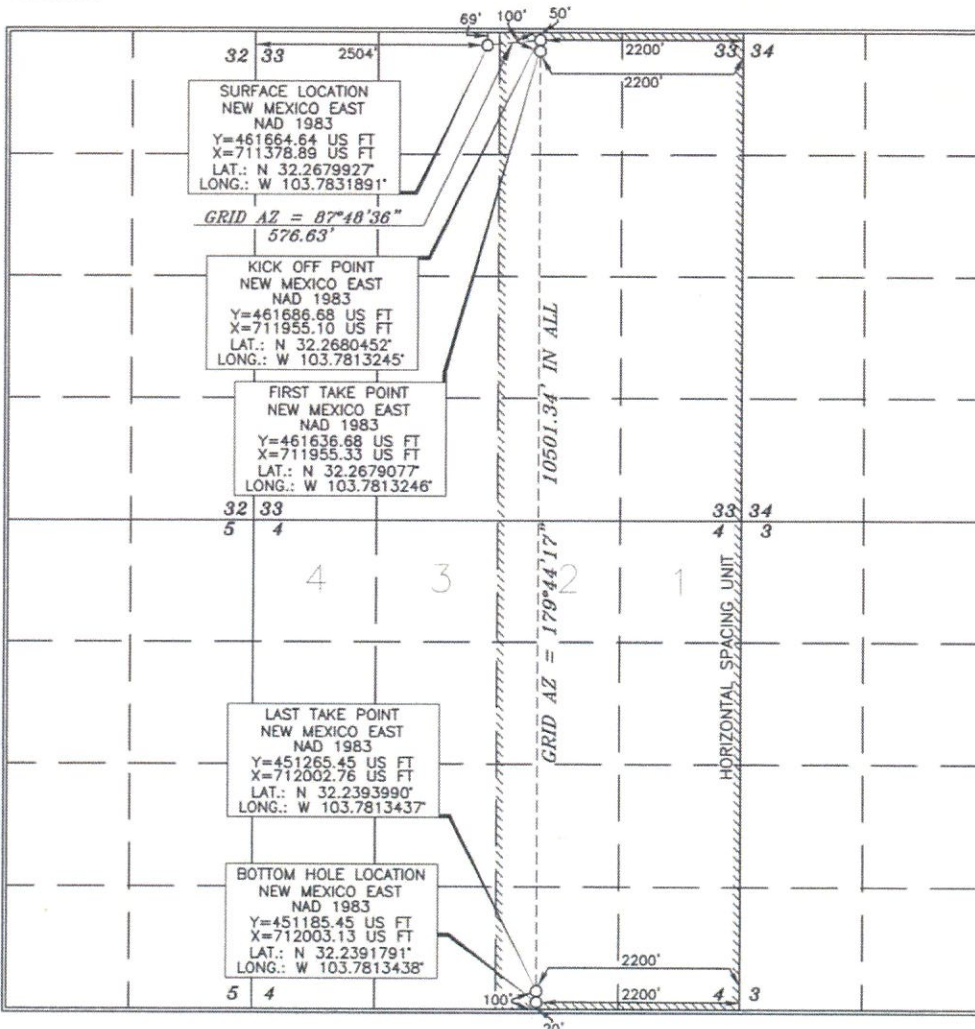
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	33	23 SOUTH	31 EAST, N.M.P.M.		69'	NORTH	2504'	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	4	24 SOUTH	31 EAST, N.M.P.M.		20'	SOUTH	2200'	EAST	EDDY

Dedicated Acres 640	Joint or Infill	Consolidation Code	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.



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.

Sarah Chapman 2/27/19
Signature Date

Sarah Chapman
Printed Name

Sarah.Chapman@oxy.com
E-mail Address

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.

OCTOBER 23, 2018
Date of Survey

Signature and Seal of Professional Surveyor

Terry J. Case 11/6/2018
Certificate Number 15079

WO# 181023WL-a (KA)

Intent As Drilled

API # 30-015-Pending		
Operator Name: OKY USA INC.	Property Name: Sterling Silver MDPI 33-4 Fed Com	Well Number 177H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
B	33	235	31E		50	NORTH	2200	east	EDDY
Latitude 32.2640452					Longitude -103.7813245			NAD NAD83	

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
B	33	235	31E		100	NORTH	2200	east	EDDY
Latitude 32.2679077					Longitude -103.7813246			NAD NAD83	

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
0	4	245	31E		100	SOUTH	2200	east	EDDY
Latitude 32.2393990					Longitude -103.7813437			NAD NAD83	

Is this well the defining well for the Horizontal Spacing Unit?

Is this well an infill well?

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name:	Property Name:	Well Number

Application Non-Standard Location - Service List
OXY USA Inc.
Sterling Silver MDP1 33-4 Federal Com 177H

New Mexico Oil Conservation Division
811 S. First St.
Artesia, NM 88210
7017 0530 0000 6129 0551

New Mexico Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505
Email to Leonard Lowe

Bureau of Land Management Carlsbad
620 E. Green Street
Carlsbad, NM 88220-6262
7018 1830 0000 8832 5772

T24S-R31E

No Existing Spacing Unit: Section 9 - Units A, B, G and H

Chevron USA Inc.
6301 Deauville Blvd.
Midland, TX 79706
7017 0530 0000 6129 0919

T23S-R31E

No Existing Spacing Unit: Section 28 - Units J, I, O and P

OXY USA Inc. is 100% Working Interest (letter from Oxy Landman is attached)

OXY USA Inc.
5 Greenway Plaze, Ste 110
Houston, TX 77046

Copies of this application were mailed to the following individuals, companies and organizations on or before March 5, 2019.

Sarah Chapman

Sarah Chapman
OXY USA Inc.



OXY USA INC.

A subsidiary of Occidental Petroleum Corporation

5 Greenway Plaza, Suite 110, Houston, Texas
77046
P.O. Box 4294, Houston, Texas 77210-4294

February 26, 2019

Re: **Sterling Silver MDP1 33-4 Federal Com 171H, 172H, 175H, 177H, 178H and 179H**

Section 28, T23S R31E, Eddy County

To Whom It May Concern:

OXY USA INC., is the sole Working Interest Owner of Section 28, T23S R31E, Eddy County, New Mexico as to depths below the Bone Spring Formation. If you have any questions please contact at the number listed below.

Best Regards,

OXY USA INC.

A handwritten signature in blue ink, appearing to read 'Matthew Cole', written over a white background.

Matthew Cole
Land Negotiator
713-366-5928



Project: PRD NM DIRECTIONAL PLANS (NAD 1983)
 Site: STERLING SILVER MDP1 33-4 FED COM
 Well: STERLING SILVER MDP1 33-4 FED COM 177H
 Wellbore: Wellbore #1
 Design: Permitting Plan

PROJECT DETAILS: NM DIRECTIONAL PLANS (NAD 1983)

Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level

Azimuths to Grid North
 True North: -0.29°
 Magnetic North: 6.54°

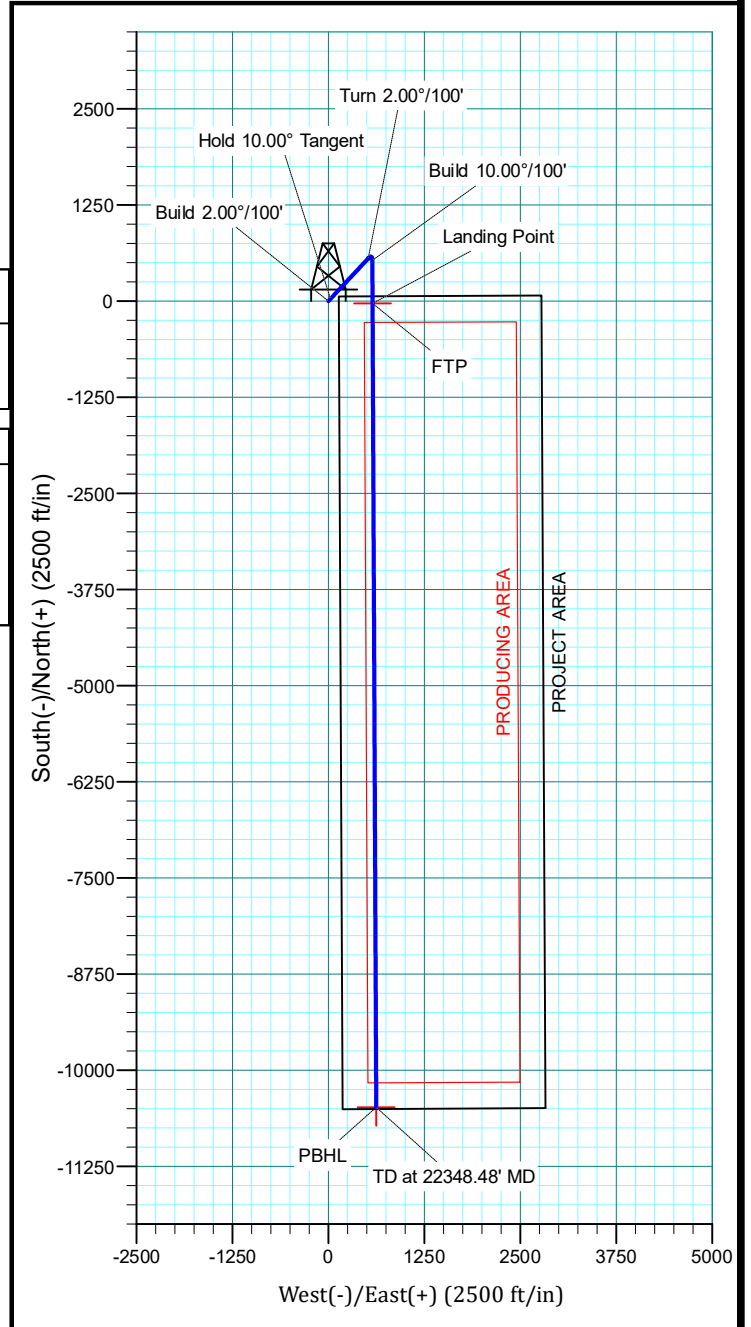
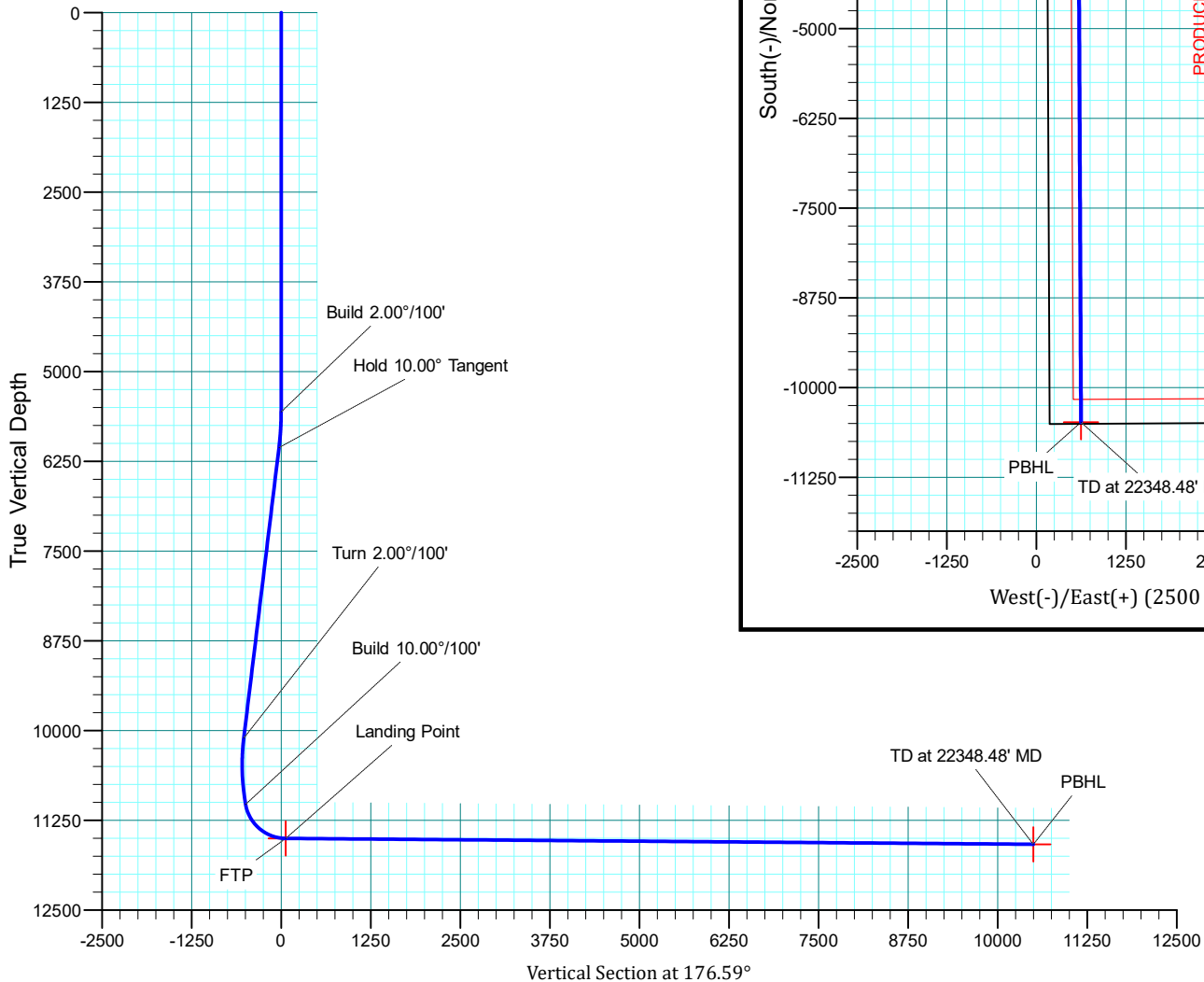
Magnetic Field
 Strength: 48007.1snT
 Dip Angle: 59.98°
 Date: 12/4/2018
 Model: HDGM

WELL DETAILS: STERLING SILVER MDP1 33-4 FED COM 177H

		Ground Level: 3386.50			
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	461664.64	711378.89	32° 16' 4.773856 N	103° 46' 59.480648 W

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V Sect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5560.00	0.00	0.00	5560.00	0.00	0.00	0.00	0.00	0.00	Build 2.00°/100'
6060.06	10.00	43.10	6057.53	31.79	29.74	2.00	43.10	-29.96	Hold 10.00° Tangent
10171.92	10.00	43.10	10106.90	553.24	517.63	0.00	0.00	-521.49	Turn 2.00°/100'
11100.59	10.00	179.74	11029.55	531.30	573.58	2.00	158.02	-496.26	Build 10.00°/100'
11896.09	89.55	179.74	11503.00	-28.45	576.15	10.00	0.00	62.65	Landing Point
22348.48	89.55	179.74	11585.00	-10480.41	624.16	0.00	0.00	10498.98	TD at 22348.48' MD



TD at 22348.48' MD
 PBHL

OXY

**PRD NM DIRECTIONAL PLANS (NAD 1983)
STERLING SILVER MDP1 33-4 FED COM
STERLING SILVER MDP1 33-4 FED COM 177H**

Wellbore #1

Plan: Permitting Plan

Standard Planning Report

04 December, 2018

Oxy Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well STERLING SILVER MDP1 33-4 FED COM 177H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=26.5' @ 3413.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=26.5' @ 3413.00ft
Site:	STERLING SILVER MDP1 33-4 FED COM	North Reference:	Grid
Well:	STERLING SILVER MDP1 33-4 FED COM 177H	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	STERLING SILVER MDP1 33-4 FED COM				
Site Position:	Northing:	461,634.30 usft	Latitude:	32° 16' 4.557918 N	
From:	Map	Easting:	709,709.04 usft	Longitude:	103° 47' 18.930890 W
Position Uncertainty:	50.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.29 °

Well	STERLING SILVER MDP1 33-4 FED COM 177H					
Well Position	+N/-S	30.34 ft	Northing:	461,664.64 usft	Latitude:	32° 16' 4.773856 N
	+E/-W	1,669.95 ft	Easting:	711,378.89 usft	Longitude:	103° 46' 59.480648 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	3,386.50 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	12/4/2018	6.83	59.98	48,007

Design	Design #1			
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	176.59

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	
5,560.00	0.00	0.00	5,560.00	0.00	0.00	0.00	0.00	0.00	0.00	
6,060.06	10.00	43.10	6,057.53	31.79	29.74	2.00	2.00	0.00	43.10	
10,171.92	10.00	43.10	10,106.90	553.24	517.63	0.00	0.00	0.00	0.00	
11,100.59	10.00	179.74	11,029.55	531.30	573.58	2.00	0.00	14.71	158.02	
11,896.09	89.55	179.74	11,503.00	-28.45	576.15	10.00	10.00	0.00	0.00	FTP (Sterling Siler)
22,348.48	89.55	179.74	11,585.00	-10,480.41	624.16	0.00	0.00	0.00	0.00	PBHL (Sterling Siler)

Oxy Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well STERLING SILVER MDP1 33-4 FED COM 177H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=26.5' @ 3413.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=26.5' @ 3413.00ft
Site:	STERLING SILVER MDP1 33-4 FED COM	North Reference:	Grid
Well:	STERLING SILVER MDP1 33-4 FED COM 177H	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	0.00
100.00	0.00	0.00	100.00	0.00	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	0.00
300.00	0.00	0.00	300.00	0.00	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	0.00
500.00	0.00	0.00	500.00	0.00	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	0.00
700.00	0.00	0.00	700.00	0.00	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	0.00
900.00	0.00	0.00	900.00	0.00	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	0.00
1,100.00	0.00	0.00	1,100.00	0.00	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	0.00
1,300.00	0.00	0.00	1,300.00	0.00	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	0.00
1,500.00	0.00	0.00	1,500.00	0.00	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	0.00
1,700.00	0.00	0.00	1,700.00	0.00	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	0.00
1,900.00	0.00	0.00	1,900.00	0.00	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	0.00
2,100.00	0.00	0.00	2,100.00	0.00	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	0.00
2,300.00	0.00	0.00	2,300.00	0.00	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	0.00
2,500.00	0.00	0.00	2,500.00	0.00	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	0.00
2,700.00	0.00	0.00	2,700.00	0.00	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	0.00
2,900.00	0.00	0.00	2,900.00	0.00	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	0.00
3,100.00	0.00	0.00	3,100.00	0.00	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	0.00
3,300.00	0.00	0.00	3,300.00	0.00	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	0.00
3,500.00	0.00	0.00	3,500.00	0.00	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	0.00
3,700.00	0.00	0.00	3,700.00	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	0.00
3,900.00	0.00	0.00	3,900.00	0.00	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	0.00
4,100.00	0.00	0.00	4,100.00	0.00	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	0.00
4,300.00	0.00	0.00	4,300.00	0.00	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	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Oxy Planning Report

Database:	HOPSP	Local Co-ordinate Reference:	Well STERLING SILVER MDP1 33-4 FED COM 177H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=26.5' @ 3413.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=26.5' @ 3413.00ft
Site:	STERLING SILVER MDP1 33-4 FED COM	North Reference:	Grid
Well:	STERLING SILVER MDP1 33-4 FED COM 177H	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)	
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,560.00	0.00	0.00	5,560.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,600.00	0.80	43.10	5,600.00	0.20	0.19	-0.19	2.00	2.00	0.00	
5,700.00	2.80	43.10	5,699.94	2.50	2.34	-2.35	2.00	2.00	0.00	
5,800.00	4.80	43.10	5,799.72	7.34	6.86	-6.92	2.00	2.00	0.00	
5,900.00	6.80	43.10	5,899.20	14.72	13.77	-13.87	2.00	2.00	0.00	
6,000.00	8.80	43.10	5,998.27	24.63	23.04	-23.21	2.00	2.00	0.00	
6,060.06	10.00	43.10	6,057.53	31.79	29.74	-29.96	2.00	2.00	0.00	
6,100.00	10.00	43.10	6,096.86	36.85	34.48	-34.74	0.00	0.00	0.00	
6,200.00	10.00	43.10	6,195.34	49.54	46.35	-46.69	0.00	0.00	0.00	
6,300.00	10.00	43.10	6,293.82	62.22	58.21	-58.65	0.00	0.00	0.00	
6,400.00	10.00	43.10	6,392.30	74.90	70.08	-70.60	0.00	0.00	0.00	
6,500.00	10.00	43.10	6,490.78	87.58	81.94	-82.55	0.00	0.00	0.00	
6,600.00	10.00	43.10	6,589.26	100.26	93.81	-94.51	0.00	0.00	0.00	
6,700.00	10.00	43.10	6,687.74	112.94	105.67	-106.46	0.00	0.00	0.00	
6,800.00	10.00	43.10	6,786.22	125.62	117.54	-118.42	0.00	0.00	0.00	
6,900.00	10.00	43.10	6,884.70	138.31	129.40	-130.37	0.00	0.00	0.00	
7,000.00	10.00	43.10	6,983.18	150.99	141.27	-142.32	0.00	0.00	0.00	
7,100.00	10.00	43.10	7,081.66	163.67	153.13	-154.28	0.00	0.00	0.00	
7,200.00	10.00	43.10	7,180.14	176.35	165.00	-166.23	0.00	0.00	0.00	
7,300.00	10.00	43.10	7,278.62	189.03	176.87	-178.18	0.00	0.00	0.00	
7,400.00	10.00	43.10	7,377.10	201.71	188.73	-190.14	0.00	0.00	0.00	
7,500.00	10.00	43.10	7,475.58	214.40	200.60	-202.09	0.00	0.00	0.00	
7,600.00	10.00	43.10	7,574.06	227.08	212.46	-214.05	0.00	0.00	0.00	
7,700.00	10.00	43.10	7,672.54	239.76	224.33	-226.00	0.00	0.00	0.00	
7,800.00	10.00	43.10	7,771.02	252.44	236.19	-237.95	0.00	0.00	0.00	
7,900.00	10.00	43.10	7,869.51	265.12	248.06	-249.91	0.00	0.00	0.00	
8,000.00	10.00	43.10	7,967.99	277.80	259.92	-261.86	0.00	0.00	0.00	
8,100.00	10.00	43.10	8,066.47	290.49	271.79	-273.82	0.00	0.00	0.00	
8,200.00	10.00	43.10	8,164.95	303.17	283.65	-285.77	0.00	0.00	0.00	
8,300.00	10.00	43.10	8,263.43	315.85	295.52	-297.72	0.00	0.00	0.00	
8,400.00	10.00	43.10	8,361.91	328.53	307.38	-309.68	0.00	0.00	0.00	
8,500.00	10.00	43.10	8,460.39	341.21	319.25	-321.63	0.00	0.00	0.00	
8,600.00	10.00	43.10	8,558.87	353.89	331.11	-333.58	0.00	0.00	0.00	
8,700.00	10.00	43.10	8,657.35	366.58	342.98	-345.54	0.00	0.00	0.00	
8,800.00	10.00	43.10	8,755.83	379.26	354.85	-357.49	0.00	0.00	0.00	
8,900.00	10.00	43.10	8,854.31	391.94	366.71	-369.45	0.00	0.00	0.00	
9,000.00	10.00	43.10	8,952.79	404.62	378.58	-381.40	0.00	0.00	0.00	
9,100.00	10.00	43.10	9,051.27	417.30	390.44	-393.35	0.00	0.00	0.00	
9,200.00	10.00	43.10	9,149.75	429.98	402.31	-405.31	0.00	0.00	0.00	
9,300.00	10.00	43.10	9,248.23	442.67	414.17	-417.26	0.00	0.00	0.00	
9,400.00	10.00	43.10	9,346.71	455.35	426.04	-429.22	0.00	0.00	0.00	
9,500.00	10.00	43.10	9,445.19	468.03	437.90	-441.17	0.00	0.00	0.00	
9,600.00	10.00	43.10	9,543.67	480.71	449.77	-453.12	0.00	0.00	0.00	
9,700.00	10.00	43.10	9,642.15	493.39	461.63	-465.08	0.00	0.00	0.00	
9,800.00	10.00	43.10	9,740.63	506.07	473.50	-477.03	0.00	0.00	0.00	
9,900.00	10.00	43.10	9,839.11	518.75	485.36	-488.98	0.00	0.00	0.00	
10,000.00	10.00	43.10	9,937.59	531.44	497.23	-500.94	0.00	0.00	0.00	
10,100.00	10.00	43.10	10,036.07	544.12	509.09	-512.89	0.00	0.00	0.00	

Oxy Planning Report

Database:	HOPSP	Local Co-ordinate Reference:	Well STERLING SILVER MDP1 33-4 FED COM 177H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=26.5' @ 3413.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=26.5' @ 3413.00ft
Site:	STERLING SILVER MDP1 33-4 FED COM	North Reference:	Grid
Well:	STERLING SILVER MDP1 33-4 FED COM 177H	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)	
10,171.92	10.00	43.10	10,106.90	553.24	517.63	-521.49	0.00	0.00	0.00	
10,200.00	9.48	44.37	10,134.58	556.67	520.91	-524.72	2.00	-1.85	4.54	
10,300.00	7.69	50.28	10,233.45	566.83	531.82	-534.22	2.00	-1.80	5.91	
10,400.00	6.02	59.60	10,332.74	573.76	541.48	-540.56	2.00	-1.67	9.31	
10,500.00	4.62	75.20	10,432.31	577.44	549.89	-543.73	2.00	-1.40	15.60	
10,600.00	3.80	100.39	10,532.05	577.87	557.04	-543.74	2.00	-0.82	25.19	
10,700.00	3.94	130.31	10,631.83	575.05	562.92	-540.57	2.00	0.14	29.92	
10,800.00	4.96	152.77	10,731.54	568.99	567.51	-534.24	2.00	1.02	22.46	
10,900.00	6.46	166.27	10,831.04	559.68	570.83	-524.76	2.00	1.50	13.50	
11,000.00	8.17	174.43	10,930.23	547.15	572.85	-512.13	2.00	1.71	8.16	
11,100.00	9.99	179.71	11,028.97	531.40	573.58	-496.37	2.00	1.82	5.28	
11,100.59	10.00	179.74	11,029.55	531.30	573.58	-496.26	2.00	1.85	4.32	
11,200.00	19.94	179.74	11,125.47	505.65	573.70	-470.65	10.00	10.00	0.00	
11,300.00	29.94	179.74	11,216.03	463.54	573.89	-428.60	10.00	10.00	0.00	
11,400.00	39.94	179.74	11,297.90	406.34	574.16	-371.49	10.00	10.00	0.00	
11,500.00	49.94	179.74	11,368.59	335.79	574.48	-301.05	10.00	10.00	0.00	
11,600.00	59.94	179.74	11,425.96	254.04	574.86	-219.42	10.00	10.00	0.00	
11,700.00	69.94	179.74	11,468.26	163.57	575.27	-129.08	10.00	10.00	0.00	
11,800.00	79.94	179.74	11,494.21	67.12	575.72	-32.78	10.00	10.00	0.00	
11,896.09	89.55	179.74	11,503.00	-28.45	576.15	62.65	10.00	10.00	0.00	
11,900.00	89.55	179.74	11,503.03	-32.36	576.17	66.55	0.00	0.00	0.00	
12,000.00	89.55	179.74	11,503.82	-132.35	576.63	166.40	0.00	0.00	0.00	
12,100.00	89.55	179.74	11,504.60	-232.35	577.09	266.24	0.00	0.00	0.00	
12,200.00	89.55	179.74	11,505.38	-332.35	577.55	366.09	0.00	0.00	0.00	
12,300.00	89.55	179.74	11,506.17	-432.34	578.01	465.94	0.00	0.00	0.00	
12,400.00	89.55	179.74	11,506.95	-532.34	578.47	565.78	0.00	0.00	0.00	
12,500.00	89.55	179.74	11,507.74	-632.33	578.93	665.63	0.00	0.00	0.00	
12,600.00	89.55	179.74	11,508.52	-732.33	579.39	765.48	0.00	0.00	0.00	
12,700.00	89.55	179.74	11,509.31	-832.33	579.85	865.32	0.00	0.00	0.00	
12,800.00	89.55	179.74	11,510.09	-932.32	580.31	965.17	0.00	0.00	0.00	
12,900.00	89.55	179.74	11,510.88	-1,032.32	580.76	1,065.02	0.00	0.00	0.00	
13,000.00	89.55	179.74	11,511.66	-1,132.31	581.22	1,164.86	0.00	0.00	0.00	
13,100.00	89.55	179.74	11,512.45	-1,232.31	581.68	1,264.71	0.00	0.00	0.00	
13,200.00	89.55	179.74	11,513.23	-1,332.30	582.14	1,364.55	0.00	0.00	0.00	
13,300.00	89.55	179.74	11,514.01	-1,432.30	582.60	1,464.40	0.00	0.00	0.00	
13,400.00	89.55	179.74	11,514.80	-1,532.30	583.06	1,564.25	0.00	0.00	0.00	
13,500.00	89.55	179.74	11,515.58	-1,632.29	583.52	1,664.09	0.00	0.00	0.00	
13,600.00	89.55	179.74	11,516.37	-1,732.29	583.98	1,763.94	0.00	0.00	0.00	
13,700.00	89.55	179.74	11,517.15	-1,832.28	584.44	1,863.79	0.00	0.00	0.00	
13,800.00	89.55	179.74	11,517.94	-1,932.28	584.90	1,963.63	0.00	0.00	0.00	
13,900.00	89.55	179.74	11,518.72	-2,032.28	585.36	2,063.48	0.00	0.00	0.00	
14,000.00	89.55	179.74	11,519.51	-2,132.27	585.82	2,163.33	0.00	0.00	0.00	
14,100.00	89.55	179.74	11,520.29	-2,232.27	586.28	2,263.17	0.00	0.00	0.00	
14,200.00	89.55	179.74	11,521.07	-2,332.26	586.74	2,363.02	0.00	0.00	0.00	
14,300.00	89.55	179.74	11,521.86	-2,432.26	587.19	2,462.86	0.00	0.00	0.00	
14,400.00	89.55	179.74	11,522.64	-2,532.25	587.65	2,562.71	0.00	0.00	0.00	
14,500.00	89.55	179.74	11,523.43	-2,632.25	588.11	2,662.56	0.00	0.00	0.00	
14,600.00	89.55	179.74	11,524.21	-2,732.25	588.57	2,762.40	0.00	0.00	0.00	
14,700.00	89.55	179.74	11,525.00	-2,832.24	589.03	2,862.25	0.00	0.00	0.00	
14,800.00	89.55	179.74	11,525.78	-2,932.24	589.49	2,962.10	0.00	0.00	0.00	
14,900.00	89.55	179.74	11,526.57	-3,032.23	589.95	3,061.94	0.00	0.00	0.00	
15,000.00	89.55	179.74	11,527.35	-3,132.23	590.41	3,161.79	0.00	0.00	0.00	

Oxy Planning Report

Database:	HOPSP	Local Co-ordinate Reference:	Well STERLING SILVER MDP1 33-4 FED COM 177H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=26.5' @ 3413.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=26.5' @ 3413.00ft
Site:	STERLING SILVER MDP1 33-4 FED COM	North Reference:	Grid
Well:	STERLING SILVER MDP1 33-4 FED COM 177H	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)	
15,100.00	89.55	179.74	11,528.14	-3,232.23	590.87	3,261.63	0.00	0.00	0.00	
15,200.00	89.55	179.74	11,528.92	-3,332.22	591.33	3,361.48	0.00	0.00	0.00	
15,300.00	89.55	179.74	11,529.70	-3,432.22	591.79	3,461.33	0.00	0.00	0.00	
15,400.00	89.55	179.74	11,530.49	-3,532.21	592.25	3,561.17	0.00	0.00	0.00	
15,500.00	89.55	179.74	11,531.27	-3,632.21	592.71	3,661.02	0.00	0.00	0.00	
15,600.00	89.55	179.74	11,532.06	-3,732.21	593.16	3,760.87	0.00	0.00	0.00	
15,700.00	89.55	179.74	11,532.84	-3,832.20	593.62	3,860.71	0.00	0.00	0.00	
15,800.00	89.55	179.74	11,533.63	-3,932.20	594.08	3,960.56	0.00	0.00	0.00	
15,900.00	89.55	179.74	11,534.41	-4,032.19	594.54	4,060.41	0.00	0.00	0.00	
16,000.00	89.55	179.74	11,535.20	-4,132.19	595.00	4,160.25	0.00	0.00	0.00	
16,100.00	89.55	179.74	11,535.98	-4,232.18	595.46	4,260.10	0.00	0.00	0.00	
16,200.00	89.55	179.74	11,536.76	-4,332.18	595.92	4,359.94	0.00	0.00	0.00	
16,300.00	89.55	179.74	11,537.55	-4,432.18	596.38	4,459.79	0.00	0.00	0.00	
16,400.00	89.55	179.74	11,538.33	-4,532.17	596.84	4,559.64	0.00	0.00	0.00	
16,500.00	89.55	179.74	11,539.12	-4,632.17	597.30	4,659.48	0.00	0.00	0.00	
16,600.00	89.55	179.74	11,539.90	-4,732.16	597.76	4,759.33	0.00	0.00	0.00	
16,700.00	89.55	179.74	11,540.69	-4,832.16	598.22	4,859.18	0.00	0.00	0.00	
16,800.00	89.55	179.74	11,541.47	-4,932.16	598.68	4,959.02	0.00	0.00	0.00	
16,900.00	89.55	179.74	11,542.26	-5,032.15	599.14	5,058.87	0.00	0.00	0.00	
17,000.00	89.55	179.74	11,543.04	-5,132.15	599.59	5,158.72	0.00	0.00	0.00	
17,100.00	89.55	179.74	11,543.83	-5,232.14	600.05	5,258.56	0.00	0.00	0.00	
17,200.00	89.55	179.74	11,544.61	-5,332.14	600.51	5,358.41	0.00	0.00	0.00	
17,300.00	89.55	179.74	11,545.39	-5,432.14	600.97	5,458.25	0.00	0.00	0.00	
17,400.00	89.55	179.74	11,546.18	-5,532.13	601.43	5,558.10	0.00	0.00	0.00	
17,500.00	89.55	179.74	11,546.96	-5,632.13	601.89	5,657.95	0.00	0.00	0.00	
17,600.00	89.55	179.74	11,547.75	-5,732.12	602.35	5,757.79	0.00	0.00	0.00	
17,700.00	89.55	179.74	11,548.53	-5,832.12	602.81	5,857.64	0.00	0.00	0.00	
17,800.00	89.55	179.74	11,549.32	-5,932.11	603.27	5,957.49	0.00	0.00	0.00	
17,900.00	89.55	179.74	11,550.10	-6,032.11	603.73	6,057.33	0.00	0.00	0.00	
18,000.00	89.55	179.74	11,550.89	-6,132.11	604.19	6,157.18	0.00	0.00	0.00	
18,100.00	89.55	179.74	11,551.67	-6,232.10	604.65	6,257.02	0.00	0.00	0.00	
18,200.00	89.55	179.74	11,552.46	-6,332.10	605.11	6,356.87	0.00	0.00	0.00	
18,300.00	89.55	179.74	11,553.24	-6,432.09	605.56	6,456.72	0.00	0.00	0.00	
18,400.00	89.55	179.74	11,554.02	-6,532.09	606.02	6,556.56	0.00	0.00	0.00	
18,500.00	89.55	179.74	11,554.81	-6,632.09	606.48	6,656.41	0.00	0.00	0.00	
18,600.00	89.55	179.74	11,555.59	-6,732.08	606.94	6,756.26	0.00	0.00	0.00	
18,700.00	89.55	179.74	11,556.38	-6,832.08	607.40	6,856.10	0.00	0.00	0.00	
18,800.00	89.55	179.74	11,557.16	-6,932.07	607.86	6,955.95	0.00	0.00	0.00	
18,900.00	89.55	179.74	11,557.95	-7,032.07	608.32	7,055.80	0.00	0.00	0.00	
19,000.00	89.55	179.74	11,558.73	-7,132.07	608.78	7,155.64	0.00	0.00	0.00	
19,100.00	89.55	179.74	11,559.52	-7,232.06	609.24	7,255.49	0.00	0.00	0.00	
19,200.00	89.55	179.74	11,560.30	-7,332.06	609.70	7,355.33	0.00	0.00	0.00	
19,300.00	89.55	179.74	11,561.08	-7,432.05	610.16	7,455.18	0.00	0.00	0.00	
19,400.00	89.55	179.74	11,561.87	-7,532.05	610.62	7,555.03	0.00	0.00	0.00	
19,500.00	89.55	179.74	11,562.65	-7,632.04	611.08	7,654.87	0.00	0.00	0.00	
19,600.00	89.55	179.74	11,563.44	-7,732.04	611.53	7,754.72	0.00	0.00	0.00	
19,700.00	89.55	179.74	11,564.22	-7,832.04	611.99	7,854.57	0.00	0.00	0.00	
19,800.00	89.55	179.74	11,565.01	-7,932.03	612.45	7,954.41	0.00	0.00	0.00	
19,900.00	89.55	179.74	11,565.79	-8,032.03	612.91	8,054.26	0.00	0.00	0.00	
20,000.00	89.55	179.74	11,566.58	-8,132.02	613.37	8,154.10	0.00	0.00	0.00	
20,100.00	89.55	179.74	11,567.36	-8,232.02	613.83	8,253.95	0.00	0.00	0.00	
20,200.00	89.55	179.74	11,568.15	-8,332.02	614.29	8,353.80	0.00	0.00	0.00	

Oxy Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well STERLING SILVER MDP1 33-4 FED COM 177H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=26.5' @ 3413.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=26.5' @ 3413.00ft
Site:	STERLING SILVER MDP1 33-4 FED COM	North Reference:	Grid
Well:	STERLING SILVER MDP1 33-4 FED COM 177H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
20,300.00	89.55	179.74	11,568.93	-8,432.01	614.75	8,453.64	0.00	0.00	0.00
20,400.00	89.55	179.74	11,569.71	-8,532.01	615.21	8,553.49	0.00	0.00	0.00
20,500.00	89.55	179.74	11,570.50	-8,632.00	615.67	8,653.34	0.00	0.00	0.00
20,600.00	89.55	179.74	11,571.28	-8,732.00	616.13	8,753.18	0.00	0.00	0.00
20,700.00	89.55	179.74	11,572.07	-8,831.99	616.59	8,853.03	0.00	0.00	0.00
20,800.00	89.55	179.74	11,572.85	-8,931.99	617.05	8,952.88	0.00	0.00	0.00
20,900.00	89.55	179.74	11,573.64	-9,031.99	617.51	9,052.72	0.00	0.00	0.00
21,000.00	89.55	179.74	11,574.42	-9,131.98	617.96	9,152.57	0.00	0.00	0.00
21,100.00	89.55	179.74	11,575.21	-9,231.98	618.42	9,252.41	0.00	0.00	0.00
21,200.00	89.55	179.74	11,575.99	-9,331.97	618.88	9,352.26	0.00	0.00	0.00
21,300.00	89.55	179.74	11,576.77	-9,431.97	619.34	9,452.11	0.00	0.00	0.00
21,400.00	89.55	179.74	11,577.56	-9,531.97	619.80	9,551.95	0.00	0.00	0.00
21,500.00	89.55	179.74	11,578.34	-9,631.96	620.26	9,651.80	0.00	0.00	0.00
21,600.00	89.55	179.74	11,579.13	-9,731.96	620.72	9,751.65	0.00	0.00	0.00
21,700.00	89.55	179.74	11,579.91	-9,831.95	621.18	9,851.49	0.00	0.00	0.00
21,800.00	89.55	179.74	11,580.70	-9,931.95	621.64	9,951.34	0.00	0.00	0.00
21,900.00	89.55	179.74	11,581.48	-10,031.95	622.10	10,051.19	0.00	0.00	0.00
22,000.00	89.55	179.74	11,582.27	-10,131.94	622.56	10,151.03	0.00	0.00	0.00
22,100.00	89.55	179.74	11,583.05	-10,231.94	623.02	10,250.88	0.00	0.00	0.00
22,200.00	89.55	179.74	11,583.84	-10,331.93	623.48	10,350.72	0.00	0.00	0.00
22,300.00	89.55	179.74	11,584.62	-10,431.93	623.93	10,450.57	0.00	0.00	0.00
22,348.48	89.55	179.74	11,585.00	-10,480.41	624.16	10,498.98	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
FTP (Sterling Siler - plan hits target center - Point	0.00	0.00	11,503.00	-28.45	576.15	461,636.19	711,955.01	32° 16' 4.463053 N	103° 46' 52.772389
PBHL (Sterling Siler - plan hits target center - Point	0.00	0.00	11,585.00	-10,480.41	624.16	451,184.86	712,003.01	32° 14' 21.038869 N	103° 46' 52.839192

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
5,560.00	5,560.00	0.00	0.00	Build 2.00°/100'
6,060.06	6,057.53	31.79	29.74	Hold 10.00° Tangent
10,171.92	10,106.90	553.24	517.63	Turn 2.00°/100'
11,100.59	11,029.55	531.30	573.58	Build 10.00°/100'
11,896.09	11,503.00	-28.45	576.15	Landing Point
22,348.48	11,585.00	-10,480.41	624.16	TD at 22348.48' MD



Occidental Oil and Gas Corporation
ATTN: Amjad Abdelrahman
5 Greenway Plaza, Suite 110
Houston, TX 77046
713-366-5198
amjad_abdelrahman@oxy.com

February 27, 2019

Mr. Leonard Lowe
New Mexico Oil Conservation Division
1220 South Francis Drive
Santa Fe, New Mexico 87505

RE: *Application for Nonstandard Location—Engineering Justification
OXY USA Inc.
Sterling Silver MDP1 33-4 Federal Com 177H
T24S R31E, Section 09 – Units A, B, G and H, Eddy County
T23S R31E Section 28 – Units J, I, O and P, Eddy County*

Dear Mr. Lowe:

Oxy USA Inc. respectfully seeks approval for a non-standard location, decreasing the first and last take point for Sterling Silver MDP1 33-4 Federal Com 177H in the Wolfcamp formation of the Purple Sage Pool from 330 feet to 100 feet. It is Oxy's responsibility as a prudent operator to maximize lateral length of horizontal wells and minimize reserves left in the ground. Decreasing the first and last take points will increase this well's effective lateral length by 460 feet, and increase the estimated ultimate recovery of the well by approximately 5%. Any increase in first and last take points would result in untapped reserves left in the reservoir, and waste of a resource that would not be developed otherwise.

Sincerely,

A handwritten signature in black ink, appearing to read "Amjad" followed by a stylized flourish.

Amjad Abdelrahman, P.E.
Sr. Reservoir Engineer

Lowe, Leonard, EMNRD

From: Chapman, Sarah E <Sarah_Chapman@oxy.com>
Sent: Tuesday, March 5, 2019 9:11 AM
To: Lowe, Leonard, EMNRD
Cc: Morris, Justin C
Subject: [EXT] OXY USA Inc. NSL Applications - Platinum MDP1 34-3 Fd Com 171H-176H and Sterling Silver MDP1 33-4 Fd Com 171H-179H
Attachments: PlatinumMDP1-34-3FdCom171H_LLSubmittal.pdf; PlatinumMDP134-3FdCom172H_LLSubmittal.pdf; PlatinumMDP1-34-3FdCom175H_LLSubmittal.pdf; SterlingSilverMDP1-33-4FdCom171H_LLSubmittal.pdf; SterlingSilverMDP1-33-4FdCom172H_LLSubmittal.pdf; SterlingSilverMDP1-33-4FdCom175H_LLSubmittal.pdf; SterlingSilverMDP1-33-4FdCom177H_LLSubmittal.pdf; SterlingSilverMDP1-33-4FdCom178H_LLSubmittal.pdf; PlatinumMDP134-3FdCom174H_LLSubmittal.pdf; PlatinumMDP134-3FdCom176H_LLSubmittal.pdf; SterlingSilverMDP1-33-4FdCom179H_LLSubmittal.pdf

Good morning Mr. Lowe,
Attached you will find NSL applications for the above referenced wells.
Please advise if you have any questions.

Thank you,

Sarah Chapman

Regulatory Specialist | Permian Resources – New Mexico
Office: (713) 350-4997 | 29.097 | Cell: (281) 642-5503
Email: Sarah_Chapman@oxy.com