

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: pLEL1906529854
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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 171H **API:** 30-015-45336
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
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

FOR OCD ONLY

- ☐ Notice Complete
☐ Application
 Content
 Complete

- 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

Signature

2/28/2019

Date

(713) 350-4997

Phone Number

SARAH_CHAPMAN@OXY.COM

e-mail Address



OXY USA Inc

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

February 28, 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 171H– Purple Sage Wolfcamp
Surface – 90' FNL 869' FWL Unit D Sec 33 T23S R31E
First Take Point – 100' FNL 440' FWL Unit D Sec 33 T23S R31E
Last Take Point – 100' FSL 440' FWL Unit M Sec 4 T24S R31E
Bottom Hole – 20' FSL 440' FWL Unit M 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 171H well, API Number 30-015-45336, Property Code 322740. The 171H 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 – 90' FNL 869' FWL Unit D Sec 33 T23S R31E
First Take Point – 100' FNL 440' FWL Unit D Sec 33 T23S R31E
Last Take Point – 100' FSL 440' FWL Unit M Sec 4 T24S R31E
Bottom Hole – 20' FSL 440' FWL Unit M Sec 4 T24S R31E

The adjoining units towards which the unorthodox location encroaches are located in T23S R31E, Section 28 - Units L, K, M and N and T24S R31E Section 09 - Units D, C, E and F.

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

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

1a. Type of work: ☐ DRILL ☐ REENTER		5. Lease Serial No.
1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☐ Multiple Zone		7. If Unit or CA Agreement, Name and No.
2. Name of Operator		8. Lease Name and Well No.
3a. Address	3b. Phone No. (include area code)	9. API Well No.
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		10. Field and Pool, or Exploratory
14. Distance in miles and direction from nearest town or post office*		11. Sec., T. R. M. or Blk. and Survey or Area
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)		12. County or Parish
16. No of acres in lease		13. State
17. Spacing Unit dedicated to this well		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.		
19. Proposed Depth		
20. BLM/BIA Bond No. in file		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)		
22. Approximate date work will start*		23. Estimated duration
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)

- | | |
|--|---|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification. |
| 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). | 6. Such other site specific information and/or plans as may be requested by the BLM. |

25. Signature	Name (Printed/Typed)	Date
Title		
Approved by (Signature)	Name (Printed/Typed)	Date
Title		
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.

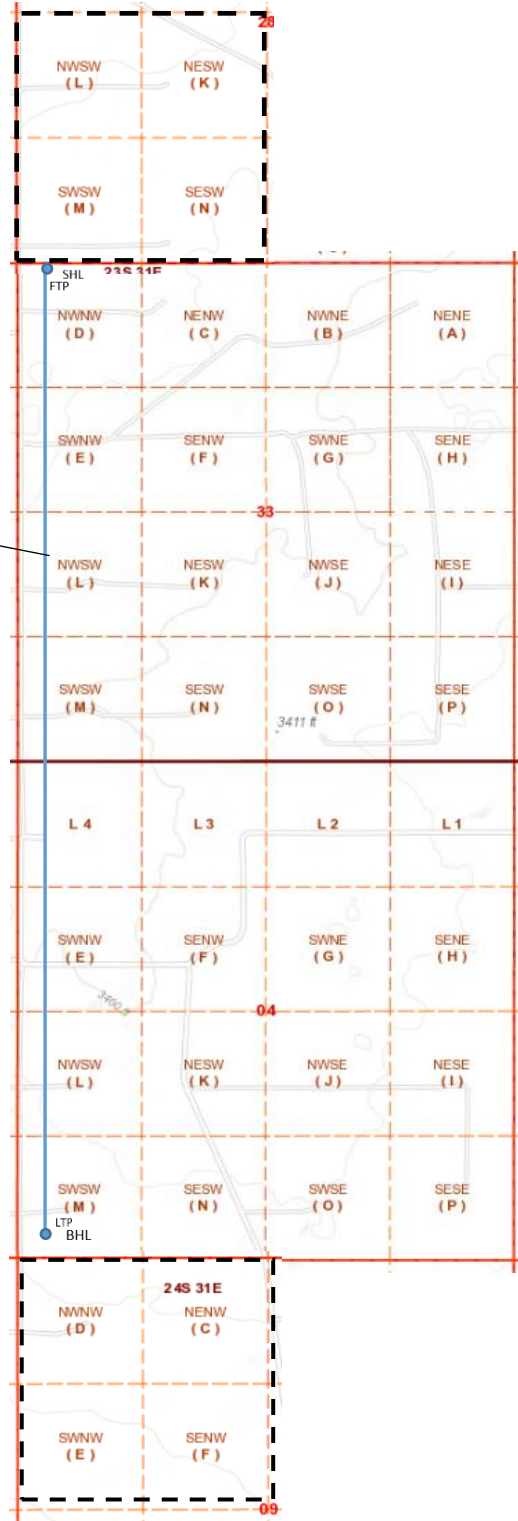
APPROVED WITH CONDITIONS
Approval Date: 10/05/2018

OXY USA Inc.

Sterling Silver MDP1 33-4 Federal Com 171H

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 171H



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 30-015-45336	Pool Code 90220	Pool Name Purple Sage Wolfcamp
Property Code 322740	Property Name STERLING SILVER MDP1 "33-4" FEDERAL COM	
OGRID No. 16696	Operator Name OXY USA INC.	Well Number 171H
		Elevation 3371.7'

Surface Location

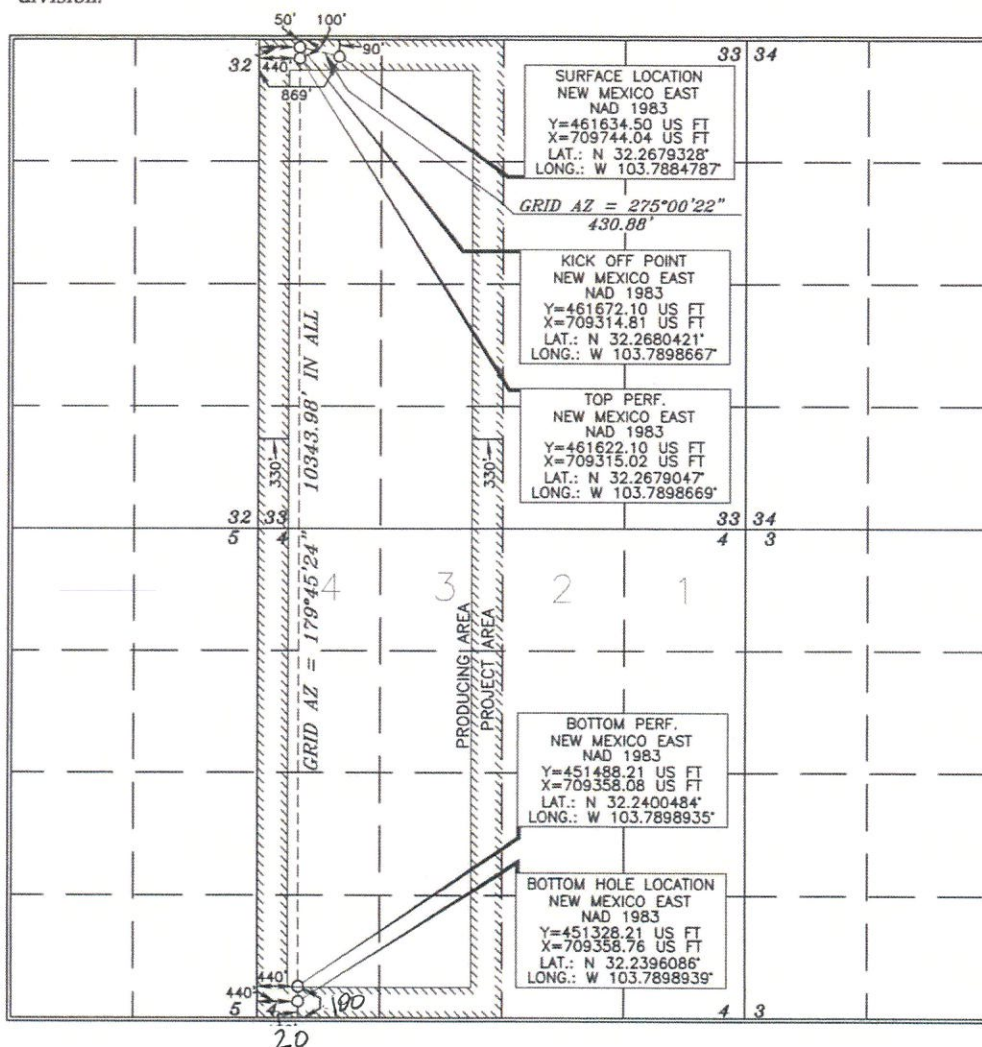
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	33	23 SOUTH	31 EAST, N.M.P.M.		90'	NORTH	869'	WEST	EDDY

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
M	4	24 SOUTH	31 EAST, N.M.P.M.		20	SOUTH	440'	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
640			

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 2/26/19
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.

TERRY J. ASH
15079
JANUARY 29, 2018
Date of Survey
Signature and Seal of Professional Surveyor

Terry Ash 3/23/2018
Certificate Number 15079

WO# 180129WL-b (KA)

Intent ☒ As Drilled ☐

API # 30-015-45336			
Operator Name: OXY USA Inc.		Property Name: Sterling Silver HDPI 33-1 Fed com	Well Number 171H

Kick Off Point (KOP)

UL D	Section 33	Township 23S	Range 31E	Lot	Feet 50	From N/S North	Feet 440	From E/W West	County EDDY
Latitude 32.2600421					Longitude -103.7898667			NAD NAD83	

First Take Point (FTP)

UL D	Section 33	Township 23S	Range 31E	Lot	Feet 100	From N/S North	Feet 440	From E/W West	County EDDY
Latitude 32.2679011					Longitude -103.7898669			NAD NAD83	

Last Take Point (LTP)

UL H	Section 4	Township 24S	Range 31E	Lot	Feet 100	From N/S South	Feet 440	From E/W West	County EDDY
Latitude 32.2400484					Longitude -103.7898935			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

KZ 06/29/2018

Application Non-Standard Location - Service List**OXY USA Inc.****Sterling Silver MDP1 33-4 Federal Com 171H**

New Mexico Oil Conservation Division
 811 S. First St.
 Artesia, NM 88210
 7018 1830 0000 8832 5710

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 5338

T24S-R31E**No Existing Spacing Unit: Section 9 - Units D, C, E and F**

Chevron USA Inc.
 6301 Deauville Blvd.
 Midland, TX 79706
 7017 1530 0000 6129 0889

T23S-R31E**No Existing Spacing Unit: Section 28 - Units L, K, M and N****OXY USA Inc. is 100% Working Interest (letter from Oxy Landman is attached)**

OXY USA Inc.
 5 Greenway Plaza, 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
 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:

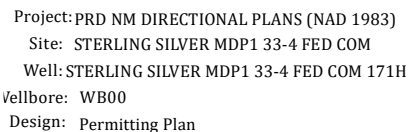
OXY USA INC., is the sole Working Interest Owner of Section 28, T23S R31E, Eddy County, New Mexico as to depths below the Bone Spring Formation. If you have any questions please contact at the number listed below.

Best Regards,

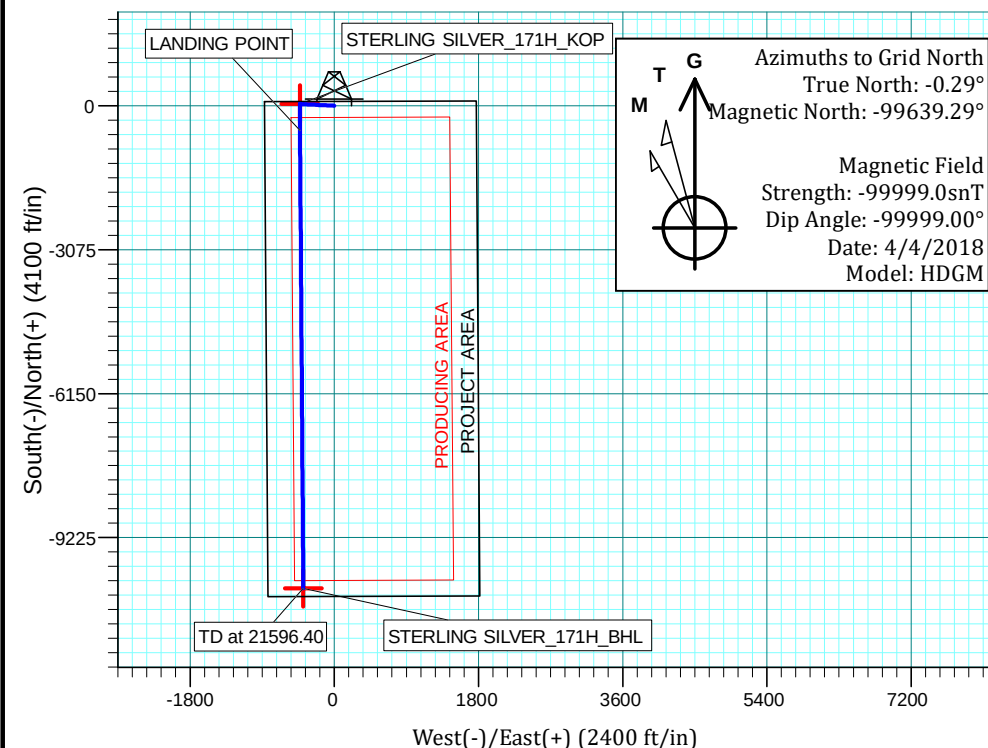
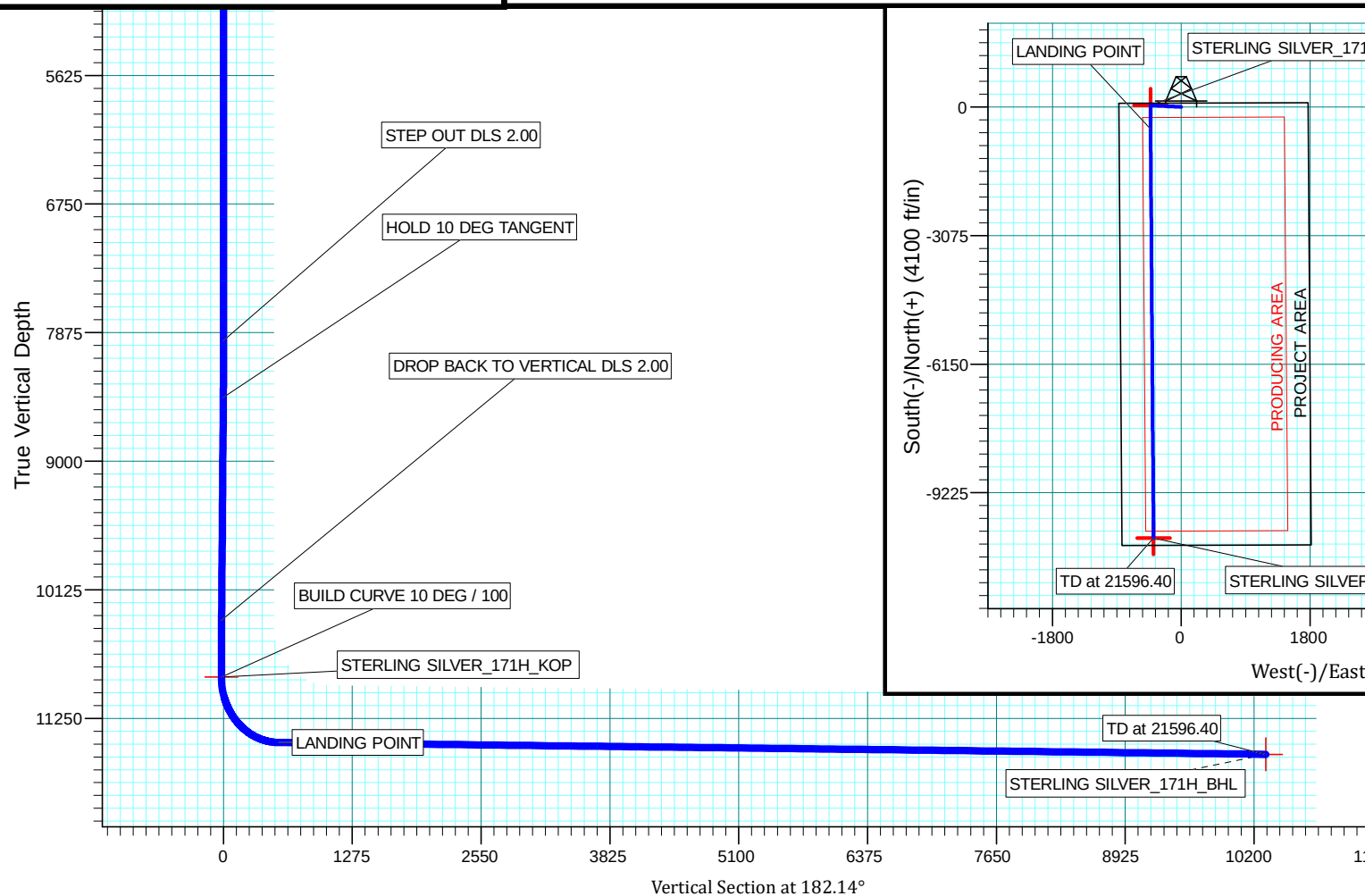
OXY USA INC.

A handwritten signature in blue ink, appearing to read "Matthew Cole".

Matthew Cole
Land Negotiator
713-366-5928



Ground Level:	3371.70	
Easting	Latitude	Longitude
709744.04	32° 16' 4.558139 N	103° 47' 18.523239 W
DATUM @ 3398.20ft		



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

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
2	7945.00	0.00	0.00	7945.00	0.00	0.00	0.00	0.00	0.00		STEP OUT DLS 2.00
3	8445.25	10.00	275.01	8442.71	3.80	-43.40	2.00	275.01	-2.18		HOLD 10 DEG TANGENT
4	10423.96	10.00	275.01	10391.33	33.80	-385.86	0.00	0.00	-19.36		DROP BACK TO VERTICAL DLS 2.00
5	10924.21	0.00	179.76	10889.04	37.60	-429.26	2.00	180.00	-21.54		BUILD CURVE 10 DEG / 100
6	11818.21	89.40	179.76	11461.97	-529.35	-426.85	10.00	179.76	544.93		LANDING POINT
7	21596.40	89.39	179.76	11565.00	-10306.91	-385.30	0.00	180.00	10314.11		TD at 21596.40

OXY

**PRD NM DIRECTIONAL PLANS (NAD 1983)
STERLING SILVER MDP1 33-4 FED COM
STERLING SILVER MDP1 33-4 FED COM 171H**

WB00

Plan: Permitting Plan

Standard Planning Report

04 April, 2018

Oxy

Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well STERLING SILVER MDP1 33-4 FED COM 171H
Company:	ENGINEERING DESIGNS	TVD Reference:	DATUM @ 3398.20ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	DATUM @ 3398.20ft
Site:	STERLING SILVER MDP1 33-4 FED COM	North Reference:	Grid
Well:	STERLING SILVER MDP1 33-4 FED COM 171H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB00		
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
From:	Map	Easting:	709,709.04 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in
		Latitude:	32° 16' 4.557918 N
		Longitude:	103° 47' 18.930890 W
		Grid Convergence:	0.29 °

Well	STERLING SILVER MDP1 33-4 FED COM 171H		
Well Position	+N/-S	0.20 ft	Northing: 461,634.50 usft
	+E/-W	35.00 ft	Easting: 709,744.04 usft
Position Uncertainty	0.00 ft	Wellhead Elevation:	0.00 ft
		Latitude:	32° 16' 4.558139 N
		Longitude:	103° 47' 18.523239 W
		Ground Level:	3,371.70 ft

Wellbore	WB00				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	4/4/2018	-99,639.00	-99,999.00	-99,999

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	182.14

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	
7,945.00	0.00	0.00	7,945.00	0.00	0.00	0.00	0.00	0.00	0.00	
8,445.25	10.00	275.01	8,442.71	3.80	-43.40	2.00	2.00	0.00	275.01	
10,423.96	10.00	275.01	10,391.33	33.80	-385.86	0.00	0.00	0.00	0.00	
10,924.21	0.00	179.76	10,889.04	37.60	-429.26	2.00	-2.00	0.00	180.00	STERLING
11,818.21	89.40	179.76	11,461.97	-529.35	-426.85	10.00	10.00	0.00	179.76	
21,596.40	89.39	179.76	11,565.00	-10,306.91	-385.30	0.00	0.00	0.00	180.00	STERLING

Oxy Planning Report

Database:	HOPSP	Local Co-ordinate Reference:	Well STERLING SILVER MDP1 33-4 FED COM 171H
Company:	ENGINEERING DESIGNS	TVD Reference:	DATUM @ 3398.20ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	DATUM @ 3398.20ft
Site:	STERLING SILVER MDP1 33-4 FED COM	North Reference:	Grid
Well:	STERLING SILVER MDP1 33-4 FED COM 171H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB00		
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
4,600.00	0.00	0.00	4,600.00	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
4,800.00	0.00	0.00	4,800.00	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
5,000.00	0.00	0.00	5,000.00	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

Oxy Planning Report

Database:	HOPSP	Local Co-ordinate Reference:	Well STERLING SILVER MDP1 33-4 FED COM 171H
Company:	ENGINEERING DESIGNS	TVD Reference:	DATUM @ 3398.20ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	DATUM @ 3398.20ft
Site:	STERLING SILVER MDP1 33-4 FED COM	North Reference:	Grid
Well:	STERLING SILVER MDP1 33-4 FED COM 171H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB00		
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
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00
7,700.00	0.00	0.00	7,700.00	0.00	0.00	0.00	0.00	0.00	0.00
7,800.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00
7,900.00	0.00	0.00	7,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,945.00	0.00	0.00	7,945.00	0.00	0.00	0.00	0.00	0.00	0.00
8,000.00	1.10	275.01	8,000.00	0.05	-0.53	-0.03	2.00	2.00	0.00
8,100.00	3.10	275.01	8,099.92	0.37	-4.18	-0.21	2.00	2.00	0.00
8,200.00	5.10	275.01	8,199.66	0.99	-11.30	-0.57	2.00	2.00	0.00
8,300.00	7.10	275.01	8,299.09	1.92	-21.88	-1.10	2.00	2.00	0.00
8,400.00	9.10	275.01	8,398.09	3.15	-35.92	-1.80	2.00	2.00	0.00
8,445.25	10.00	275.01	8,442.71	3.80	-43.40	-2.18	2.00	2.00	0.00
8,500.00	10.00	275.01	8,496.63	4.63	-52.88	-2.65	0.00	0.00	0.00
8,600.00	10.00	275.01	8,595.11	6.15	-70.18	-3.52	0.00	0.00	0.00
8,700.00	10.00	275.01	8,693.59	7.66	-87.49	-4.39	0.00	0.00	0.00
8,800.00	10.00	275.01	8,792.07	9.18	-104.80	-5.26	0.00	0.00	0.00
8,900.00	10.00	275.01	8,890.55	10.70	-122.10	-6.13	0.00	0.00	0.00
9,000.00	10.00	275.01	8,989.03	12.21	-139.41	-7.00	0.00	0.00	0.00
9,100.00	10.00	275.01	9,087.50	13.73	-156.72	-7.86	0.00	0.00	0.00
9,200.00	10.00	275.01	9,185.98	15.24	-174.02	-8.73	0.00	0.00	0.00
9,300.00	10.00	275.01	9,284.46	16.76	-191.33	-9.60	0.00	0.00	0.00
9,400.00	10.00	275.01	9,382.94	18.28	-208.64	-10.47	0.00	0.00	0.00
9,500.00	10.00	275.01	9,481.42	19.79	-225.95	-11.34	0.00	0.00	0.00
9,600.00	10.00	275.01	9,579.90	21.31	-243.25	-12.21	0.00	0.00	0.00
9,700.00	10.00	275.01	9,678.38	22.82	-260.56	-13.08	0.00	0.00	0.00
9,800.00	10.00	275.01	9,776.86	24.34	-277.87	-13.94	0.00	0.00	0.00
9,900.00	10.00	275.01	9,875.34	25.86	-295.17	-14.81	0.00	0.00	0.00
10,000.00	10.00	275.01	9,973.82	27.37	-312.48	-15.68	0.00	0.00	0.00
10,100.00	10.00	275.01	10,072.30	28.89	-329.79	-16.55	0.00	0.00	0.00

Oxy Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well STERLING SILVER MDP1 33-4 FED COM 171H
Company:	ENGINEERING DESIGNS	TVD Reference:	DATUM @ 3398.20ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	DATUM @ 3398.20ft
Site:	STERLING SILVER MDP1 33-4 FED COM	North Reference:	Grid
Well:	STERLING SILVER MDP1 33-4 FED COM 171H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB00		
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)
10,200.00	10.00	275.01	10,170.78	30.41	-347.10	-17.42	0.00	0.00	0.00
10,300.00	10.00	275.01	10,269.26	31.92	-364.40	-18.29	0.00	0.00	0.00
10,400.00	10.00	275.01	10,367.74	33.44	-381.71	-19.15	0.00	0.00	0.00
10,423.96	10.00	275.01	10,391.33	33.80	-385.86	-19.36	0.00	0.00	0.00
10,500.00	8.48	275.01	10,466.38	34.87	-398.03	-19.97	2.00	-2.00	0.00
10,600.00	6.48	275.01	10,565.52	36.00	-411.00	-20.62	2.00	-2.00	0.00
10,700.00	4.48	275.01	10,665.06	36.84	-420.52	-21.10	2.00	-2.00	0.00
10,800.00	2.48	275.01	10,764.87	37.37	-426.57	-21.41	2.00	-2.00	0.00
10,900.00	0.48	275.01	10,864.83	37.59	-429.15	-21.54	2.00	-2.00	0.00
10,924.21	0.00	179.76	10,889.04	37.60	-429.26	-21.54	2.00	-2.00	0.00
11,000.00	7.58	179.76	10,964.61	32.60	-429.23	-16.54	10.00	10.00	0.00
11,100.00	17.58	179.76	11,062.09	10.85	-429.14	5.19	10.00	10.00	0.00
11,200.00	27.58	179.76	11,154.31	-27.50	-428.98	43.51	10.00	10.00	0.00
11,300.00	37.58	179.76	11,238.46	-81.28	-428.75	97.24	10.00	10.00	0.00
11,400.00	47.58	179.76	11,312.00	-148.85	-428.46	164.75	10.00	10.00	0.00
11,500.00	57.58	179.76	11,372.69	-228.17	-428.13	244.00	10.00	10.00	0.00
11,600.00	67.58	179.76	11,418.69	-316.82	-427.75	332.58	10.00	10.00	0.00
11,700.00	77.58	179.76	11,448.59	-412.11	-427.35	427.79	10.00	10.00	0.00
11,800.00	87.58	179.76	11,461.49	-511.15	-426.92	526.74	10.00	10.00	0.00
11,818.21	89.40	179.76	11,461.97	-529.35	-426.85	544.93	10.00	10.00	0.00
11,900.00	89.40	179.76	11,462.83	-611.14	-426.50	626.64	0.00	0.00	0.00
12,000.00	89.40	179.76	11,463.87	-711.13	-426.07	726.55	0.00	0.00	0.00
12,100.00	89.40	179.76	11,464.92	-811.12	-425.65	826.46	0.00	0.00	0.00
12,200.00	89.40	179.76	11,465.97	-911.12	-425.22	926.37	0.00	0.00	0.00
12,300.00	89.40	179.76	11,467.02	-1,011.11	-424.80	1,026.27	0.00	0.00	0.00
12,400.00	89.40	179.76	11,468.06	-1,111.10	-424.38	1,126.18	0.00	0.00	0.00
12,500.00	89.40	179.76	11,469.11	-1,211.10	-423.95	1,226.09	0.00	0.00	0.00
12,600.00	89.40	179.76	11,470.16	-1,311.09	-423.53	1,326.00	0.00	0.00	0.00
12,700.00	89.40	179.76	11,471.21	-1,411.08	-423.10	1,425.91	0.00	0.00	0.00
12,800.00	89.40	179.76	11,472.26	-1,511.08	-422.68	1,525.81	0.00	0.00	0.00
12,900.00	89.40	179.76	11,473.30	-1,611.07	-422.25	1,625.72	0.00	0.00	0.00
13,000.00	89.40	179.76	11,474.35	-1,711.07	-421.83	1,725.63	0.00	0.00	0.00
13,100.00	89.40	179.76	11,475.40	-1,811.06	-421.40	1,825.54	0.00	0.00	0.00
13,200.00	89.40	179.76	11,476.45	-1,911.05	-420.98	1,925.45	0.00	0.00	0.00
13,300.00	89.40	179.76	11,477.50	-2,011.05	-420.55	2,025.35	0.00	0.00	0.00
13,400.00	89.40	179.76	11,478.55	-2,111.04	-420.13	2,125.26	0.00	0.00	0.00
13,500.00	89.40	179.76	11,479.60	-2,211.03	-419.70	2,225.17	0.00	0.00	0.00
13,600.00	89.40	179.76	11,480.65	-2,311.03	-419.28	2,325.08	0.00	0.00	0.00
13,700.00	89.40	179.76	11,481.70	-2,411.02	-418.85	2,424.98	0.00	0.00	0.00
13,800.00	89.40	179.76	11,482.75	-2,511.01	-418.43	2,524.89	0.00	0.00	0.00
13,900.00	89.40	179.76	11,483.80	-2,611.01	-418.00	2,624.80	0.00	0.00	0.00
14,000.00	89.40	179.76	11,484.85	-2,711.00	-417.58	2,724.71	0.00	0.00	0.00
14,100.00	89.40	179.76	11,485.90	-2,810.99	-417.15	2,824.62	0.00	0.00	0.00
14,200.00	89.40	179.76	11,486.95	-2,910.99	-416.73	2,924.52	0.00	0.00	0.00
14,300.00	89.40	179.76	11,488.00	-3,010.98	-416.30	3,024.43	0.00	0.00	0.00
14,400.00	89.40	179.76	11,489.05	-3,110.98	-415.88	3,124.34	0.00	0.00	0.00
14,500.00	89.40	179.76	11,490.10	-3,210.97	-415.45	3,224.25	0.00	0.00	0.00
14,600.00	89.40	179.76	11,491.15	-3,310.96	-415.03	3,324.16	0.00	0.00	0.00
14,700.00	89.40	179.76	11,492.20	-3,410.96	-414.60	3,424.06	0.00	0.00	0.00
14,800.00	89.40	179.76	11,493.25	-3,510.95	-414.18	3,523.97	0.00	0.00	0.00
14,900.00	89.40	179.76	11,494.30	-3,610.94	-413.75	3,623.88	0.00	0.00	0.00
15,000.00	89.40	179.76	11,495.36	-3,710.94	-413.33	3,723.79	0.00	0.00	0.00

Oxy Planning Report

Database:	HOSPSP	Local Co-ordinate Reference:	Well STERLING SILVER MDP1 33-4 FED COM 171H
Company:	ENGINEERING DESIGNS	TVD Reference:	DATUM @ 3398.20ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	DATUM @ 3398.20ft
Site:	STERLING SILVER MDP1 33-4 FED COM	North Reference:	Grid
Well:	STERLING SILVER MDP1 33-4 FED COM 171H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB00		
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	89.40	179.76	11,496.41	-3,810.93	-412.90	3,823.70	0.00	0.00	0.00
15,200.00	89.40	179.76	11,497.46	-3,910.92	-412.48	3,923.60	0.00	0.00	0.00
15,300.00	89.40	179.76	11,498.51	-4,010.92	-412.05	4,023.51	0.00	0.00	0.00
15,400.00	89.40	179.76	11,499.56	-4,110.91	-411.63	4,123.42	0.00	0.00	0.00
15,500.00	89.40	179.76	11,500.61	-4,210.90	-411.20	4,223.33	0.00	0.00	0.00
15,600.00	89.40	179.76	11,501.67	-4,310.90	-410.78	4,323.23	0.00	0.00	0.00
15,700.00	89.40	179.76	11,502.72	-4,410.89	-410.35	4,423.14	0.00	0.00	0.00
15,800.00	89.40	179.76	11,503.77	-4,510.89	-409.93	4,523.05	0.00	0.00	0.00
15,900.00	89.40	179.76	11,504.82	-4,610.88	-409.51	4,622.96	0.00	0.00	0.00
16,000.00	89.40	179.76	11,505.88	-4,710.87	-409.08	4,722.87	0.00	0.00	0.00
16,100.00	89.40	179.76	11,506.93	-4,810.87	-408.66	4,822.77	0.00	0.00	0.00
16,200.00	89.40	179.76	11,507.98	-4,910.86	-408.23	4,922.68	0.00	0.00	0.00
16,300.00	89.40	179.76	11,509.03	-5,010.85	-407.81	5,022.59	0.00	0.00	0.00
16,400.00	89.40	179.76	11,510.09	-5,110.85	-407.38	5,122.50	0.00	0.00	0.00
16,500.00	89.40	179.76	11,511.14	-5,210.84	-406.96	5,222.41	0.00	0.00	0.00
16,600.00	89.40	179.76	11,512.19	-5,310.83	-406.53	5,322.31	0.00	0.00	0.00
16,700.00	89.40	179.76	11,513.25	-5,410.83	-406.11	5,422.22	0.00	0.00	0.00
16,800.00	89.40	179.76	11,514.30	-5,510.82	-405.68	5,522.13	0.00	0.00	0.00
16,900.00	89.40	179.76	11,515.36	-5,610.81	-405.26	5,622.04	0.00	0.00	0.00
17,000.00	89.40	179.76	11,516.41	-5,710.81	-404.83	5,721.95	0.00	0.00	0.00
17,100.00	89.40	179.76	11,517.46	-5,810.80	-404.41	5,821.85	0.00	0.00	0.00
17,200.00	89.40	179.76	11,518.52	-5,910.80	-403.98	5,921.76	0.00	0.00	0.00
17,300.00	89.40	179.76	11,519.57	-6,010.79	-403.56	6,021.67	0.00	0.00	0.00
17,400.00	89.40	179.76	11,520.63	-6,110.78	-403.13	6,121.58	0.00	0.00	0.00
17,500.00	89.40	179.76	11,521.68	-6,210.78	-402.71	6,221.48	0.00	0.00	0.00
17,600.00	89.40	179.76	11,522.74	-6,310.77	-402.28	6,321.39	0.00	0.00	0.00
17,700.00	89.40	179.76	11,523.79	-6,410.76	-401.86	6,421.30	0.00	0.00	0.00
17,800.00	89.40	179.76	11,524.85	-6,510.76	-401.43	6,521.21	0.00	0.00	0.00
17,900.00	89.40	179.76	11,525.90	-6,610.75	-401.01	6,621.12	0.00	0.00	0.00
18,000.00	89.40	179.76	11,526.96	-6,710.74	-400.58	6,721.02	0.00	0.00	0.00
18,100.00	89.40	179.76	11,528.01	-6,810.74	-400.16	6,820.93	0.00	0.00	0.00
18,200.00	89.40	179.76	11,529.07	-6,910.73	-399.73	6,920.84	0.00	0.00	0.00
18,300.00	89.40	179.76	11,530.12	-7,010.72	-399.31	7,020.75	0.00	0.00	0.00
18,400.00	89.39	179.76	11,531.18	-7,110.72	-398.88	7,120.66	0.00	0.00	0.00
18,500.00	89.39	179.76	11,532.24	-7,210.71	-398.46	7,220.56	0.00	0.00	0.00
18,600.00	89.39	179.76	11,533.29	-7,310.70	-398.03	7,320.47	0.00	0.00	0.00
18,700.00	89.39	179.76	11,534.35	-7,410.70	-397.61	7,420.38	0.00	0.00	0.00
18,800.00	89.39	179.76	11,535.40	-7,510.69	-397.18	7,520.29	0.00	0.00	0.00
18,900.00	89.39	179.76	11,536.46	-7,610.69	-396.76	7,620.19	0.00	0.00	0.00
19,000.00	89.39	179.76	11,537.52	-7,710.68	-396.33	7,720.10	0.00	0.00	0.00
19,100.00	89.39	179.76	11,538.57	-7,810.67	-395.91	7,820.01	0.00	0.00	0.00
19,200.00	89.39	179.76	11,539.63	-7,910.67	-395.48	7,919.92	0.00	0.00	0.00
19,300.00	89.39	179.76	11,540.69	-8,010.66	-395.06	8,019.83	0.00	0.00	0.00
19,400.00	89.39	179.76	11,541.75	-8,110.65	-394.63	8,119.73	0.00	0.00	0.00
19,500.00	89.39	179.76	11,542.80	-8,210.65	-394.21	8,219.64	0.00	0.00	0.00
19,600.00	89.39	179.76	11,543.86	-8,310.64	-393.79	8,319.55	0.00	0.00	0.00
19,700.00	89.39	179.76	11,544.92	-8,410.63	-393.36	8,419.46	0.00	0.00	0.00
19,800.00	89.39	179.76	11,545.98	-8,510.63	-392.94	8,519.37	0.00	0.00	0.00
19,900.00	89.39	179.76	11,547.03	-8,610.62	-392.51	8,619.27	0.00	0.00	0.00
20,000.00	89.39	179.76	11,548.09	-8,710.61	-392.09	8,719.18	0.00	0.00	0.00
20,100.00	89.39	179.76	11,549.15	-8,810.61	-391.66	8,819.09	0.00	0.00	0.00
20,200.00	89.39	179.76	11,550.21	-8,910.60	-391.24	8,919.00	0.00	0.00	0.00

Oxy

Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well STERLING SILVER MDP1 33-4 FED COM 171H
Company:	ENGINEERING DESIGNS	TVD Reference:	DATUM @ 3398.20ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	DATUM @ 3398.20ft
Site:	STERLING SILVER MDP1 33-4 FED COM	North Reference:	Grid
Well:	STERLING SILVER MDP1 33-4 FED COM 171H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB00		
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	89.39	179.76	11,551.27	-9,010.59	-390.81	9,018.90	0.00	0.00	0.00
20,400.00	89.39	179.76	11,552.33	-9,110.59	-390.39	9,118.81	0.00	0.00	0.00
20,500.00	89.39	179.76	11,553.38	-9,210.58	-389.96	9,218.72	0.00	0.00	0.00
20,600.00	89.39	179.76	11,554.44	-9,310.57	-389.54	9,318.63	0.00	0.00	0.00
20,700.00	89.39	179.76	11,555.50	-9,410.57	-389.11	9,418.54	0.00	0.00	0.00
20,800.00	89.39	179.76	11,556.56	-9,510.56	-388.69	9,518.44	0.00	0.00	0.00
20,900.00	89.39	179.76	11,557.62	-9,610.56	-388.26	9,618.35	0.00	0.00	0.00
21,000.00	89.39	179.76	11,558.68	-9,710.55	-387.84	9,718.26	0.00	0.00	0.00
21,100.00	89.39	179.76	11,559.74	-9,810.54	-387.41	9,818.17	0.00	0.00	0.00
21,200.00	89.39	179.76	11,560.80	-9,910.54	-386.99	9,918.07	0.00	0.00	0.00
21,300.00	89.39	179.76	11,561.86	-10,010.53	-386.56	10,017.98	0.00	0.00	0.00
21,400.00	89.39	179.76	11,562.92	-10,110.52	-386.14	10,117.89	0.00	0.00	0.00
21,500.00	89.39	179.76	11,563.98	-10,210.52	-385.71	10,217.80	0.00	0.00	0.00
21,596.40	89.39	179.76	11,565.00	-10,306.91	-385.30	10,314.11	0.00	0.00	0.00

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
STERLING - plan hits target center - Point	0.00	0.00	10,889.04	37.60	-429.26	461,672.10	709,314.81	32° 16' 4.951749 N	103° 47' 23.520187
STERLING - plan hits target center - Point	0.00	0.00	11,565.00	-10,306.91	-385.30	451,328.21	709,358.76	32° 14' 22.590842 N	103° 47' 23.618136

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
7,945.00	7,945.00	0.00	0.00	STEP OUT DLS 2.00
8,445.25	8,442.71	3.80	-43.40	HOLD 10 DEG TANGENT
10,423.96	10,391.33	33.80	-385.86	DROP BACK TO VERTICAL DLS 2.00
10,924.21	10,889.04	37.60	-429.26	BUILD CURVE 10 DEG / 100
11,818.21	11,461.97	-529.35	-426.85	LANDING POINT
21,596.40	11,565.00	-10,306.91	-385.30	TD at 21596.40



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 171H
T24S R31E, Section 09 – Units D, C, E and F, Eddy County
T23S R31E Section 28 – Units L, K, M and N, 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 171H 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,

Amjad Abdelrahman, P.E.
Sr. Reservoir Engineer