

NM OIL CONSERVATION

NM OIL CONSERVATION
ARTESIA DISTRICTForm 3160-4
(August 2007)

ARTESIA DISTRICT

UNITED STATES

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

MAR 08 2018

MAR 08 2018
OCS ArtesiaFORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.
NMNM57273

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other
 b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.
 Other _____

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

2. Name of Operator
OXY USA INC

Contact: JANA MENDIOLA
E-Mail: janalyn_mendiola@oxy.com

8. Lease Name and Well No.
PALLADIUM MDP1-7-6 FEDERAL COM 5H

3. Address
MIDLAND, TX 79710

3a. Phone No. (include area code)
Ph: 432-685-5936

9. API Well No.
30-015-44294-00-S1

4. Location of Well (Report location clearly and in accordance with Federal requirements)*

Sec 7 T24S R31E Mer NMP
At surface SESE 293FSL 592FEL 32.225398 N Lat, 103.810304 W Lon

Sec 7 T24S R31E Mer NMP
At top prod interval reported below SESE 347FSL 1269FEL 32.225527 N Lat, 103.812463 W Lon

Sec 6 T24S R31E Mer NMP
At total depth NENE 54FNL 1278FEL 32.253161 N Lat, 103.812421 W Lon

10. Field and Pool, or Exploratory
COTTON DRAW

11. Sec., T., R., M., or Block and Survey
or Area Sec 7 T24S R31E Mer NMP

12. County or Parish
EDDY

13. State
NM

14. Date Spudded
08/13/2017

15. Date T.D. Reached
10/01/2017

16. Date Completed
☐ D & A ☒ Ready to Prod.
11/19/2017

17. Elevations (DF, KB, RT, GL)*
3525 GL

18. Total Depth: MD 20288
TVD 10064

19. Plug Back T.D.: MD 19998
TVD 10060

20. Depth Bridge Plug Set: MD
TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
MUDLOG CBL

22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit analysis)
Directional Survey? ☐ No ☒ Yes (Submit analysis)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17.500	13.375 J55	54.5	0	671		865	204	0	
12.250	9.625 J55	36.0	0	4372		1330	426	0	
8.500	5.500 P110	20.0	0	20278		2955	890	1565	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)

25. Producing Intervals

26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) BONE SPRING			10094 TO 20132	0.420	1960	ACTIVE
B) BONE SPRING 2ND	10094	19979				
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
10094 TO 20132	18975852G SLICKWATER + 60278G 15% HCL ACID W/19686389# SAND

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
11/19/2017	12/18/2017	24	→	3670.0	4716.0	6160.0			FLows FROM WELL
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
47/128	SI	882.0	→	3670	4716	6160	1285	POW	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
11/19/2017	12/18/2017	24	→	3670.0	4716.0	6160.0			FLows FROM WELL
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
47/128	SI	882.0	→	3670	4716	6160	1285	POW	

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #405017 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

RECLAMATION
DUE 5-19-18

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

29. Disposition of Gas(Sold, used for fuel, vented, etc.)
SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
BELL CANYON	4305	5216	OIL, GAS, WATER	RUSTLER	605
CHERRY CANYON	5217	6459	OIL, GAS, WATER	SALADO	963
BRUSHY CANYON	6460	8161	OIL, GAS, WATER	CASTILE	2400
BONE SPRING	8162	9142	OIL, GAS, WATER	DELAWARE	4270
BONE SPRING 1ST	9143	9909	OIL, GAS, WATER	BELL CANYON	4305
BONE SPRING 2ND	9910	10064	OIL, GAS, WATER	CHERRY CANYON	5217
				BRUSHY CANYON	6460
				BONE SPRING	8162

32. Additional remarks (include plugging procedure):
52. FORMATION (LOG) MARKERS CONTD.

1ST BONE SPRING 9143'M
2ND BONE SPRING 9910'M

11/11/17 RIH & set CIBP @ 19998' to isolate the following perfs: 20028-20132'.

33. Circle enclosed attachments:

- | | | | |
|---|--------------------|---------------|-----------------------|
| 1. Electrical/Mechanical Logs (1 full set req'd.) | 2. Geologic Report | 3. DST Report | 4. Directional Survey |
| 5. Sundry Notice for plugging and cement verification | 6. Core Analysis | 7 Other: | |

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

Electronic Submission #405017 Verified by the BLM Well Information System.

For OXY USA INC, sent to the Carlsbad

Committed to AFMSS for processing by DUNCAN WHITLOCK on 02/28/2018 (18DW0069SE)

Name (please print) DAVID STEWART

Title SR REGULATORY ADVISOR

Signature (Electronic Submission)

Date 02/20/2018

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.

**** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ****

Additional data for transaction #405017 that would not fit on the form

32. Additional remarks, continued

Logs were mailed 2/20/18.

Log Header, Directional Survey, As-Drilled Amended C-102 plat & WBD are attached.

NM OIL CONSERVATION

ARTESIA DISTRICT

Form C-102

Revised August 1, 2011

Submit one copy to appropriate District Office

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

MAR 08 2018

RECEIVED

☒ AMENDED REPORT
(As-Drilled)

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (505) 393-6161 Fax: (505) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (505) 748-1283 Fax: (505) 748-9720
District III
1000 Rio Grande 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

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-44294	Pool Code 13367	Pool Name Cotton Draw; Bone Spring
Property Code 317687	Property Name PALLADIUM MDP1 "7-6" FEDERAL COM	Well Number 5H
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 3525.4'

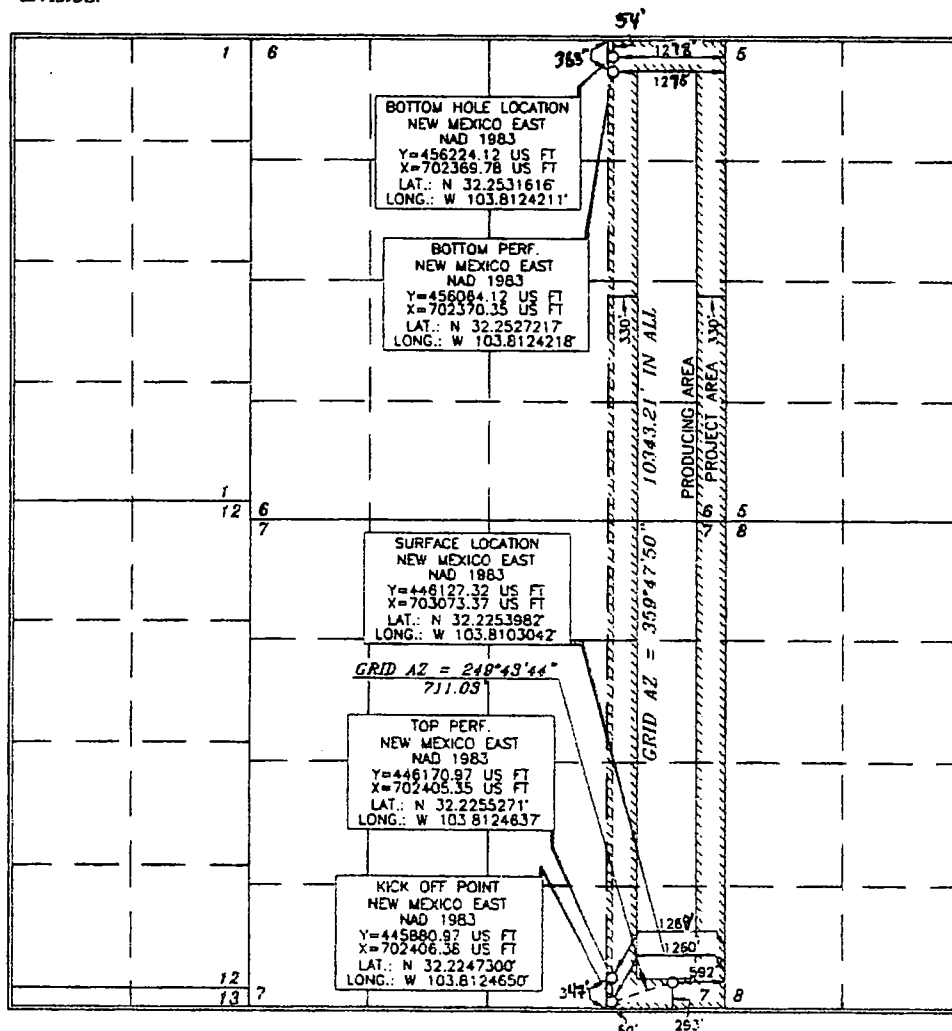
Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
P	7	24 SOUTH	31 EAST, N.M.P.M.		293'	SOUTH	592'	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
1	6	24 SOUTH	31 EAST, N.M.P.M.		100' 54	NORTH	100' 1249	EAST	EDDY
Dedicated Acres 320.22	Joint or Infill Y	Consolidation Code	Order No. - NSL-7549	BP-363 FNL 1275 FEL					
				TP-347 FSL 1269 FEL					

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.

[Signature] 11/13/17
Date
Jana Mendiola
Printed Name
janalyn_mendiola@oxy.com
E-mail Address

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from reliable technical surveys made by me or under my supervision and that the same is true and correct to the best of my belief.

[Signature]
Date of Survey
Signature and Seal of Professional Surveyor

[Signature] 9/24/2016
Certificate Number 15079



Structure:

Oxy Palladium MDP1 7-8 Federal Com 5H

C. y. Publications MDP-76 Federal Case DRJFV71GH 1850p1

[illegible]

Grid North
Tot Corr (M->G 6.886")
Mag Dec (6.954")
Grid Conv (0.278")

NS (N) Scale = 1:400.00(N)

Leaseline
Lateral Target Window 50°/25° Towards LL
330 HL

VD (n) Scale = 1:400.00(n)

EW (ft) Scale = 1:400.00(ft)

Vertical Section (ft) Azim = 358.01° Scale = 1:400.00(ft) Origin = 0N/-S. 0E/-W



Gyrodata Incorporated
10504 WCR 72
Midland, TX 79707

Main: 432-561-8458
Fax: 432-563-7982

I, Kevin Willard, certify that; I am employed by Gyrodata Inc.; that I am authorized and qualified to review the Gyroscopic Multishot survey from a depth of 0 feet to a depth of feet conducted on the day(s) of 08/14/2017; that this survey was conducted at the request OXY USA for the PALLADIUM MDP1 Well 5H No. 30-015-44294 in Eddy County, NM; that the data is true, correct, complete, and within the limitations of the tool as set forth by Gyrodata Inc.; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Gyrodata Inc.

A handwritten signature in black ink, appearing to read "Kevin Willard", written over a horizontal line.

Kevin Willard
Operations Coordinator

A Gyrodata Directional Survey

FINAL DEFINITIVE COPY

for

OXY USA

Lease: Palladium MDP1 7-6 Fed Com Well: 5H, 17 1/2"
Location: Transcend Rig 1, Eddy County, New Mexico

Job Number: MD0817GDM593

Run Date: 13 Aug 2017
Report Generated: 02 Oct 2017 08:21

Surveyor: Craig Donald

Calculation Method: MINIMUM CURVATURE

Survey surface coordinates obtained from: Company Man
Survey Latitude: 32.225275 deg. N
Longitude: 103.809820 deg. W

Well Head Location -
From Local Horizontal Reference: N 0.00 ft. E 0.00 ft.

Azimuth Correction:
Gyro: -0.28000 deg to Grid North

Depth Reference: Rotary Table

Air Gap (RKB to Ground / RKB to MSL): 6.00

Ground Elevation (Ground to MSL / MSL to Mudline): 3525.40

Vertical Section Calculated from Well Head Location

Closure Calculated from Well Head Location

Horizontal Coordinates Calculated from Local Horizontal Reference

OXY USA

Lease: Palladium MDP1 7-6 Fed Com Well: 5H, 17 1/2"

Location: Transcend Rig 1, Eddy County, New Mexico

Job Number: MD0817GDM593

0 to 636.71 ft rate gyroscopic survey, inside of 5" drillpipe
All measured depths and coordinates in reference to Transcend Rig 1, R.K.B height of 6.00 ft

Final Station Closure: Distance: 4.71 ft Az: 287.99 deg.

Schlumberger Drilling and Measurements
Drilling Group
Gen Market Area: South West Texas Basin
7220 W I-H 20
Midland, Texas 79706
Phone : (432) 742-5400 (Main)
Fax : (432) 742-5606 (Shared)

Schlumberger

Well Reference:
7, 24S, 31E, Eddy NM
N 32.22540 W -103.81030

I, Aaron Simon certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of August 26, 2017 through October 01, 2017, conduct or supervise the taking of the TelePacer & SlimPulse surveys from a depth of 780.00 feet to a depth of 20250.00 feet referenced to driller's depth; that the data is true, correct, complete and within the limitations of the tool as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I am authorized and qualified to make this report; that this survey was conducted at the request of Oxy USA Inc for the Palladium MDP1-7.6 Fed Com 5H Well (Original Hole) API No. 30-015-44294 in New Mexico; and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation.

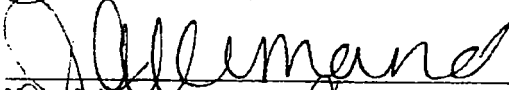
By
Aaron Simon
FE



Subscribed and Sworn to before me this 11th day of October (month) 2017 (yr)

My Commission expires:

Dec 20, 2020



Notary Public

Adams County Colorado
(County State)

(signature)

JENNIFER ALLEMAND
Notary Public
State of Colorado
Notary ID # 20164047962
My Commission Expires 12-20-2020

Oxy Palladium MDP1 7-6 Federal Com 5H Gyro+MWD 0-20,288' Survey

Geodetic Report

(Def Survey)



Report Date:	October 02 2017 - 09 05 AM	Survey / DLS Computation:	Minimum Curvature / Lubinski
Client:	OXY	Vertical Section Azimuth:	356.014° (Grid North)
Field:	NM Eddy County (NAD 83)	Vertical Section Origin:	0.000 ft 0.000 ft
Structure / Slot:	Oxy Palladium MDP1 7-6 Federal Com 5H / Oxy Palladium MDP1 7-6 Federal Com 5H	TVD Reference Datum:	RKB=26.5'
Well:	Oxy Palladium MDP1 7-6 Federal Com 5H	TVD Reference Elevation:	3551.900 ft above MSL
Borehole:	Original Borehole	Seabed / Ground Elevation:	3525.400 ft above MSL
UWI / API#:	Unknown / Unknown	Magnetic Declination:	6.964°
Survey Name:	Oxy Palladium MDP1 7-6 Federal Com 5H Gyro+MWD 0-20 288	Total Gravity Field Strength:	998.428mgm (9.80665 Based)
Survey Date:	September 19 2017	Gravity Model:	GARM
Tort / AMD / DDI / ERD Ratio:	243.929° / 11238.035 ft / 6.742 / 1.117	Total Magnetic Field Strength:	48092.378 nT
Coordinate Reference System:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	Magnetic Dip Angle:	59.893°
Location Lat / Long:	N 32° 13' 31" 43355", W 103° 48' 37" 09523"	Declination Date:	September 18 2017
Location Grid N/E Y/X:	N 448127 320 NUS E 703073 370 NUS	Magnetic Declination Model:	HDGM 2017
CRS Grid Convergence Angle:	0.2789°	North Reference:	Grid North
Grid Scale Factor:	0.99953905	Total Convergence Used:	0.2789°
Version / Patch:	2.10.544.0	Total Corr Mag North -> Grid North:	6.6856°
		Local Coord Referenced To:	Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ft)	Easting (ft)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
SHL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	448127.32	703073.37	N 32° 13' 31.43"	W 103° 48' 37.10"
RKB	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00	448127.32	703073.37	N 32° 13' 31.43"	W 103° 48' 37.10"
	38.28	0.28	34.64	38.28	0.02	0.02	0.02	2.38	448127.34	703073.39	N 32° 13' 31.43"	W 103° 48' 37.10"
	95.87	0.35	340.94	95.87	0.30	0.31	0.04	0.51	448127.63	703073.41	N 32° 13' 31.44"	W 103° 48' 37.09"
	155.15	0.52	349.95	155.15	0.74	0.74	-0.07	0.31	448128.06	703073.30	N 32° 13' 31.44"	W 103° 48' 37.10"
	216.17	0.58	335.20	216.16	1.31	1.29	-0.25	0.25	448128.61	703073.12	N 32° 13' 31.45"	W 103° 48' 37.10"
	278.21	0.44	315.24	278.20	1.78	1.75	-0.54	0.36	448129.07	703072.83	N 32° 13' 31.45"	W 103° 48' 37.10"
	342.21	0.56	287.29	342.20	2.08	2.02	-1.02	0.42	448129.34	703072.35	N 32° 13' 31.45"	W 103° 48' 37.11"
	405.21	0.51	274.50	405.20	2.24	2.13	-1.59	0.20	448129.45	703071.78	N 32° 13' 31.45"	W 103° 48' 37.11"
	468.21	0.58	265.36	468.19	2.27	2.13	-2.19	0.18	448129.45	703071.18	N 32° 13' 31.45"	W 103° 48' 37.12"
	531.21	0.60	257.28	531.19	2.22	2.03	-2.83	0.14	448129.35	703070.54	N 32° 13' 31.45"	W 103° 48' 37.13"
	592.21	0.95	248.89	592.19	2.02	1.78	-3.61	0.60	448129.10	703069.76	N 32° 13' 31.45"	W 103° 48' 37.14"
Last Gyro	657.21	0.71	249.80	657.18	1.75	1.44	-4.49	0.37	448128.76	703068.88	N 32° 13' 31.45"	W 103° 48' 37.15"
	780.00	0.73	231.55	779.96	1.10	0.89	-5.82	0.19	448128.01	703067.55	N 32° 13' 31.44"	W 103° 48' 37.16"
	873.00	0.58	227.75	872.95	0.47	0.01	-6.63	0.17	448127.33	703066.74	N 32° 13' 31.43"	W 103° 48' 37.17"
	965.00	0.72	232.11	964.95	-0.14	-0.66	-7.43	0.16	448126.65	703065.94	N 32° 13' 31.43"	W 103° 48' 37.18"
	1053.00	0.94	219.86	1052.94	-0.97	1.55	8.33	0.32	448125.77	703065.04	N 32° 13' 31.42"	W 103° 48' 37.19"
	1145.00	1.01	217.68	1144.92	-2.12	-2.77	-9.31	0.09	448124.55	703064.06	N 32° 13' 31.41"	W 103° 48' 37.20"
	1238.00	0.80	210.30	1237.81	3.27	-3.98	-10.14	0.26	448123.34	703063.23	N 32° 13' 31.39"	W 103° 48' 37.21"
	1422.00	0.97	202.81	1421.89	-5.72	-6.53	-11.39	0.11	448120.79	703061.98	N 32° 13' 31.37"	W 103° 48' 37.22"
	1514.00	0.90	208.84	1513.88	-7.04	-7.89	-12.02	0.10	448119.43	703061.36	N 32° 13' 31.36"	W 103° 48' 37.24"
	1699.00	0.73	208.27	1698.86	-9.28	-10.23	-13.23	0.09	448117.09	703060.15	N 32° 13' 31.33"	W 103° 48' 37.25"
	1885.00	0.93	203.99	1884.84	-11.62	-12.65	-14.40	0.11	448114.67	703058.97	N 32° 13' 31.31"	W 103° 48' 37.26"
	1980.00	0.87	205.38	1979.83	-12.93	-14.01	-15.02	0.07	448113.32	703058.35	N 32° 13' 31.30"	W 103° 48' 37.27"
	2074.00	1.00	206.81	2073.82	-14.25	-15.38	-15.70	0.14	448111.84	703057.87	N 32° 13' 31.28"	W 103° 48' 37.28"
	2168.00	0.96	209.20	2167.80	-15.82	-16.80	-16.45	0.06	448110.52	703056.92	N 32° 13' 31.27"	W 103° 48' 37.29"
	2263.00	1.30	213.31	2262.78	-17.14	-18.40	-17.43	0.37	448108.92	703055.84	N 32° 13' 31.25"	W 103° 48' 37.30"
	2452.00	1.75	218.55	2451.71	-21.02	-22.50	-20.45	0.27	448104.82	703052.92	N 32° 13' 31.21"	W 103° 48' 37.33"
	2546.00	1.34	203.59	2545.68	-23.08	-24.65	-21.80	0.64	448102.67	703051.57	N 32° 13' 31.16"	W 103° 48' 37.35"
	2640.00	1.18	172.12	2639.66	-25.02	-26.62	-22.11	0.75	448100.70	703051.26	N 32° 13' 31.17"	W 103° 48' 37.35"
	2734.00	1.48	152.54	2733.63	-27.10	-28.66	-21.42	0.57	448098.67	703051.95	N 32° 13' 31.15"	W 103° 48' 37.35"
	2828.00	1.29	133.94	2827.61	-29.00	-30.47	-20.18	0.52	448096.86	703053.27	N 32° 13' 31.11"	W 103° 48' 37.33"
	2922.00	2.26	129.00	2921.56	-31.04	-32.37	-17.80	1.04	448094.95	703055.48	N 32° 13' 31.11"	W 103° 48' 37.31"
	3016.00	2.00	108.42	3015.50	-32.93	-34.05	-14.90	0.85	448093.27	703058.47	N 32° 13' 31.10"	W 103° 48' 37.27"
	3111.00	1.60	75.03	3110.45	-33.28	-34.19	-11.88	1.17	448093.13	703061.49	N 32° 13' 31.10"	W 103° 48' 37.24"
	3202.00	1.03	67.80	3201.42	-32.75	-33.51	-8.75	0.87	448093.81	703063.62	N 32° 13' 31.10"	W 103° 48' 37.21"
	3296.00	0.68	75.70	3295.41	-32.38	-33.05	-6.43	0.39	448094.27	703064.94	N 32° 13' 31.11"	W 103° 48' 37.20"
	3391.00	0.76	106.20	3390.40	-32.52	-33.11	-7.28	0.43	448094.21	703066.09	N 32° 13' 31.11"	W 103° 48' 37.18"
	3485.00	1.53	99.90	3484.38	-33.06	-33.52	-5.45	0.84	448093.80	703067.92	N 32° 13' 31.10"	W 103° 48' 37.16"
	3579.00	3.04	102.66	3578.30	-34.07	-34.28	-1.78	1.61	448093.04	703071.59	N 32° 13' 31.09"	W 103° 48' 37.12"
	3674.00	4.22	112.85	3673.11	-36.37	-36.19	3.90	1.41	448091.13	703077.26	N 32° 13' 31.08"	W 103° 48' 37.05"
	3768.00	3.83	115.29	3766.88	-39.47	-38.87	9.92	0.45	448088.45	703083.29	N 32° 13' 31.05"	W 103° 48' 36.98"
	3862.00	4.44	122.42	3860.64	-43.16	-42.17	15.83	0.85	448085.16	703089.20	N 32° 13' 31.02"	W 103° 48' 36.91"
	3963.00	4.46	133.66	3961.33	-48.39	-46.97	21.97	0.86	448080.35	703095.34	N 32° 13' 30.97"	W 103° 48' 36.84"
	4058.00	4.02	144.82	4056.07	-53.96	-52.24	26.56	0.98	448075.08	703099.93	N 32° 13' 30.92"	W 103° 48' 36.79"
	4152.00	2.86	154.33	4149.90	-58.96	-57.05	29.48	1.37	448070.27	703102.85	N 32° 13' 30.87"	W 103° 48' 36.76"
	4247.00	1.76	178.47	4244.03	-62.62	-60.65	30.54	1.52	448066.66	703103.81	N 32° 13' 30.83"	W 103° 48' 36.74"
	4320.00	1.24	207.91	4317.80	-64.41	-62.46	30.20	1.25	448064.86	703103.57	N 32° 13' 30.81"	W 103° 48' 36.75"
	4464.00	1.88	226.10	4461.75	-67.19	-65.42	27.72	0.58	448061.90	703101.08	N 32° 13' 30.78"	W 103° 48' 36.78"
	4559.00	2.53	248.58	4556.68	-68.77	-67.23	24.60	1.06	448060.10	703097.97	N 32° 13' 30.77"	W 103° 48' 36.81"
	4653.00	3.44	259.77	4650.55	-69.70	-68.48	19.90	1.15	448058.84	703093.27	N 32° 13' 30.75"	W 103° 48' 36.87"
	4748.00	4.28	266.75	4745.34	-69.97	-69.15	13.55	1.01	448058.13	703086.92	N 32° 13' 30.75"	W 103° 48' 36.94"
	4842.00	5.12	272.21	4839.02	-69.47	-69.23	5.86	1.01	448058.10	703079.23	N 32° 13' 30.75"	W 103° 48' 37.03"
	4937.00	6.24	275.80	4933.55	-68.13	-66.54	-3.51	1.24	448058.78	703069.86	N 32° 13' 30.76"	W 103° 48' 37.14"
	5031.00	7.12	276.37	5026.91	-66.22	-67.38	-14.39	0.94	448055.94	703058.99	N 32° 13' 30.77"	W 103° 48' 37.27"
	5125.00	7.79	276.52	5120.12	-64.01	-66.01	26.50	0.71	448061.31	703046.87	N 32° 13' 30.76"	W 103° 48' 37.41"
	5220.00	6.33	274.83	5214.18	-61.78	-64.70	39.76	0.62	448062.82	703033.61	N 32° 13' 30.80"	W 103° 48' 37.56"
	5314.00	6.79	273.70	5307.13	-59.78	-63.66	-53.71	0.52	448063.66	703019.66	N 32° 13' 30.81"	W 103° 48' 37.72"
	5408.00	9.35	272.58	5399.96	-57.94	-62.86	-68.51	0.62	448064.47	703004.87	N 32° 13' 30.81"	W 103° 48' 37.90"
	5502.00	10.05	271.86	5492.61	-55.22	-62.23	-84.33	0.75	448065.09	702989.04	N 32° 13' 30.82"	W 103° 48' 38.08"
	5596.00	10.41	270.93	5585.12	-54.64	-61.81	-101.02	0.43	448065.51	702972.36	N 32° 13' 30.83"	W 103° 48' 38.27"
	5691.00	10.87	270.72	5678.49	-53.17	-61.58	-118.56	0.49	448065.76	702954.82	N 32° 13' 30.83"	W 103° 48' 38.46"
	5785.00	10.12	270.73	5770.81	-51.77	-61.35	-135.68	0.80	448065.98	702937.70	N 32° 13' 30.83"	W 103° 48' 38.68"
	5879.00	8.89	269.41	5863.62	-50.66	-61.31	-151.20	1.33	448066.01	702922.18	N 32° 13' 30.83"	W 103° 48' 38.81"
	5973.00	7.40	268.40	5966.67	-49.97	-61.56	-164.52	1.59	448065.77	702908.87	N 32° 13' 30.83"	W 103° 48' 39.01"
	6068.00	7.68	263.73	6050.85	-49.87	-62.42	-176.94	1.03	448064.90	702896.44	N 32° 13' 30.82"	W 103° 48' 39.16"
	6162.00	8.46	259.65	6143.92	-50.89	-64.35	-189.99	0.71	448062.87	702883.40	N 32° 13' 30.81"	W 103° 48' 39.31"
	6257.00	8.17	256.42	6237.80	-53.02	-67.38	-204.22	1.03	448062.87	702869.16	N 32° 13' 30.78"	W 103° 48' 39.48"
	6351.00	8.65	254.46	6330.53	-55.85	-71.25	-218.05	0.91	448059.94	702854.29	N 32° 13' 30.74"	W 103° 48' 39.65"
	6445.00	10.45	252.68	6424.07	-59.43	-75.95	-234.99	0.61	448056.07	702838.40	N 32° 13' 30.69"	W 103° 48' 39.83"
	6540.00	10.26	249.35	6516.54	-63.80	-81.44	-250.96	0.67	448054.99	702822.43	N 32° 13' 30.58"	W 103° 48' 40.02"
	6635.00	9.24	246.68	6610.17	-68.75	-87.44	-265.88	1.17	448053.88	702802.43	N 32° 13' 30.58"	W 103° 48' 40.20"
	6726.00	8.02	242.00	6703.10	-73.92	-93.51	-278.60	1.50	448053.82	702794.79	N 32° 13' 30.52"	W 103° 48' 40.40"
	6824.00	6.75	235.80	6797.32	-75.42	-96.76	-289.07	1.58	448052.57	702784.32	N 32° 13' 30.46"	W 103° 48' 40.47"
	6918.00	6.71	237.87	6890.67	-84.79	-105.78	-298.29	0.76	448021.54	702775.10	N 32° 13' 30.40"	W 103° 48' 40.

Comments	MD (m)	Incl (°)	Azim Grid (°)	TVD (m)	VSEC (m)	NS (m)	EW (m)	DLS (°/100°)	Northing (m)	Easting (m)	Latitude (N/S ° ° ' '')	Longitude (E/W ° ° ' '')
	7296.00	7.09	248.03	7265.75	-100.56	-124.56	-341.02	0.79	446002.75	702732.37	N 32 13 30.22 W	103 48 41.07
	7390.00	6.58	240.04	7359.08	-104.71	-128.42	-351.06	1.15	445997.80	702722.53	N 32 13 30.17 W	103 48 41.19
	7484.00	5.93	233.17	7452.53	-109.70	-135.02	-359.62	1.05	445992.30	702713.78	N 32 13 30.11 W	103 48 41.29
	7578.00	6.01	234.50	7546.02	-114.80	-140.78	-367.51	0.17	445986.54	702705.68	N 32 13 30.06 W	103 48 41.38
	7673.00	6.52	242.79	7640.45	-119.63	-146.15	-376.36	1.09	445981.16	702697.04	N 32 13 30.01 W	103 48 41.48
	7768.00	6.77	247.88	7734.81	-123.50	-150.72	-386.34	0.67	445976.61	702688.06	N 32 13 29.96 W	103 48 41.60
	7862.00	7.14	252.70	7828.12	-126.57	-154.55	-397.05	0.73	445972.78	702679.35	N 32 13 29.92 W	103 48 41.73
	7957.00	7.09	258.50	7922.39	-128.70	-157.47	-408.43	0.76	445968.86	702670.96	N 32 13 29.84 W	103 48 41.86
	8051.00	6.23	254.23	8015.76	-130.50	-160.01	-419.03	1.08	445964.32	702662.37	N 32 13 29.87 W	103 48 41.98
	8145.00	5.09	245.02	8109.30	-133.03	-163.16	-427.71	1.55	445959.17	702653.81	N 32 13 29.84 W	103 48 42.08
	8240.00	4.87	246.67	8203.95	-135.82	-166.47	-435.09	0.47	445954.39	702645.29	N 32 13 29.81 W	103 48 42.17
	8334.00	3.89	249.81	8297.69	-137.98	-169.09	-441.59	0.87	445949.24	702636.81	N 32 13 29.78 W	103 48 42.25
	8429.00	3.98	248.68	8392.47	-138.86	-171.39	-447.67	0.11	445944.39	702628.31	N 32 13 29.76 W	103 48 42.32
	8523.00	4.71	243.26	8486.20	-142.32	-174.31	-454.14	0.91	445939.27	702619.26	N 32 13 29.73 W	103 48 42.39
	8618.00	5.12	248.15	8580.85	-145.27	-177.78	-461.50	0.50	445934.39	702610.80	N 32 13 29.70 W	103 48 42.48
	8712.00	5.04	248.40	8674.48	-147.94	-181.00	-469.18	0.23	445929.34	702602.22	N 32 13 29.67 W	103 48 42.57
	8806.00	4.55	253.99	8768.15	-149.97	-183.54	-476.60	0.72	445924.39	702593.66	N 32 13 29.64 W	103 48 42.65
	8901.00	4.97	256.33	8862.82	-151.43	-185.54	-484.22	0.49	445919.34	702585.08	N 32 13 29.62 W	103 48 42.74
	8996.00	5.64	258.64	8957.42	-152.63	-187.34	-492.82	0.77	445914.39	702576.50	N 32 13 29.60 W	103 48 42.84
	9090.00	5.92	259.37	9050.94	-153.70	-189.06	-500.13	0.30	445909.34	702567.92	N 32 13 29.58 W	103 48 42.95
	9184.00	7.52	256.67	9144.29	-155.26	-191.38	-512.88	1.73	445904.39	702559.34	N 32 13 29.56 W	103 48 43.08
	9278.00	8.76	256.42	9238.21	-157.61	-194.70	-526.75	2.36	445899.34	702550.76	N 32 13 29.53 W	103 48 43.24
	9307.00	10.53	255.80	9325.77	-158.46	-195.89	-531.54	2.78	445894.39	702542.18	N 32 13 29.52 W	103 48 43.29
	9463.00	10.24	247.66	9419.22	-165.36	-204.85	-558.19	0.96	445889.34	702533.60	N 32 13 29.48 W	103 48 43.60
	9557.00	13.21	266.90	9511.28	-167.82	-208.41	-576.65	5.18	445884.39	702525.02	N 32 13 29.45 W	103 48 43.82
	9652.00	25.94	285.78	9600.69	-160.59	-203.32	-607.64	14.80	445879.34	702516.44	N 32 13 29.40 W	103 48 44.18
	9746.00	30.17	322.97	9694.26	-133.62	-178.68	-641.92	18.85	445874.39	702507.86	N 32 13 29.37 W	103 48 44.58
	9840.00	33.17	353.52	9784.77	-87.83	-133.98	-665.67	17.20	445869.34	702499.28	N 32 13 29.10 W	103 48 44.78
	9935.00	43.12	353.71	9839.38	-28.28	-75.73	-673.89	10.47	445864.39	702490.70	N 32 13 30.72 W	103 48 44.85
	10029.00	55.79	353.40	9930.36	41.94	-8.80	-678.50	13.48	445859.34	702482.12	N 32 13 31.42 W	103 48 44.84
	10124.00	67.50	359.64	9945.44	125.33	74.36	-683.81	13.61	445854.39	702473.54	N 32 13 32.24 W	103 48 44.99
	10218.00	71.48	8.32	9978.42	212.39	166.06	-672.31	9.63	445849.34	702464.96	N 32 13 33.11 W	103 48 44.91
	10312.00	80.91	8.59	10000.83	301.43	256.25	-658.90	10.04	445844.39	702456.38	N 32 13 34.00 W	103 48 44.75
	10373.00	84.18	8.77	10008.74	380.44	316.03	-649.78	5.37	445839.34	702447.80	N 32 13 34.56 W	103 48 44.64
	10478.00	86.73	7.43	10017.06	462.77	419.65	-635.03	2.74	445834.39	702439.22	N 32 13 35.62 W	103 48 44.46
	10572.00	90.24	5.05	10019.55	555.23	513.03	-624.82	4.51	445829.34	702430.64	N 32 13 36.58 W	103 48 44.28
	10667.00	90.79	0.62	10018.69	649.53	607.89	-620.13	4.70	445824.39	702422.06	N 32 13 37.48 W	103 48 44.28
	10761.00	89.97	358.72	10018.07	743.33	701.88	-620.67	2.20	445819.34	702413.48	N 32 13 38.41 W	103 48 44.28
	10855.00	90.07	357.84	10018.04	837.26	795.84	-623.49	0.94	445814.39	702404.90	N 32 13 39.34 W	103 48 44.31
	11043.00	92.24	358.48	10014.25	1025.00	983.73	-627.88	1.45	445809.34	702396.32	N 32 13 41.20 W	103 48 44.35
	11138.00	90.07	358.62	10012.33	1119.84	1078.69	-629.46	2.46	445804.39	702387.74	N 32 13 42.14 W	103 48 44.36
	11232.00	90.03	359.57	10012.25	1213.70	1172.58	-630.94	1.01	445799.34	702379.16	N 32 13 43.07 W	103 48 44.37
	11328.00	89.35	358.52	10012.77	1309.57	1268.66	-632.54	1.30	445794.39	702370.58	N 32 13 44.02 W	103 48 44.39
	11422.00	89.00	357.52	10014.12	1403.50	1362.60	-635.79	1.13	445789.34	702362.00	N 32 13 44.98 W	103 48 44.42
	11516.00	89.00	357.65	10015.76	1497.45	1456.50	-639.75	0.14	445784.39	702353.42	N 32 13 45.85 W	103 48 44.46
	11611.00	88.97	357.56	10017.30	1592.40	1551.40	-643.72	0.18	445779.34	702344.84	N 32 13 46.82 W	103 48 44.50
	11705.00	88.97	357.01	10018.85	1686.36	1645.28	-648.17	0.61	445774.39	702336.26	N 32 13 47.74 W	103 48 44.55
	11799.00	88.97	356.27	10020.54	1780.34	1739.11	-653.60	0.79	445769.34	702327.68	N 32 13 48.67 W	103 48 44.61
	11893.00	89.00	356.30	10022.15	1874.33	1832.89	-658.77	0.11	445764.39	702319.10	N 32 13 49.60 W	103 48 44.67
	12082.00	89.00	357.78	10025.34	2063.26	2021.81	-669.56	0.77	445759.34	702310.52	N 32 13 51.47 W	103 48 44.76
	12176.00	89.73	357.87	10026.38	2157.21	2115.53	-673.15	0.79	445754.39	702301.94	N 32 13 52.40 W	103 48 44.81
	12270.00	89.35	358.57	10027.13	2251.14	2209.49	-676.06	0.85	445749.34	702293.36	N 32 13 53.33 W	103 48 44.84
	12365.00	85.55	358.25	10028.04	2346.05	2304.44	-678.69	0.39	445744.39	702284.78	N 32 13 54.27 W	103 48 44.87
	12459.00	89.52	358.78	10028.81	2439.96	2398.41	-681.12	0.55	445739.34	702276.20	N 32 13 55.20 W	103 48 44.85
	12553.00	90.14	358.92	10029.09	2533.84	2492.39	-683.01	0.68	445734.39	702267.62	N 32 13 56.13 W	103 48 44.91
	12648.00	90.41	358.85	10028.63	2628.72	2587.37	-684.77	0.29	445729.34	702259.04	N 32 13 57.07 W	103 48 44.92
	12742.00	90.00	358.23	10028.29	2722.62	2681.34	-687.09	0.88	445724.39	702250.46	N 32 13 58.00 W	103 48 44.94
	12837.00	90.10	358.99	10028.21	2817.52	2776.31	-689.39	0.81	445719.34	702241.88	N 32 13 58.97 W	103 48 44.96
	12931.00	89.75	0.45	10026.30	2911.32	2870.31	-689.85	1.59	445714.39	702233.30	N 32 13 59.87 W	103 48 44.98
	13025.00	90.03	0.12	10026.45	3005.06	2964.31	-689.38	0.43	445709.34	702224.72	N 32 14 0.80 W	103 48 44.95
	13214.00	89.97	0.29	10026.45	3193.55	3153.31	-688.71	0.10	445704.39	702216.14	N 32 14 0.80 W	103 48 44.93
	13403.00	90.03	1.10	10026.45	3381.92	3342.29	-686.41	0.43	445699.34	702207.56	N 32 14 0.80 W	103 48 44.90
	13592.00	90.62	1.28	10027.38	3570.15	3531.25	-682.49	0.33	445694.39	702198.98	N 32 14 0.80 W	103 48 44.84
	13687.00	90.36	2.33	10026.55	3664.66	3626.18	-679.50	1.13	445689.34	702190.40	N 32 14 0.80 W	103 48 44.80
	13781.00	90.17	2.06	10026.10	3758.11	3720.12	-675.90	0.36	445684.39	702181.82	N 32 14 0.80 W	103 48 44.75
	13875.00	90.10	0.77	10025.87	3851.69	3814.09	-673.57	1.37	445679.34	702173.24	N 32 14 0.80 W	103 48 44.70
	13969.00	90.00	0.89	10025.75	3945.36	3908.02	-672.21	0.17	445674.39	702164.66	N 32 14 1.08 W	103 48 44.60
	14064.00	80.10	0.78	10025.71	4040.02	4003.07	-670.03	0.16	445669.34	702156.08	N 32 14 1.08 W	103 48 44.50
	14158.00	89.97	1.07	10025.65	4133.60	4097.06	-669.31	0.34	445664.39	702147.50	N 32 14 12.01 W	103 48 44.66
	14252.00	90.10	359.30	10025.55	4227.42	4191.06	-669.01	1.89	445659.34	702138.92	N 32 14 12.94 W	103 48 44.65
	14346.00	89.21	359.02	10026.16	4321.28	4285.04	-670.39	0.99	445654.39	702130.34	N 32 14 13.87 W	103 48 44.66
	14440.00	89.76	358.62	10027.01	4415.16	4379.02	-672.32	0.72	445649.34	702121.76	N 32 14 14.80 W	103 48 44.67
	14535.00	90.34	358.94	10026.92	4510.05	4473.00	-674.34	0.70	445644.39	702113.18	N 32 14 15.74 W	103 48 44.69
	14629.00	90.52	358.91	10026.22	4603.93	4567.98	-676.11	0.19	445639.34	702104.60	N 32 14 16.67 W	103 48 44.71
	14724.00	90.10	359.32	10025.70	4698.79	4662.97	-677.57	0.62	445634.39	702096.02	N 32 14 17.61 W	103 48 44.72
	14818.00	89.93	359.07	10025.68	4792.64	4756.96	-678.90	0.32	445629.34	702087.44	N 32 14 18.54 W	103 48 44.73
	14912.00	90.										

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLB (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Proj to TD	20288.00	89.17	359.22	10064.16	10246.95	10225.98	-696.34	0.00	456352.65	702307.07	N 32 15 12.65 W	103 48 44.51

Survey Type: Def Survey

Survey Error Model: ISCWSA Rev 0 ~ 3-D 95.000% Confidence 2.7955 sigma
Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0.000	26.500	1/98.425	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Palladium MDP1 7-6 Federal Com 5H Gyro+MWD 0-20,288'
	1	26.500	26.500	Act Stns	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Palladium MDP1 7-6 Federal Com 5H Gyro+MWD 0-20,288'
	1	26.500	657.210	Act Stns	30.000	30.000	NAL_NSG+MSHOT	Original Borehole / Oxy Palladium MDP1 7-6 Federal Com 5H Gyro+MWD 0-20,288'
	1	657.210	20288.000	Act Stns	30.000	30.000	NAL_MWD_PLUS_0.5_DEG	Original Borehole / Oxy Palladium MDP1 7-6 Federal Com 5H

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

Ken McQueen
Cabinet Secretary

Matthias Sayer
Deputy Cabinet Secretary

David R. Catanach, Division Director
Oil Conservation Division



June 27, 2017

Oxy USA Inc
Attn Mr David Stewart

ADMINISTRATIVE NON-STANDARD LOCATION

Administrative Order NSL-7549

Oxy USA Inc.
OGRID 16696
Palladium MDP1 7-6 Federal Com Well No. 5H
API No. 30-015-Pending

Non-Standard Location

Proposed Location:

	<u>Footages</u>	<u>Unit/Lot</u>	<u>Sec.</u>	<u>Tsp</u>	<u>Rge</u>	<u>County</u>
Surface	293' FSL & 592' FEL	P	7	24S	31E	Eddy
Penetration Point	340' FSL & 1260' FEL	P	7	24S	31E	Eddy
Final perforation	340' FNL & 1260' FEL	A/1	6	24S	31E	Eddy
Terminus	180' FNL & 1260' FEL	A/1	6	24S	31E	Eddy

Proposed Project Area:

<u>Description</u>	<u>Acres</u>	<u>Pool</u>	<u>Pool Code</u>
E/2 E/2 of Section 7	320 22	Cotton Draw, Bone Spring	13367
E/2 E/2 of Section 6			

Reference is made to your application received on April 26, 2017

You have requested to drill this horizontal well at an unorthodox oil well location described above in the referenced pool or formation. This location is governed by statewide Rule 19 15 15 9.A NMAC, which provides for 40-acre units, with wells located at least 330 feet from a unit outer boundary, and Rule 19 15 16 14 B(2) NMAC concerning directional wells in designated project areas. This location is unorthodox because portions of the proposed completed interval are closer to outside boundaries of the proposed project area than any location that would be a standard location under the applicable pool rules.

Your application has been duly filed under the provisions of Division Rules 19 15 15 13 NMAC and 19 15 4 12 A (2) NMAC

It is our understanding that the Applicant is seeking this location because they intend to increase their horizontal well spacing from four wells per section to six wells per section to effectively develop the Bone Spring and Wolfcamp formations. Next, increasing well density will optimize recoverable.

It is also understood that you have given due notice of this application to all operators or owners who are "affected persons," as defined in Rule 19 15 4 12 A (2) NMAC, in all adjoining units towards which the proposed location encroaches.

Pursuant to the authority conferred by Division Rule 19.15.15 13 (B) NMAC, the above-described unorthodox location is hereby approved.

The above approvals are subject to your being in compliance with all other applicable Division rules, including, but not limited to Division Rule 19 15 5 9 NMAC.

Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

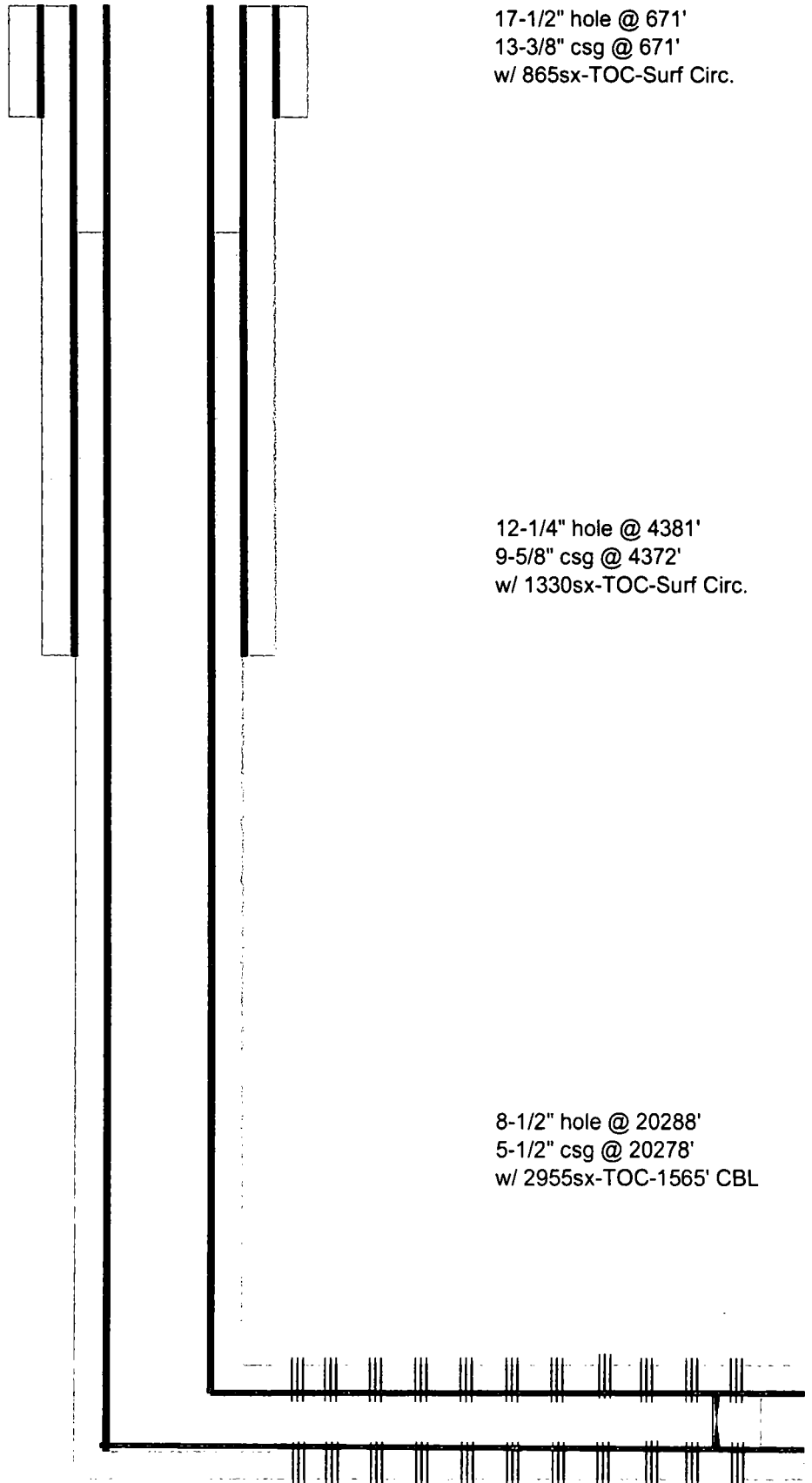


DAVID R. CATANACH
Director

DRC/lrl

cc: Oil Conservation Division – Artesia District Office
Bureau of Land Management – Carlsbad Field Office

OXY USA Inc.
Palladium MDP1 7-6 Federal Com 5H
API No. 30-015-44294



17-1/2" hole @ 671'
13-3/8" csg @ 671'
w/ 865sx-TOC-Surf Circ.

12-1/4" hole @ 4381'
9-5/8" csg @ 4372'
w/ 1330sx-TOC-Surf Circ.

8-1/2" hole @ 20288'
5-1/2" csg @ 20278'
w/ 2955sx-TOC-1565' CBL

CIBP @ 19998'

Perfs @ 19979-10094'

TD- 20288'M 10064'V
PBDT- 19998'M 10060'V

COLUMBINE LOGGING

Scale: 5" / 100'
Measured Depth Log

Well Name 30015442940000_Palladium MDP17_6 Fed Com 5H_ML_Horz_R1.t

Location 293' FNL x 592' FEL. Section 7, T24-S, R31-E

State New Mexico

County Eddy

Country USA

Rig Number H & P 657

API Number 30015442940000

Field Sand Dunes

Geographic Region Permian/Delaware Basin

Drilling Completed 10/1/2017

Spud Date 8/26/2017

Surface Coordinates Lat: 32°13'31.43" N
Long: 103°48'37.10"W

X:703073.37
Y:446127.320

Bottom Hole Coordinates Lat: 32°15'10.98"N
Long: 103°48'44.72"W

X:703189.77
Y:456228.47

Ground Elevation 3,525.4'

K.B. Elevation 3551.9'

Logged Interval 9401' To 20,288'

Total Depth 20,288'

Formation Second Bone Spring Sand

Type of Drilling Fluid OBM

COLUMBINE LOGGING

Scale: 1" / 100'
Measured Depth Log

Well Name 30015442940000_Palladium MDP17_6 Fed Com 5H_ML_Horz_R1.tl

Location 293' FNL x 592' FEL. Section 7, T24-S, R31-E

State New Mexico

County Eddy

Country USA

Rig Number H & P 657

API Number 30015442940000

Field Sand Dunes I

Geographic Region Permian/Delaware Basin

Drilling Completed 10/1/2017

Spud Date 8/26/2017

Surface Coordinates Lat: 32°13'31.43" N
Long: 103°48'37.10"W

X:703073.37
Y:446127.320

m Hole Coordinates Lat: 32°15'10.98"N
Long: 103°48'44.72"W

X:703189.77
Y:456228.47

Ground Elevation 3,525.4'

K.B. Elevation 3551.9'

Logged Interval 9401' To 20,288'

Total Depth 20,288'

Formation Second Bone Spring Sand

Type of Drilling Fluid OBM

COLUMBINE LOGGING

Scale: 5" / 100'
Measured Depth Log

Well Name 30015442940000_Palladium MDP17_6Fed Com 5H_ML_Vertt_R1.tlog

Location 293' FNL x 592' FEL. Section 7, T24-S, R31-E

State New Mexico

County Eddy

Country USA

Rig Number H & P 657

API Number 30015442940000

Field Sand Dunes MDP1

Geographic Region Permian/Delaware Basin

Drilling Completed 9/24/2017

Spud Date 8/26/2017

Surface Coordinates NAD83 Lat: 32°13'31.43" N
NAD83 Long: 103°48'37.10" W

NAD83 X:703073.37
NAD83 Y:446127.320

Bottom Hole Coordinates NAD83 Lat: 32°15'10.98"N
NAD83 Long: 103°48'44.72"W

NAD83 X:703189.77
NAD83 Y:456228.47

Ground Elevation 3,525.4'

K.B. Elevation 3551.9'

Logged Interval 690' To 9401'

Total Depth 9401'

Formation Second Bone Spring Sand

Type of Drilling Fluid Brine/OBM

COLUMBINE LOGGING

Scale: 1" / 100'
Measured Depth Log

Well Name 30015442940000_Palladium MDP17_6Fed Com 5H_ML_Vertt_R1.tlog

Location 293' FNL x 592' FEL. Section 7, T24-S, R31-E

State New Mexico

County Eddy

Country USA

Rig Number H & P 657

API Number 30015442940000

Field Sand Dunes MDP1

Geographic Region Permian/Delaware Basin

Drilling Completed 9/24/2017

Spud Date 8/26/2017

Surface Coordinates NAD83 Lat: 32°13'31.43" N
NAD83 Long: 103°48'37.10" W

NAD83 X:703073.37
NAD83 Y:446127.320

Bottom Hole Coordinates NAD83 Lat: 32°15'10.98"N
NAD83 Long: 103°48'44.72"W

NAD83 X:703189.77
NAD83 Y:456228.47

Ground Elevation 3,525.4'

K.B. Elevation 3551.9'

Logged Interval 690' To 9401'

Total Depth 9401'

Formation Second Bone Spring Sand

Type of Drilling Fluid Brine/OBM