

Oilfield Services, Central U.S. Land
Schlumberger Drilling and Measurements
Drilling Group
Geo 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

April 15, 2019

Oxy USA Inc;

17, 24S, 31E, Eddy NM
N 32.22406 W 103.80340

Re:

CLIENT: Oxy USA Inc.
WELL: Sunrise MDP1 8-5 Federal Com 171H
FIELD: Purple Sage Wolfcamp

RIG: H&P 657
COUNTY: Eddy
API NO: 30-015-44930
JOB NO: 19MLD4351

Enclosed, please find the original copy of the survey performed on the referenced well by Drilling & Measurements, a division of Schlumberger Technology Corporation (P-5 No. 754900).
Other information required by your office is as follows.

<u>Name & Title of Surveyor</u>	<u>Drainhole Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Maria Zapata FE	Sunrise MDP1 8-5 Federal Com 171H Original Hole	733.00 Ft to 22275.00 Ft	March 22, 2019 to April 3, 2019	SlimPulse Third Party Corrected

If any other information is required, please contact the undersigned at the above letterhead and phone number.
Sincerely,

Field Service Manager

Schlumberger-Private

Schlumberger

OXY

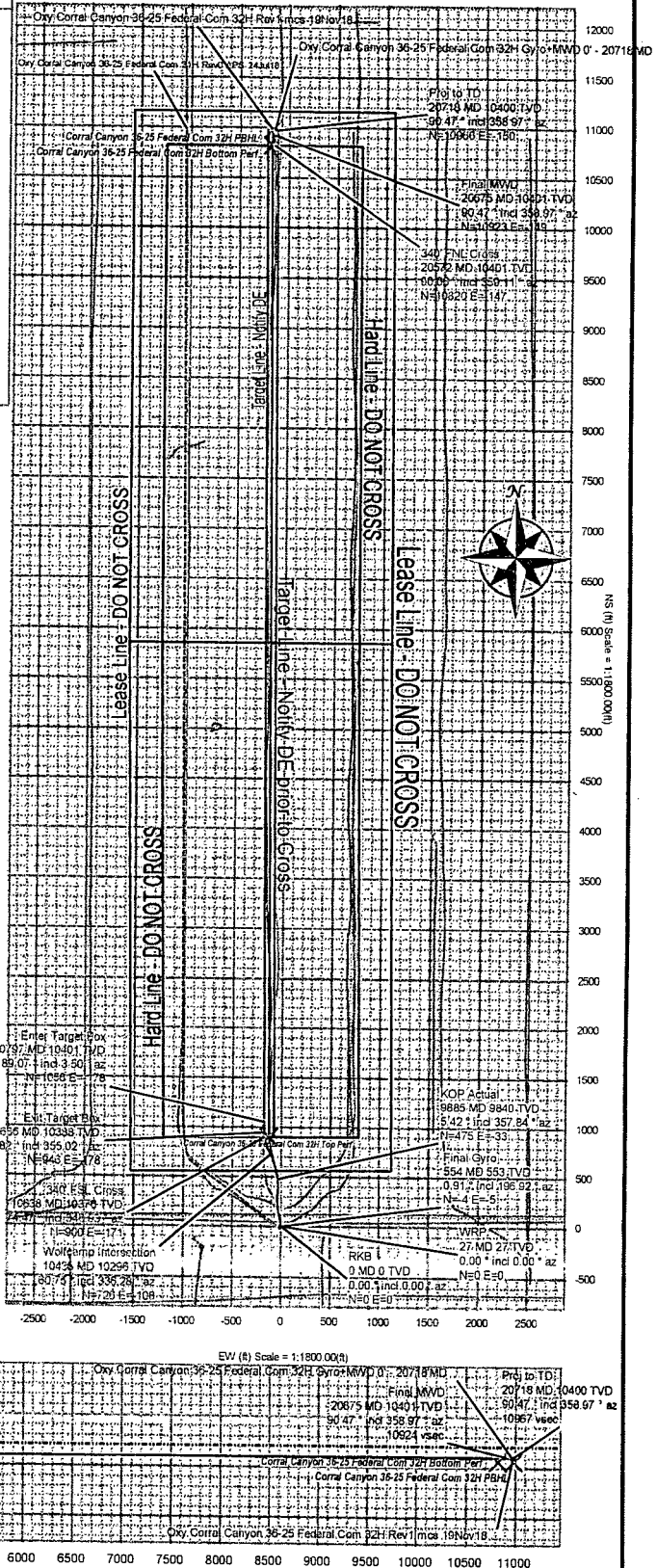
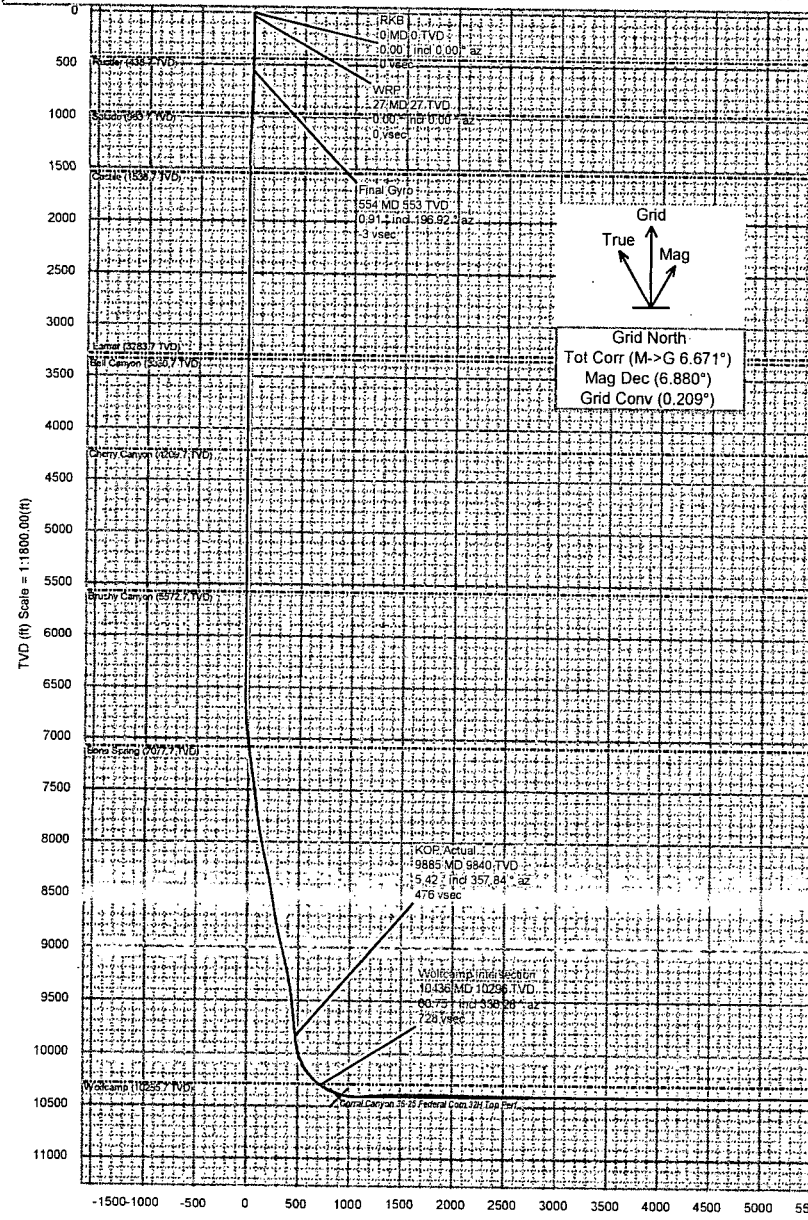


Borehole:	Well:	Field:	Structure:
Original Borehole	Corral Canyon 36-25 Federal Com 32H	NM Eddy County (NAD 83)	Oxy Corral Canyon 36-25 Federal Com 32H

Gravity & Magnetic Parameters				Surface Location				Miscellaneous			
Model:	IPR1	Dip:	59.903°	Date:	16-Nov-2018	NAD83 New Mexico State Plane, Eastern Zone, US Feet		Slot:	Oxy Corral Canyon	TVD Ref:	RKB=26.5' (3138.7 ft above MSL)
MagDec:	6.88°	FS:	49004.3nT	Gravity FS:	998.45mgm (9.80665 Based)	Lat:	N 32 9 54.02	North:	423984.73RUS	Grid Conv:	0.2085°
						Lon:	W 103 56 29.39	East:	662533.21RUS	Scale Fact:	0.99992591
										Plan:	Oxy Corral Canyon 36-25 Federal Com 32H Gyro+MWD 0' - 20718 MWD

Critical Points

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(°)S(-)	E(°)W(-)	DLS
RKB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
WRP	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00
Final Gyro	553.50	0.91	196.92	553.46	-3.44	-3.52	-4.73	0.12
KOP Actual	9885.00	5.42	357.84	9839.59	475.59	475.14	-32.86	0.51
Wolfcamp Intersection	10435.90	60.75	336.28	10296.00	727.98	726.39	-108.30	3.86
340' FSL Cross	10638.00	74.47	348.93	10376.14	902.34	899.79	-171.19	14.16
Exit Target Box	10686.00	77.82	355.02	10387.65	948.55	945.91	-177.68	14.16
Enter Target Box	10797.00	89.07	3.50	10400.87	1058.47	1055.84	-178.11	12.61
340' FNL Cross	20571.66	90.06	359.11	10400.65	10820.52	10819.55	-146.95	0.68
Final MWD	20675.00	90.47	358.97	10400.57	10923.86	10922.87	-148.90	1.37
Proj to TD	20718.00	90.47	358.97	10400.22	10966.86	10965.86	-149.67	0.00



Oxy Corral Canyon 36-25 Federal Com 32H Gyro+MWD 0' - 20718'MD
Survey Geodetic Report
(Def Survey)



Report Date: December 03, 2018 - 12:09 PM
Client: OXY
Field: NM Eddy County (NAD 83)
Structure / Slot: Oxy Corral Canyon 36-25 Federal Com 32H / Oxy Corral Canyon 36-25 Federal Com 32H
Well: Corral Canyon 36-25 Federal Com 32H
Borehole: Original Borehole
UWI / API#: H&P 635 / 30-015-44642
Survey Name: Oxy Corral Canyon 36-25 Federal Com 32H Gyro+MWD 0' - 20718'MD
Survey Date: October 09, 2018
Tort / AHD / DDI / ERD Ratio: 292.139' / 11084.242 ft / 6.809 / 1.065
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 9' 54.02134", W 103° 56' 29.98554"
Location Grid N/E Y/X: N 423984.730 RUS, E 662533.210 RUS
CRS Grid Convergence Angle: 0.2085 °
Grid Scale Factor: 0.99992591
Version / Patch: 2.10.753.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 359.110 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB=26.5'
TVD Reference Elevation: 3138.700 ft above MSL
Seabed / Ground Elevation: 3112.200 ft above MSL
Magnetic Declination: 6.880 °
Total Gravity Field Strength: 998.4504mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 48004.300 nT
Magnetic Dip Angle: 59.903 °
Declination Date: November 16, 2018
Magnetic Declination Model: IFR1
North Reference: Grid North
Grid Convergence Used: 0.2085 °
Total Corr Mag North->Grid North: 6.6715 °
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (RUS)	Easting (RUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
RKB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	423984.73	662533.21	N 32	9 54.02 W 103 56 29.99
WRP	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00	423984.73	662533.21	N 32	9 54.02 W 103 56 29.99
	70.50	0.24	266.48	70.50	0.00	-0.01	-0.09	0.55	423984.72	662533.12	N 32	9 54.02 W 103 56 29.99
	170.50	0.54	254.36	170.50	-0.13	-0.15	-0.75	0.31	423984.58	662532.46	N 32	9 54.02 W 103 56 29.99
	270.50	0.86	246.26	270.49	-0.55	-0.57	-1.90	0.33	423984.16	662531.31	N 32	9 54.02 W 103 56 29.99
	370.50	0.96	242.58	370.48	-1.21	-1.26	-3.33	0.12	423983.47	662529.88	N 32	9 54.01 W 103 56 30.01
	470.50	0.83	200.81	470.47	-2.26	-2.33	-4.33	0.65	423982.40	662528.88	N 32	9 54.01 W 103 56 30.02
Final Gyro	553.50	0.91	196.92	553.46	-3.44	-3.52	-4.73	0.12	423981.21	662528.48	N 32	9 54.00 W 103 56 30.04
	623.00	1.37	204.88	622.94	-4.72	-4.80	-5.24	0.70	423979.93	662527.97	N 32	9 53.99 W 103 56 30.04
	715.00	1.38	200.68	714.92	-6.74	-6.83	-6.10	0.11	423977.90	662527.11	N 32	9 53.97 W 103 56 30.05
	807.00	1.43	198.72	806.89	-8.85	-8.96	-6.86	0.08	423975.77	662526.35	N 32	9 53.95 W 103 56 30.06
	900.00	1.85	201.16	899.85	-11.33	-11.46	-7.77	0.46	423973.27	662525.44	N 32	9 53.93 W 103 56 30.07
	1085.00	2.56	190.50	1084.71	-18.15	-18.30	-9.60	0.44	423966.43	662523.61	N 32	9 53.91 W 103 56 30.08
	1177.00	2.46	193.68	1176.62	-22.08	-22.24	-10.44	0.19	423962.49	662522.77	N 32	9 53.84 W 103 56 30.10
	1269.00	2.49	194.48	1268.54	-25.92	-26.10	-11.41	0.05	423958.64	662521.80	N 32	9 53.80 W 103 56 30.11
	1362.00	2.27	202.07	1361.46	-29.56	-29.76	-12.61	0.41	423954.97	662520.60	N 32	9 53.76 W 103 56 30.12
	1454.00	1.26	220.43	1453.41	-32.00	-32.22	-13.95	1.24	423952.52	662519.26	N 32	9 53.70 W 103 56 30.13
	1542.00	0.08	90.22	1541.41	-32.72	-32.95	-14.51	1.49	423951.78	662519.26	N 32	9 53.70 W 103 56 30.15
	1636.00	0.13	19.74	1635.41	-32.63	-32.85	-14.41	0.14	423951.88	662518.70	N 32	9 53.70 W 103 56 30.16
	1731.00	0.13	199.53	1730.41	-32.63	-32.85	-14.41	0.27	423951.88	662518.80	N 32	9 53.70 W 103 56 30.15
	1825.00	0.18	265.45	1824.41	-32.74	-32.97	-14.59	0.18	423951.77	662518.80	N 32	9 53.70 W 103 56 30.15
	1919.00	0.13	81.27	1918.41	-32.73	-32.96	-14.64	0.33	423951.77	662518.62	N 32	9 53.70 W 103 56 30.16
	2014.00	0.18	246.12	2013.41	-32.77	-33.01	-14.67	0.32	423951.73	662518.58	N 32	9 53.70 W 103 56 30.16
	2108.00	0.13	47.22	2107.41	-32.76	-32.99	-14.72	0.33	423951.73	662518.55	N 32	9 53.70 W 103 56 30.16
	2202.00	0.13	92.99	2201.41	-32.70	-32.93	-14.72	0.33	423951.74	662518.49	N 32	9 53.70 W 103 56 30.16
	2296.00	0.13	18.64	2295.41	-32.60	-32.93	-14.54	0.11	423951.81	662518.67	N 32	9 53.70 W 103 56 30.16
	2391.00	0.13	128.07	2390.41	-32.57	-32.83	-14.40	0.17	423951.90	662518.81	N 32	9 53.70 W 103 56 30.15
	2485.00	0.13	301.33	2484.41	-32.58	-32.80	-14.28	0.22	423951.94	662518.67	N 32	9 53.70 W 103 56 30.15
	2579.00	0.21	6.38	2578.41	-32.58	-32.81	-14.29	0.28	423951.93	662518.93	N 32	9 53.70 W 103 56 30.15
	2673.00	0.13	247.49	2672.41	-32.35	-32.58	-14.36	0.21	423952.15	662518.93	N 32	9 53.70 W 103 56 30.15
	2768.00	0.13	203.99	2767.41	-32.22	-32.45	-14.44	0.31	423952.28	662518.77	N 32	9 53.70 W 103 56 30.15
	2957.00	0.09	296.84	2956.41	-32.36	-32.59	-14.58	0.10	423952.14	662518.63	N 32	9 53.70 W 103 56 30.16
	3051.00	0.17	42.46	3050.41	-32.48	-32.72	-14.80	0.09	423952.02	662518.63	N 32	9 53.70 W 103 56 30.16
	3145.00	0.13	275.59	3144.40	-32.35	-32.58	-14.77	0.23	423952.15	662518.63	N 32	9 53.70 W 103 56 30.16
	3240.00	0.13	297.60	3239.40	-32.23	-32.47	-14.78	0.29	423952.26	662518.41	N 32	9 53.70 W 103 56 30.16
	3429.00	0.13	295.11	3428.40	-32.17	-32.41	-14.99	0.05	423952.33	662518.43	N 32	9 53.70 W 103 56 30.16
	3523.00	0.21	127.91	3522.40	-31.97	-32.22	-15.37	0.00	423952.52	662518.23	N 32	9 53.70 W 103 56 30.16
	3617.00	0.17	91.84	3616.40	-32.04	-32.28	-15.33	0.36	423952.46	662517.84	N 32	9 53.70 W 103 56 30.17
	3712.00	0.17	342.52	3711.40	-32.15	-32.39	-15.06	0.13	423952.34	662517.88	N 32	9 53.70 W 103 56 30.17
	3806.00	0.19	267.49	3805.40	-32.02	-32.26	-14.96	0.29	423952.47	662518.16	N 32	9 53.70 W 103 56 30.16
	3995.00	0.19	96.53	3994.40	-31.89	-32.13	-15.15	0.23	423952.60	662518.25	N 32	9 53.70 W 103 56 30.16
	4183.00	0.19	275.14	4182.40	-31.94	-32.18	-15.16	0.20	423952.55	662518.06	N 32	9 53.70 W 103 56 30.16
	4278.00	0.19	46.08	4277.40	-31.95	-32.19	-15.16	0.20	423952.54	662518.05	N 32	9 53.70 W 103 56 30.16
	4372.00	0.19	218.47	4371.40	-31.83	-32.07	-15.20	0.36	423952.67	662518.05	N 32	9 53.70 W 103 56 30.16
	4561.00	0.17	39.43	4560.40	-31.84	-32.08	-15.19	0.40	423952.67	662518.01	N 32	9 53.70 W 103 56 30.16
	4750.00	0.19	163.86	4749.40	-31.87	-32.11	-15.20	0.19	423952.62	662518.03	N 32	9 53.70 W 103 56 30.16
	4939.00	0.17	96.69	4938.40	-31.96	-32.19	-14.94	0.17	423952.54	662518.01	N 32	9 53.70 W 103 56 30.16
	5127.00	0.12	66.69	4938.40	-32.18	-32.42	-14.67	0.13	423952.32	662518.27	N 32	9 53.70 W 103 56 30.16
	5222.00	0.17	284.35	5221.40	-32.18	-32.42	-14.67	0.13	423952.32	662518.54	N 32	9 53.70 W 103 56 30.16
	5411.00	0.15	299.30	5410.40	-32.03	-32.26	-14.79	0.16	423952.47	662518.42	N 32	9 53.70 W 103 56 30.16
	5600.00	0.12	335.73	5599.40	-32.06	-32.29	-14.82	0.38	423952.44	662518.39	N 32	9 53.70 W 103 56 30.16
	5694.00	0.15	248.49	5693.40	-32.08	-32.31	-14.79	0.17	423952.42	662518.42	N 32	9 53.70 W 103 56 30.16
	5883.00	0.12	335.73	5599.40	-31.77	-32.01	-15.09	0.05	423952.72	662518.39	N 32	9 53.70 W 103 56 30.16
	5978.00	0.17	68.84	5882.40	-31.73	-31.97	-15.25	0.20	423952.77	662518.12	N 32	9 53.71 W 103 56 30.16
	5978.00	0.12	113.36	5977.40	-31.77	-31.97	-15.25	0.20	423952.77	662517.97	N 32	9 53.71 W 103 56 30.16
	6166.00	0.15	135.63	6165.40	-31.72	-31.96	-15.21	0.17	423952.78	662517.88	N 32	9 53.71 W 103 56 30.16
	6261.00	0.12	314.77	6260.40	-31.71	-31.94	-14.99	0.13	423952.79	662518.00	N 32	9 53.71 W 103 56 30.16
	6449.00	0.19	171.73	6448.40	-31.94	-32.18	-15.16	0.20	423952.54	662518.22	N 32	9 53.71 W 103 56 30.16
	6544.00	0.12	110.54	6543.40	-31.95	-32.19	-15.16	0.20	423952.54	662518.05	N 32	9 53.70 W 103 56 30.16
	6638.00	0.96	1.11	6637.39	-31.83	-32.07	-15.20	0.36	423952.67	662518.01	N 32	9 53.70 W 103 56 30.16
	6732.00	2.87	9.61	6731.34	-31.84	-32.08	-15.19	0.40	423952.65	662518.03	N 32	9 53.70 W 103 56 30.16
	6826.00	4.75	10.96	6825.12	-31.87	-32.11	-15.20	0.19	423952.62	662518.03	N 32	9 53.70 W 103 56 30.16
	6921.00	5.86	10.67	6919.72	-31.86	-32.10	-15.19	0.40	423952.65	662518.03	N 32	9 53.70 W 103 56 30.16
	7015.00	6.63	8.77	7013.16	-31.72	-31.96	-15.21	0.17	423952.78	662518.00	N 32	9 53.71 W 103 56 30.16
	7109.00	7.67	9.29	7106.43	-31.71	-31.94	-14.99	0.13	423952.79	662518.22	N 32	9 53.71 W 103 56 30.16
	7204.00	8.03	9.46	7200.54	-31.97	-32.20	-14.64	0.03	423952.53	662518.57	N 32	9 53.70 W 103 56 30.16
	7298.00	8.12	3.53	7293.60	-31.99	-32.22	-14.62	0.28	423952.52	662518.59	N 32	9 53.70 W 103 56 30.16
	7393.00	7.61	357.29	7387.71	-32.15	-32.39	-14.72	0.16	423952.35	662518.48	N 32	9 53.70 W 103 56 30.16
	7487.00	6.92	348.41	7480.96	-32.35	-32.58	-14.60	0.18	423952.15	662518.48	N 32	9 53.70 W 103 56 30.16
	7581.00	7.86	343.93	7574.18	-32.35	-32.58	-14.60	0.18	423952.15	662518.61	N 32	9 53.70 W 103 56 30.16
	7675.00	8.69	345.15	7667.20	-31.60	-31.82	-14.49	1.07	423952.91	662518.12	N 32	9 53.70 W 103 56 30.16
	7770.00	8.98	345.71	7761.07	-28.49	-28.72	-14.09	2.05	423956.02	662519.13	N 32	9 53.74 W 103 56 30.15
	7864.00	9.83	345.92	7853.81	-22.37	-22.58	-12.95	2.00	423962.16	662520.26	N 32	9 53.

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')
	8430.00	9.77	352.38	8407.87	226.49	225.95	-36.41	2.90	424210.66	662496.80	N 32° 9' 56.26" W	103° 56' 30.40"
	8524.00	9.03	353.12	8500.57	241.98	241.41	-38.38	0.50	424226.13	662494.84	N 32° 9' 56.41" W	103° 56' 30.42"
	8619.00	8.03	356.25	8594.36	257.08	256.49	-39.79	0.61	424241.20	662493.43	N 32° 9' 56.56" W	103° 56' 30.44"
	8713.00	10.02	359.69	8687.06	272.62	272.03	-40.31	1.21	424256.74	662492.90	N 32° 9' 56.71" W	103° 56' 30.44"
	8808.00	11.46	3.85	8780.39	290.29	289.71	-39.72	1.72	424274.42	662493.49	N 32° 9' 56.89" W	103° 56' 30.44"
	8947.00	12.54	5.25	8872.34	309.75	309.19	-38.16	1.19	424293.90	662495.05	N 32° 9' 57.08" W	103° 56' 30.42"
	8997.00	12.55	6.81	8916.26	319.45	318.91	-37.14	0.75	424303.62	662496.08	N 32° 9' 57.18" W	103° 56' 30.40"
	9042.00	13.37	6.70	8964.99	330.56	330.05	-35.82	1.64	424314.75	662497.39	N 32° 9' 57.29" W	103° 56' 30.39"
	9091.00	13.75	5.00	9008.74	341.04	340.54	-34.74	1.22	424325.24	662498.47	N 32° 9' 57.39" W	103° 56' 30.38"
	9186.00	14.14	4.82	9056.29	352.79	352.31	-33.73	0.80	424337.01	662499.48	N 32° 9' 57.51" W	103° 56' 30.36"
	9280.00	13.37	5.23	9148.57	375.25	374.81	-31.76	0.82	424359.51	662501.45	N 32° 9' 57.73" W	103° 56' 30.34"
	9375.00	12.35	2.18	9240.21	396.10	395.68	-30.38	1.30	424380.38	662502.83	N 32° 9' 57.94" W	103° 56' 30.32"
	9469.00	10.58	356.20	9333.31	414.96	414.53	-30.58	2.24	424399.23	662504.72	N 32° 9' 58.12" W	103° 56' 30.30"
	9564.00	7.25	356.64	9426.16	429.51	429.07	-31.50	3.54	424413.77	662501.72	N 32° 9' 58.27" W	103° 56' 30.33"
	9564.00	6.84	359.03	9520.45	441.15	440.71	-31.94	0.53	424425.41	662501.27	N 32° 9' 58.38" W	103° 56' 30.34"
	9658.00	6.40	358.42	9613.82	451.99	451.54	-32.18	0.47	424436.24	662501.03	N 32° 9' 58.49" W	103° 56' 30.34"
	9732.00	6.20	358.65	9687.37	460.11	459.66	-32.39	0.27	424444.36	662500.82	N 32° 9' 58.57" W	103° 56' 30.34"
	9885.00	5.42	357.84	9839.59	475.59	475.14	-32.86	0.51	424459.83	662500.36	N 32° 9' 58.72" W	103° 56' 30.35"
	9951.00	7.99	344.91	9905.13	483.16	482.69	-34.17	4.49	424467.38	662499.04	N 32° 9' 58.80" W	103° 56' 30.36"
	10046.00	16.18	340.58	9997.95	502.14	501.58	-40.30	8.67	424486.27	662498.27	N 32° 9' 58.99" W	103° 56' 30.43"
	10140.00	26.85	352.70	10085.32	535.77	535.10	-47.38	12.24	424519.79	662485.84	N 32° 9' 59.32" W	103° 56' 30.51"
	10234.00	38.03	347.84	10164.53	585.43	584.62	-56.20	12.20	424569.31	662477.01	N 32° 9' 59.81" W	103° 56' 30.61"
	10328.00	47.32	339.18	10233.63	646.49	645.41	-74.64	11.67	424630.09	662458.58	N 32° 10' 0.41" W	103° 56' 30.83"
	10423.00	60.25	336.26	10289.65	717.64	716.11	-103.78	13.83	424700.79	662429.44	N 32° 10' 1.11" W	103° 56' 31.16"
Wolfcamp Intersection	10435.90	60.75	336.28	10296.00	727.98	726.39	-108.30	3.86	424711.06	662424.92	N 32° 10' 1.21" W	103° 56' 31.21"
	10517.00	63.88	336.37	10333.67	794.19	792.15	-137.13	3.86	424776.82	662396.09	N 32° 10' 1.86" W	103° 56' 31.55"
	10611.00	72.66	345.42	10368.50	877.00	874.54	-165.45	12.92	424859.20	662367.77	N 32° 10' 2.68" W	103° 56' 31.87"
340' FSL Cross Exit Target Box	10638.00	74.47	348.93	10376.14	902.34	899.79	-171.19	14.16	424884.45	662362.03	N 32° 10' 2.93" W	103° 56' 31.94"
	10686.00	77.82	355.02	10387.65	948.55	945.91	-177.68	14.16	424930.56	662355.55	N 32° 10' 3.39" W	103° 56' 32.01"
	10706.00	79.26	357.51	10391.62	968.13	965.46	-178.95	14.16	424950.12	662354.27	N 32° 10' 3.58" W	103° 56' 32.03"
Enter Target Box	10797.00	89.07	3.50	10400.87	1058.47	1055.84	-178.11	12.61	425040.49	662355.11	N 32° 10' 4.48" W	103° 56' 32.01"
	10801.00	89.50	3.76	10400.92	1062.46	1059.83	-177.86	12.61	425044.48	662355.36	N 32° 10' 4.51" W	103° 56' 32.01"
	10896.00	94.04	9.23	10397.98	1156.57	1154.11	-167.13	7.48	425138.75	662366.09	N 32° 10' 5.45" W	103° 56' 31.88"
	10978.00	93.81	9.24	10392.37	1237.10	1234.86	-154.00	0.28	425219.50	662379.22	N 32° 10' 6.25" W	103° 56' 31.72"
	11072.00	92.85	8.72	10386.91	1329.55	1327.55	-139.36	1.16	425312.18	662393.86	N 32° 10' 7.16" W	103° 56' 31.55"
	11167.00	91.99	6.96	10382.90	1423.36	1421.57	-126.41	2.06	425406.19	662406.81	N 32° 10' 8.09" W	103° 56' 31.40"
	11357.00	89.37	1.93	10380.64	1612.45	1610.91	-111.69	2.98	425595.52	662421.52	N 32° 10' 9.97" W	103° 56' 31.22"
	11547.00	90.23	359.43	10381.31	1802.36	1800.88	-109.44	1.39	425785.47	662423.78	N 32° 10' 11.85" W	103° 56' 31.18"
	11643.00	88.41	358.32	10382.45	1898.35	1896.85	-111.32	2.22	425881.43	662421.89	N 32° 10' 12.79" W	103° 56' 31.20"
	11832.00	89.58	358.68	10385.76	2087.31	2085.75	-116.27	0.65	426070.32	662416.95	N 32° 10' 14.66" W	103° 56' 31.25"
	11926.00	89.20	358.65	10386.76	2181.30	2179.72	-118.46	0.41	426164.28	662414.76	N 32° 10' 15.59" W	103° 56' 31.27"
	12021.00	89.30	357.47	10388.00	2276.27	2274.66	-121.68	1.25	426259.21	662411.54	N 32° 10' 16.53" W	103° 56' 31.30"
	12115.00	89.48	357.88	10389.01	2370.24	2368.57	-125.49	0.48	426353.12	662407.73	N 32° 10' 17.46" W	103° 56' 31.35"
	12304.00	89.24	358.67	10391.12	2559.20	2557.47	-131.18	0.44	426542.01	662402.04	N 32° 10' 19.33" W	103° 56' 31.40"
	12399.00	89.34	357.84	10392.29	2654.18	2652.42	-134.07	0.88	426636.95	662399.15	N 32° 10' 20.27" W	103° 56' 31.45"
	12588.00	89.17	356.50	10394.75	2843.06	2841.17	-143.40	0.71	426825.68	662389.82	N 32° 10' 22.14" W	103° 56' 31.53"
	12683.00	89.34	356.68	10395.99	2937.96	2935.99	-149.05	0.26	426920.50	662384.17	N 32° 10' 23.08" W	103° 56' 31.60"
	12873.00	89.51	357.37	10397.89	3127.82	3125.73	-158.91	0.37	427110.22	662374.31	N 32° 10' 24.96" W	103° 56' 31.70"
	13062.00	89.58	358.25	10399.39	3316.76	3314.58	-166.13	0.47	427299.06	662367.09	N 32° 10' 26.83" W	103° 56' 31.78"
	13250.00	89.96	359.00	10400.15	3504.75	3502.52	-170.64	0.45	427486.99	662362.58	N 32° 10' 28.69" W	103° 56' 31.82"
	13439.00	90.06	359.75	10400.12	3693.75	3691.51	-172.71	0.40	427675.96	662360.52	N 32° 10' 30.56" W	103° 56' 31.84"
	13534.00	89.92	359.05	10400.13	3786.75	3786.51	-173.70	0.75	427770.95	662359.52	N 32° 10' 31.50" W	103° 56' 31.85"
	13628.00	89.96	359.43	10400.23	3882.75	3880.50	-174.95	0.41	427864.93	662358.28	N 32° 10' 32.43" W	103° 56' 31.86"
	13722.00	89.13	358.74	10400.98	3976.74	3974.48	-176.45	1.15	427958.91	662356.77	N 32° 10' 33.36" W	103° 56' 31.87"
	13817.00	89.85	357.41	10401.82	4071.72	4069.42	-179.64	1.59	428053.84	662353.58	N 32° 10' 34.30" W	103° 56' 31.90"
	13912.00	90.71	359.12	10401.36	4166.70	4164.37	-182.52	2.01	428148.79	662350.71	N 32° 10' 35.24" W	103° 56' 31.93"
	14007.00	88.55	356.81	10401.97	4261.67	4259.30	-185.89	3.33	428243.70	662347.34	N 32° 10' 36.17" W	103° 56' 31.97"
	14101.00	89.51	359.55	10403.56	4355.64	4353.23	-188.67	3.09	428337.63	662344.35	N 32° 10' 37.10" W	103° 56' 32.00"
	14196.00	88.38	358.86	10405.31	4450.62	4448.20	-190.19	1.39	428432.59	662343.03	N 32° 10' 38.04" W	103° 56' 32.01"
	14291.00	90.85	359.98	10405.95	4545.61	4543.18	-191.15	2.85	428527.57	662342.07	N 32° 10' 38.98" W	103° 56' 32.02"
	14481.00	91.44	2.29	10402.15	4735.43	4733.10	-187.39	1.25	428717.46	662345.83	N 32° 10' 40.86" W	103° 56' 31.97"
	14575.00	91.37	3.98	10399.85	4829.17	4826.92	-182.25	1.80	428811.29	662350.97	N 32° 10' 41.79" W	103° 56' 31.90"
	14670.00	91.26	4.02	10397.67	4923.80	4921.67	-175.63	0.12	428906.02	662357.60	N 32° 10' 42.73" W	103° 56' 31.82"
	14765.00	90.75	2.99	10396.00	5018.51	5016.47	-169.82	1.21	429000.82	662363.40	N 32° 10' 43.67" W	103° 56' 31.75"
	14859.00	91.16	1.95	10394.44	5112.33	5110.37	-165.77	1.19	429094.71	662367.45	N 32° 10' 44.60" W	103° 56' 31.70"
	14954.00	88.24	359.98	10394.93	5207.26	5205.34	-164.17	3.71	429189.67	662369.05	N 32° 10' 45.53" W	103° 56' 31.68"
	15049.00	88.66	358.22	10397.34	5302.23	5300.29	-165.66	1.96	429284.62	662367.56	N 32° 10' 46.47" W	103° 56' 31.69"
	15143.00	89.75	359.18	10398.48	5396.22	5394.26	-167.79	1.39	429378.58	662365.43	N 32° 10' 47.40" W	103° 56' 31.71"
	15237.00	91.09	359.71	10397.79	5490.21	5488.25	-168.70	1.53	429472.56	662364.52	N 32° 10' 48.33" W	103° 56' 31.72"
	15332.00	89.24	358.70	10397.52	5585.20	5583.24	-170.02	2.22	429567.54	662363.20	N 32° 10' 49.27" W	103° 56' 31.73"
	15427.00	88.72	358.08	10399.21	5680.18	5678.18	-172.69	0.85	429662.48	662360.53	N 32° 10' 50.21" W	103° 56' 31.75"
	15521.00	89.89	358.99	10400.35	5774.17	5772.14	-175.09	1.58	429756.43	662358.13	N 32° 10' 51.14" W	103° 56' 31.78"
	15616.00	90.20	0.09	10400.27	5869.16	5867.14	-175.86	1.20	429851.42	662357.37	N 32° 10' 52.08" W	103° 56' 31.78"
	15711.00	90.20	358.84	10399.94	5964.16	5962.13	-176.74	1.32	429946.41	662356.48		

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS ("/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	19210.00	90.58	3.80	10403.97	9459.76	9458.58	-149.63	1.51	433442.59	662383.59	N 32 11 27.62	W 103 56 31.33
	19304.00	89.75	3.13	10403.70	9553.49	9552.41	-143.95	1.13	433536.41	662389.27	N 32 11 28.55	W 103 56 31.26
	19398.00	91.50	4.61	10402.68	9647.15	9646.18	-137.61	2.44	433630.18	662395.61	N 32 11 29.48	W 103 56 31.18
	19493.00	90.10	0.43	10401.35	9741.95	9741.05	-133.43	4.64	433725.04	662399.79	N 32 11 30.42	W 103 56 31.13
	19588.00	88.75	358.89	10402.30	9836.94	9836.04	-134.00	2.16	433820.02	662399.22	N 32 11 31.36	W 103 56 31.13
	19682.00	90.47	359.71	10402.94	9930.93	9930.03	-135.14	2.03	433914.00	662398.08	N 32 11 32.29	W 103 56 31.14
	19776.00	91.26	359.86	10401.52	10024.91	10024.02	-135.50	0.86	434007.98	662397.72	N 32 11 33.22	W 103 56 31.14
	19965.00	89.44	358.92	10400.37	10213.90	10212.99	-137.51	1.08	434196.95	662395.71	N 32 11 35.09	W 103 56 31.15
	20060.00	88.89	358.81	10401.75	10308.89	10307.96	-139.39	0.59	434291.91	662393.83	N 32 11 36.03	W 103 56 31.17
	20155.00	90.20	359.49	10402.51	10403.88	10402.95	-140.80	1.55	434386.89	662392.42	N 32 11 36.97	W 103 56 31.18
	20249.00	90.51	359.33	10401.92	10497.88	10496.94	-141.77	0.37	434480.87	662391.45	N 32 11 37.90	W 103 56 31.19
	20344.00	90.95	359.13	10400.71	10592.87	10591.92	-143.04	0.51	434575.85	662390.18	N 32 11 38.84	W 103 56 31.20
	20438.00	89.41	358.72	10400.42	10686.86	10685.90	-144.81	1.70	434669.82	662388.41	N 32 11 39.77	W 103 56 31.22
	20533.00	90.20	359.33	10400.74	10781.86	10780.89	-146.42	1.05	434764.80	662386.80	N 32 11 40.71	W 103 56 31.23
340' FNL Cross	20571.66	90.06	359.11	10400.65	10820.52	10819.55	-146.95	0.68	434803.45	662386.27	N 32 11 41.09	W 103 56 31.24
	20628.00	89.85	358.79	10400.70	10876.86	10875.88	-147.98	0.68	434859.78	662385.24	N 32 11 41.65	W 103 56 31.25
Final MWD	20675.00	90.47	358.97	10400.57	10923.86	10922.87	-148.90	1.37	434906.77	662384.32	N 32 11 42.11	W 103 56 31.26
Proj to TD	20718.00	90.47	358.97	10400.22	10966.86	10965.86	-149.67	0.00	434949.75	662383.55	N 32 11 42.54	W 103 56 31.26

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 (in)	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 Corral Canyon 36-25 Federal Com 32H Gyro+MWD 0' - 20718'MD
	1	26.500	26.500	Act Stns	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Corral Canyon 36-25 Federal Com 32H Gyro+MWD 0' - 20718'MD
	1	26.500	553.500	Act Stns	30.000	30.000	NAL_NSG+MSHOT	Original Borehole / Oxy Corral Canyon 36-25 Federal Com 32H
	1	553.500	6544.000	Act Stns	30.000	30.000	NAL_MWD_IFR1+MS	Original Borehole / Oxy Corral Canyon 36-25 Federal Com 32H
	1	6544.000	7109.000	Act Stns	30.000	30.000	NAL_MWD_PLUS_0.5_DEG	Original Borehole / Oxy Corral Canyon 36-25 Federal Com 32H
	1	7109.000	20718.000	Act Stns	30.000	30.000	NAL_MWD_IFR1+MS	Original Borehole / Oxy Corral Canyon 36-25 Federal Com 32H

...Original Borehole\Oxy Corral Canyon 36-25 Federal Com 32H Gyro+MWD 0' - 20718'MD

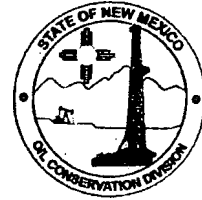
State of New Mexico
Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham
Governor

Sarah Cottrell Propst
Cabinet Secretary

Todd E. Leahy, JD, PhD
Deputy Cabinet Secretary

Gabriel Wade, Acting Director
Oil Conservation Division



February 25, 2019

Ms. Sarah Chapman
SARAH_CHAPMAN@oxy.com

NON-STANDARD LOCATION

Administrative Order NSL-7833

Oxy USA, Inc. [OGRID 16696]
Corral Canyon 36 25 Federal Com Well No. 032H
API No. 30-015-44642

Proposed Location

	<u>Footages</u>	<u>Unit/Lot</u>	<u>Sec.</u>	<u>Twsp</u>	<u>Range</u>	<u>County</u>
Surface	561 FNL & 1528 FWL	3	1	25S	29E	Eddy
First Take Point	178 FSL & 1414 FWL	N	36	24S	29E	Eddy
Last Take Point	401 FNL & 1382 FWL	C	25	24S	29E	Eddy
Terminus	183 FNL & 1378 FWL	C	25	24S	29E	Eddy

Proposed Horizontal Gas Units

<u>Description</u>	<u>Acres</u>	<u>Pool</u>	<u>Pool Code</u>
W2 of Section 36	640	Purple Sage; Wolfcamp (GAS)	98220
W2 of Section 25			

Reference is made to your application received on February 21, 2019.

You have requested to complete this horizontal well as a gas well described above in the referenced pool or formation. This well is governed by special rules for the Purple Sage; Wolfcamp (Gas) Pool of and provides for 320-acre units, with wells located at least 330 feet from a unit outer boundary.

This well's completed interval is as close as 178 feet to the southern edge of the horizontal spacing unit. Encroachment will impact the following tracts.

Section 1, 24S 29E, encroachment to the NW/4

The Division understands you have given notice of this application to all operators or owners who are "affected persons," as defined in Paragraph (8) Subsection A of 19.15.2.7 NMAC, in all adjoining units towards which the proposed location encroaches. All waivers from the affected parties were received and the application was processed in accordance.

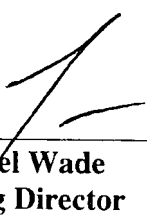
Division understands you seek this unorthodox location as an efficient spacing of your horizontal wells, thereby preventing waste within the Wolfcamp formation underlying the W2 of Section 36 and W2 of Section 25.

Your application has been filed under Subsection 6 of Paragraph of Section (C) of 19.15.16.15 NMAC, 19.15.15.13 NMAC and Paragraph (2) of Subsection A of 19.15.4.12 NMAC.

Per Subsection B of 19.15.15.13 NMAC, Division approves this unorthodox location.

The above approvals are subject to your following all other applicable Division rules.

Jurisdiction of this case is retained for the entry of further orders as Division deems necessary.



Gabriel Wade
Acting Director

GW/lrl

cc: Oil Conservation Division – Artesia District Office
Bureau of Land Management – Carlsbad Field Office
State Land Office – Oil, Gas, and Minerals Division