

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

30-015-44643

December 5, 2018

Oxy USA Incorporated
5 Greenway Plaza, Suite 110
Houston, TX 77046

**NM OIL CONSERVATION
ARTESIA DISTRICT**

FEB 28 2019

RECEIVED

Re:

SEC 1, T25S, R29E, Eddy NM
N 32.16500 W -103.94150

CLIENT: Oxy USA Incorporated
WELL: Corral Canyon 36-25 Fed Com 33H
FIELD: Purple Sage Wolfcamp

RIG: H&P 635
COUNTY: Eddy
API NO: 30-015-44643
JOB NO: 18MLD3543

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>
Jamie Castille	Corral Canyon 36-25 Fed Com 33H Original Hole	622.00 Ft to 20816.00 Ft	November 3, 2018 to November 19, 2018	TelePacer/SlimPulse Third Party Corrected

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

Mike Stephens
Field Service Manager

Schlumberger-Private

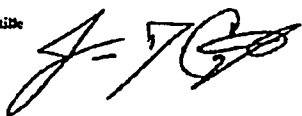
Oilfield Services, Central U.S. Land
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Well Reference:
SEC 1, T25S, R29E, Eddy NM
N 32.16500 W -103.94150

I, Jamie Castille certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of November 03, 2018 through November 19, 2018, conduct or supervise the taking of the TelePacer/SlimPulse & Third Party Corrected surveys from a depth of 622.00 feet to a depth of 20816.00 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 Incorporated for the Corral Canyon 36-25 Fed Com 33H Well (Original Hole) API No. 30-015-44643 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
Jamie Castille
FE



Subscribed and Sworn to before me this 5th day of December (month) 2018 (yr)

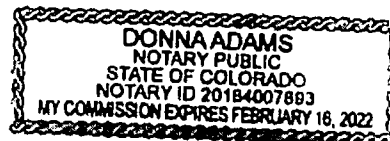
My Commission expires:

2-16-2022

Donna Adams
Notary Public

(signature)

Adams County Colorado
(County State)



Oxy Corral Canyon 36-25 Federal Com 33H MWD 0' - 20861ft MD Survey Geodetic Report (Def Survey)



Report Date: November 20, 2018 - 08:37 AM
Client: OXY
Field: NM Eddy County (NAD 83)
Structure / Slot: Oxy Corral Canyon 36-25 Federal Com 33H / Oxy Corral Canyon 36-25 Federal Com 33H
Well: Corral Canyon 36-25 Federal Com 33H
Borehole: Original Borehole
UWI / API#: Unknown / 30-015-44643
Survey Name: Oxy Corral Canyon 36-25 Federal Com 33H MWD 0' - 20861ft MD
Survey Date: October 09, 2018
Tori / AHD / DDI / ERD Ratio: 349.688' / 11330.194 ft / 8.898 / 1.085
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 5' 54.02255", W 103° 56' 29.57834"
Location Grid N/E Y/X: N 423984 988 NUS, E 682568 210 NUS
CRS Grid Convergence Angle: 0.2086°
Grid Scale Factor: 0.99992592
Version / Patch: 2.10.740.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 3.450° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB=28.5'
TVD Reference Elevation: 3139.000 ft above MSL
Seabed / Ground Elevation: 3112.500 ft above MSL
Magnetic Declination: 6.884°
Total Gravity Field Strength: 988.4504mgm (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 48009.000 nT
Magnetic Dip Angle: 59.904°
Declination Date: October 31, 2018
Magnetic Declination Model: IFR1
North Reference: Grid North
Grid Convergence Used: 0.2086°
Total Corr Mag North->Grid North: 6.6754°
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azimuth (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (ft)	Easting (ft)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
RKB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	423984.98	682568.21	N 32° 5' 54.02"	W 103° 56' 29.58"
WRP	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00	423984.98	682568.21	N 32° 5' 54.02"	W 103° 56' 29.58"
	69.88	0.89	356.84	69.88	0.26	0.26	-0.01	1.59	423985.24	682568.20	N 32° 5' 54.03"	W 103° 56' 29.58"
	130.58	0.58	346.29	130.58	0.92	0.93	-0.10	0.24	423985.91	682568.11	N 32° 5' 54.03"	W 103° 56' 29.58"
	215.08	0.66	347.09	215.05	1.80	1.82	-0.29	0.10	423986.80	682567.92	N 32° 5' 54.04"	W 103° 56' 29.58"
	304.54	0.55	348.84	304.53	2.71	2.74	-0.49	0.12	423987.72	682567.72	N 32° 5' 54.05"	W 103° 56' 29.58"
	399.11	0.64	3.30	399.09	3.68	3.72	-0.55	0.18	423988.70	682567.66	N 32° 5' 54.06"	W 103° 56' 29.58"
	493.69	0.65	42.71	493.68	4.62	4.64	-0.15	0.48	423989.82	682568.08	N 32° 5' 54.07"	W 103° 56' 29.58"
Final Gyro	568.50	0.23	21.91	568.47	5.08	5.08	0.18	0.61	423990.06	682568.39	N 32° 5' 54.07"	W 103° 56' 29.58"
	622.00	0.22	70.01	621.97	5.23	5.22	0.32	0.33	423990.20	682568.53	N 32° 5' 54.07"	W 103° 56' 29.57"
	714.00	0.03	27.63	713.97	5.32	5.30	0.50	0.22	423990.28	682568.71	N 32° 5' 54.07"	W 103° 56' 29.57"
	806.00	0.03	160.75	805.97	5.32	5.30	0.52	0.06	423990.28	682568.73	N 32° 5' 54.07"	W 103° 56' 29.57"
	898.00	0.07	27.12	898.87	5.35	5.32	0.55	0.10	423990.30	682568.76	N 32° 5' 54.08"	W 103° 56' 29.57"
	991.00	0.03	188.17	990.97	5.38	5.35	0.58	0.11	423990.33	682568.79	N 32° 5' 54.08"	W 103° 56' 29.57"
	1084.00	0.03	165.43	1083.97	5.33	5.30	0.58	0.01	423990.28	682568.79	N 32° 5' 54.08"	W 103° 56' 29.57"
	1178.00	0.07	94.28	1175.97	5.30	5.27	0.64	0.07	423990.25	682568.85	N 32° 5' 54.07"	W 103° 56' 29.57"
	1268.00	0.07	85.29	1267.97	5.31	5.28	0.75	0.01	423990.25	682568.98	N 32° 5' 54.07"	W 103° 56' 29.57"
	1361.00	0.07	49.00	1360.97	5.36	5.32	0.85	0.05	423990.30	682569.08	N 32° 5' 54.08"	W 103° 56' 29.57"
	1453.00	0.07	115.44	1452.97	5.38	5.33	0.95	0.08	423990.31	682569.18	N 32° 5' 54.08"	W 103° 56' 29.57"
	1545.00	0.03	278.05	1544.97	5.38	5.31	0.97	0.11	423990.29	682569.18	N 32° 5' 54.08"	W 103° 56' 29.57"
	1638.00	0.08	175.43	1638.97	5.29	5.25	0.95	0.10	423990.23	682569.16	N 32° 5' 54.07"	W 103° 56' 29.57"
	1733.00	0.03	163.84	1732.97	5.21	5.18	0.97	0.06	423990.14	682569.18	N 32° 5' 54.07"	W 103° 56' 29.57"
	1828.00	0.07	222.99	1827.97	5.14	5.09	0.93	0.08	423990.07	682569.14	N 32° 5' 54.07"	W 103° 56' 29.57"
	1922.00	0.07	157.28	1921.97	5.04	5.00	0.92	0.08	423989.98	682569.13	N 32° 5' 54.07"	W 103° 56' 29.57"
	2111.00	0.03	129.68	2110.97	4.91	4.88	1.00	0.02	423989.84	682569.21	N 32° 5' 54.07"	W 103° 56' 29.57"
	2205.00	0.07	260.36	2204.97	4.88	4.83	0.96	0.10	423989.81	682569.17	N 32° 5' 54.07"	W 103° 56' 29.57"
	2299.00	0.07	289.45	2298.97	4.88	4.84	0.85	0.04	423989.82	682569.06	N 32° 5' 54.07"	W 103° 56' 29.57"
	2393.00	0.13	104.46	2392.97	4.88	4.83	0.90	0.21	423989.81	682569.11	N 32° 5' 54.07"	W 103° 56' 29.57"
	2488.00	0.12	148.85	2487.97	4.78	4.72	1.06	0.10	423989.70	682569.27	N 32° 5' 54.07"	W 103° 56' 29.57"
	2582.00	0.21	114.55	2581.97	4.83	4.57	1.26	0.14	423989.55	682569.47	N 32° 5' 54.07"	W 103° 56' 29.56"
	2676.00	0.18	99.53	2675.97	4.56	4.47	1.55	0.07	423989.45	682569.76	N 32° 5' 54.07"	W 103° 56' 29.56"
	2771.00	0.07	115.28	2770.97	4.52	4.43	1.73	0.10	423989.41	682569.94	N 32° 5' 54.07"	W 103° 56' 29.56"
	2865.00	0.10	168.13	2864.97	4.42	4.32	1.80	0.09	423989.30	682570.01	N 32° 5' 54.07"	W 103° 56' 29.56"
	2959.00	0.23	178.00	2958.97	4.18	4.05	1.83	0.14	423989.03	682570.04	N 32° 5' 54.08"	W 103° 56' 29.56"
	3054.00	0.43	194.80	3053.97	3.82	3.52	1.75	0.24	423988.50	682569.96	N 32° 5' 54.08"	W 103° 56' 29.56"
	3148.00	0.31	209.43	3147.97	3.25	3.17	1.41	0.49	423988.15	682569.82	N 32° 5' 54.05"	W 103° 56' 29.56"
	3243.00	0.21	282.34	3242.97	3.28	3.21	0.98	0.12	423988.19	682569.19	N 32° 5' 54.05"	W 103° 56' 29.57"
	3337.00	0.07	312.78	3336.98	3.33	3.28	0.77	0.16	423988.28	682569.08	N 32° 5' 54.06"	W 103° 56' 29.57"
	3431.00	0.07	338.51	3430.98	3.41	3.38	0.71	0.03	423988.38	682568.92	N 32° 5' 54.06"	W 103° 56' 29.57"
	3526.00	0.07	298.68	3525.98	3.49	3.46	0.64	0.06	423988.44	682568.85	N 32° 5' 54.06"	W 103° 56' 29.57"
	3620.00	0.07	210.67	3619.98	3.47	3.44	0.55	0.10	423988.42	682568.78	N 32° 5' 54.06"	W 103° 56' 29.57"
	3714.00	0.07	115.88	3713.98	3.40	3.37	0.57	0.11	423988.35	682568.78	N 32° 5' 54.06"	W 103° 56' 29.57"
	3809.00	0.07	181.89	3808.98	3.32	3.29	0.62	0.08	423988.27	682568.83	N 32° 5' 54.06"	W 103° 56' 29.57"
	3903.00	0.07	98.98	3902.98	3.25	3.22	0.68	0.10	423988.20	682568.89	N 32° 5' 54.05"	W 103° 56' 29.57"
	3998.00	0.03	67.54	3997.98	3.26	3.22	0.76	0.05	423988.20	682568.97	N 32° 5' 54.05"	W 103° 56' 29.57"
	4092.00	0.07	225.54	4091.98	3.23	3.19	0.74	0.10	423988.17	682568.95	N 32° 5' 54.05"	W 103° 56' 29.57"
	4186.00	0.07	233.35	4185.98	3.15	3.12	0.65	0.01	423988.09	682568.88	N 32° 5' 54.05"	W 103° 56' 29.57"
	4281.00	0.07	137.02	4280.98	3.07	3.04	0.64	0.11	423988.02	682568.85	N 32° 5' 54.05"	W 103° 56' 29.57"
	4376.00	0.07	278.75	4375.98	3.00	2.97	0.61	0.07	423987.95	682568.82	N 32° 5' 54.05"	W 103° 56' 29.57"
	4470.00	0.07	137.12	4469.98	2.93	2.90	0.57	0.07	423987.88	682568.78	N 32° 5' 54.05"	W 103° 56' 29.57"
	4564.00	0.07	11.49	4563.98	2.95	2.92	0.62	0.13	423987.80	682568.83	N 32° 5' 54.05"	W 103° 56' 29.57"
	4658.00	0.14	281.01	4657.98	3.10	3.08	0.42	0.08	423987.80	682568.83	N 32° 5' 54.05"	W 103° 56' 29.57"
	4752.00	0.13	292.68	4751.98	3.15	3.14	0.21	0.03	423987.82	682568.82	N 32° 5' 54.05"	W 103° 56' 29.58"
	4846.00	0.09	268.78	4845.98	3.17	3.18	0.04	0.06	423987.82	682568.82	N 32° 5' 54.05"	W 103° 56' 29.58"
	4940.00	0.09	294.81	4939.98	3.19	3.20	-0.10	0.04	423987.82	682568.81	N 32° 5' 54.05"	W 103° 56' 29.58"
	5034.00	0.07	188.12	5033.98	3.18	3.18	-0.17	0.12	423987.82	682568.81	N 32° 5' 54.05"	W 103° 56' 29.58"
	5128.00	0.07	335.71	5127.98	3.18	3.17	-0.21	0.14	423987.82	682568.81	N 32° 5' 54.05"	W 103° 56' 29.58"
	5222.00	0.03	347.82	5221.98	3.23	3.25	-0.24	0.04	423987.82	682567.97	N 32° 5' 54.05"	W 103° 56' 29.58"
	5316.00	0.03	337.57	5315.98	3.28	3.30	-0.28	0.01	423987.82	682567.95	N 32° 5' 54.06"	W 103° 56' 29.58"
	5410.00	0.12	232.51	5409.98	3.23	3.28	-0.34	0.14	423987.82	682567.87	N 32° 5' 54.05"	W 103° 56' 29.58"
	5504.00	0.10	297.98	5503.98	3.20	3.24	-0.50	0.13	423987.82	682567.71	N 32° 5' 54.05"	W 103° 56' 29.58"
	5598.00	0.09	215.34	5597.98	3.17	3.22	-0.61	0.13	423987.82	682567.60	N 32° 5' 54.05"	W 103° 56' 29.59"
	5692.00	0.12	249.64	5691.98	3.07	3.12	-0.75	0.07	423987.82	682567.46	N 32° 5' 54.05"	W 103° 56' 29.59"
	5786.00	0.07	265.16	5785.98	3.02	3.08	-0.90	0.08	423987.82	682567.31	N 32° 5' 54.05"	W 103° 56' 29.59"
	5880.00	0.07	238.74	5879.98	2.98	3.05	-1.00	0.03	423987.82	682567.17	N 32° 5' 54.05"	W 103° 56' 29.59"
	5974.00	0.07	288.89	5973.98	2.90	3.04	-1.11	0.08	423987.82	682567.00	N 32° 5' 54.05"	W 103° 56' 29.59"
	6068.00	0.07	138.11	6067.98	2.94	3.01	-1.12	0.14	423987.82	682566.85	N 32° 5' 54.05"	W 103° 56' 29.59"
	6162.00	0.07	193.05	6161.98	2.84	2.91	-1.10	0.07	423987.82	682566.71	N 32° 5' 54.05"	W 103° 56' 29.59"
	6256.00	0.07	145.76	6255.98	2.74	2.81	-1.08	0.06	423987.82	682566.58	N 32° 5' 54.05"	W 103° 56' 29.59"
	6350.00	0.07	131.14	6349.98	2.68	2.73	-1.01	0.02	423987.82	682566.44	N 32° 5' 54.05"	W 103° 56' 29.59"
	6444.00	0.07	207.19	6443.98	2.57	2.64	-0.99	0.09	423987.82	682566.31	N 32° 5' 54.05"	W 103° 56' 29.59"
	6538.00	0.12	221.59	6537.98	2.44	2.51	-1.08	0.08	423987.82	682566.17	N 32° 5' 54.05"	W 103° 56' 29.59"
	6632.00	0.07	328.18	6632.98	2.41	2.48	-1.18	0.16	423987.46	682565.93	N 32° 5' 54.05"	W 103° 56' 29.59"
	7017.00	1.33	70.16	7018.93	2.89							

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (ft)	Easting (ft)	Latitude (N/S ° ° ' '')	Longitude (E/W ° ° ' '')
	7469.00	7.96	59.25	7466.05	32.78	30.38	41.13	0.25	424015.34	662609.33	N 32° 0' 54.32" W	103° 56' 28.10" E
	7584.00	8.54	60.79	7580.08	40.28	37.18	52.84	0.85	424022.14	662621.14	N 32° 0' 54.39" W	103° 56' 28.90" E
	7678.00	9.83	63.56	7672.88	48.05	44.14	68.21	1.45	424029.12	662634.42	N 32° 0' 54.40" W	103° 56' 28.81" E
	7772.00	11.01	63.45	7765.31	56.53	51.73	81.43	1.26	424030.70	662640.93	N 32° 0' 54.53" W	103° 56' 28.63" E
	7867.00	11.41	60.30	7858.49	68.21	60.44	97.71	0.77	424045.41	662605.61	N 32° 0' 54.64" W	103° 56' 28.44" E
	7961.00	11.35	56.76	7960.10	80.09	73.09	118.40	0.59	424058.07	662680.60	N 32° 0' 54.74" W	103° 56' 28.20" E
	8067.00	14.95	60.12	8073.69	92.45	84.38	138.91	4.02	424069.33	662705.11	N 32° 0' 54.85" W	103° 56' 27.98" E
	8182.00	18.44	58.16	8165.08	106.94	97.55	159.96	1.86	424082.53	662727.18	N 32° 0' 54.98" W	103° 56' 27.73" E
	8278.00	17.91	56.37	8254.88	122.93	112.15	182.57	1.56	424097.12	662750.77	N 32° 0' 55.13" W	103° 56' 27.45" E
	8370.00	20.50	61.16	8343.63	140.03	127.66	208.30	2.02	424112.83	662777.50	N 32° 0' 55.28" W	103° 56' 27.14" E
	8465.00	17.75	61.15	8433.37	156.85	142.67	238.67	2.89	424127.64	662804.76	N 32° 0' 55.43" W	103° 56' 26.82" E
	8527.00	20.16	57.27	8482.01	168.01	153.01	253.83	4.38	424137.98	662822.03	N 32° 0' 55.63" W	103° 56' 26.02" E
	8621.00	20.73	50.62	8560.10	188.69	172.33	280.32	2.54	424157.30	662846.51	N 32° 0' 55.72" W	103° 56' 25.31" E
	8716.00	17.74	44.75	8669.80	211.20	193.28	303.52	3.74	424178.25	662871.70	N 32° 0' 55.92" W	103° 56' 25.04" E
	8810.00	19.29	41.87	8758.93	234.15	215.05	323.82	1.85	424200.02	662892.11	N 32° 0' 56.14" W	103° 56' 25.80" E
	8905.00	18.78	40.81	8848.73	258.67	238.38	344.31	0.85	424223.34	662912.49	N 32° 0' 56.37" W	103° 56' 25.58" E
	8950.00	18.85	40.82	8891.33	270.24	249.40	353.78	1.16	424234.36	662921.94	N 32° 0' 56.48" W	103° 56' 25.45" E
	8999.00	19.53	41.87	8937.61	282.98	261.53	384.38	0.56	424246.49	662932.54	N 32° 0' 56.60" W	103° 56' 25.33" E
	9044.00	19.54	42.21	8980.02	294.78	272.72	374.41	0.40	424257.66	662942.59	N 32° 0' 56.71" W	103° 56' 25.21" E
	9094.00	19.29	43.34	9027.17	307.61	284.92	385.70	0.90	424269.88	662953.88	N 32° 0' 56.83" W	103° 56' 25.08" E
	9138.00	20.02	45.47	9069.55	318.04	293.73	398.29	2.27	424280.68	662964.47	N 32° 0' 56.95" W	103° 56' 24.96" E
	9188.00	21.07	49.74	9115.44	331.36	307.30	408.99	3.73	424292.28	662977.17	N 32° 0' 57.05" W	103° 56' 24.81" E
	9233.00	19.38	54.38	9204.59	353.08	327.51	434.83	2.47	424312.47	663003.01	N 32° 0' 57.25" W	103° 56' 24.51" E
	9277.00	18.59	60.55	9293.49	371.04	343.95	460.54	2.28	424328.91	663028.72	N 32° 0' 57.41" W	103° 56' 24.21" E
	9371.00	15.87	67.82	9394.23	384.87	358.29	485.77	3.67	424341.24	663053.95	N 32° 0' 57.53" W	103° 56' 23.91" E
	9472.00	15.35	74.76	9474.77	394.40	364.40	509.89	2.03	424349.34	663077.88	N 32° 0' 57.61" W	103° 56' 23.63" E
	9568.00	15.26	70.26	9565.43	403.26	381.59	533.35	1.27	424358.79	663101.32	N 32° 0' 57.68" W	103° 56' 23.36" E
	9660.00	13.12	59.21	9657.54	414.28	391.59	554.41	3.64	424369.54	663122.57	N 32° 0' 57.78" W	103° 56' 23.11" E
	9758.00	12.64	54.68	9697.51	419.69	386.57	582.06	2.73	424371.82	663130.23	N 32° 0' 57.83" W	103° 56' 23.02" E
	9848.00	10.34	33.20	9846.52	441.96	407.61	583.11	5.17	424382.56	663151.28	N 32° 0' 58.03" W	103° 56' 22.78" E
	10041.00	14.21	33.83	9937.38	459.06	424.08	594.04	4.18	424409.03	663182.21	N 32° 0' 58.20" W	103° 56' 22.65" E
	10138.00	22.98	32.85	10027.33	485.33	449.40	610.83	9.24	424434.34	663178.79	N 32° 0' 58.45" W	103° 56' 22.48" E
	10230.00	27.59	27.65	10112.32	521.29	484.22	630.49	5.86	424469.17	663198.68	N 32° 0' 58.79" W	103° 56' 22.22" E
	10324.00	40.36	21.10	10190.13	570.49	532.22	651.44	14.02	424517.18	663210.60	N 32° 0' 59.27" W	103° 56' 21.98" E
	10378.72	44.28	20.03	10229.13	604.90	565.46	683.90	7.55	424550.40	663222.06	N 32° 0' 59.59" W	103° 56' 21.83" E
	10418.00	47.42	19.28	10258.55	633.50	594.01	674.09	7.55	424578.94	663242.25	N 32° 0' 59.68" W	103° 56' 21.71" E
	10491.58	50.97	12.72	10306.00	687.08	648.78	689.14	8.41	424631.71	663257.29	N 32° 0' 0.40" W	103° 56' 21.53" E
	10513.00	52.09	10.91	10319.33	703.87	663.20	692.57	8.41	424648.13	663260.73	N 32° 0' 0.56" W	103° 56' 21.49" E
	10608.00	58.91	4.00	10373.15	781.66	740.73	702.52	9.35	424725.83	663270.68	N 32° 0' 1.33" W	103° 56' 21.37" E
	10702.00	69.33	358.81	10414.15	886.02	825.13	704.42	12.14	424810.04	663272.58	N 32° 0' 2.18" W	103° 56' 21.35" E
	10788.00	78.70	357.69	10437.25	946.36	908.75	702.09	11.21	424890.66	663270.24	N 32° 0' 2.98" W	103° 56' 21.37" E
	10877.00	78.93	357.78	10439.28	957.12	918.53	701.68	11.21	424901.46	663269.83	N 32° 0' 3.07" W	103° 56' 21.38" E
	10982.00	82.33	354.08	10445.69	1050.88	1010.89	694.82	13.62	424995.80	663263.08	N 32° 0' 4.00" W	103° 56' 21.45" E
	10954.00	84.95	353.68	10441.76	1111.89	1072.41	688.32	4.27	425057.31	663258.48	N 32° 0' 4.61" W	103° 56' 21.53" E
	11073.00	91.60	358.14	10434.86	1229.33	1181.48	689.02	3.49	425175.81	663245.94	N 32° 0' 5.78" W	103° 56' 21.84" E
	11264.00	90.19	359.60	10431.87	1419.23	1381.48	689.02	1.48	425368.35	663237.18	N 32° 0' 7.67" W	103° 56' 21.74" E
	11358.00	88.57	353.81	10432.99	1512.67	1478.35	684.42	3.34	425460.23	663235.08	N 32° 0' 8.60" W	103° 56' 21.79" E
	11433.00	89.71	358.51	10434.42	1607.09	1570.22	659.90	2.99	425585.08	663226.08	N 32° 0' 9.54" W	103° 56' 21.83" E
	11548.00	90.43	4.12	10434.30	1701.98	1665.18	682.08	5.85	425650.01	663220.24	N 32° 0' 10.48" W	103° 56' 21.81" E
	11642.00	90.39	3.52	10433.63	1795.98	1758.94	688.34	0.84	425743.79	663238.50	N 32° 0' 11.40" W	103° 56' 21.73" E
	11737.00	89.05	2.85	10434.09	1890.97	1851.80	673.45	1.68	425838.64	663241.61	N 32° 0' 12.34" W	103° 56' 21.87" E
	11831.00	89.57	3.58	10435.22	1884.86	1947.65	678.83	1.21	425932.48	663246.79	N 32° 0' 13.27" W	103° 56' 21.60" E
	11925.00	91.56	5.38	10434.30	2078.93	2041.33	686.03	2.80	426026.17	663254.19	N 32° 0' 14.20" W	103° 56' 21.51" E
	12020.00	89.78	4.33	10433.19	2173.89	2135.99	694.07	2.18	426120.81	663262.23	N 32° 0' 15.13" W	103° 56' 21.41" E
	12114.00	88.74	2.46	10434.40	2267.88	2226.82	699.94	2.28	426214.63	663267.80	N 32° 0' 16.08" W	103° 56' 21.34" E
	12209.00	90.64	2.68	10434.91	2362.88	2324.72	703.83	0.51	426309.52	663272.04	N 32° 0' 17.00" W	103° 56' 21.29" E
	12398.00	90.70	3.05	10432.70	2551.84	2513.41	714.28	2.02	426498.20	663282.44	N 32° 0' 18.87" W	103° 56' 21.16" E
	12478.37	90.10	1.88	10432.14	2632.20	2593.69	718.14	2.35	426578.47	663286.30	N 32° 0' 19.68" W	103° 56' 21.11" E
	12587.00	89.29	359.43	10432.72	2740.69	2702.30	719.38	2.35	426687.07	663287.52	N 32° 0' 20.74" W	103° 56' 21.00" E
	12684.77	89.91	357.35	10433.25	2818.15	2780.03	717.18	2.79	426784.80	663285.33	N 32° 0' 21.51" W	103° 56' 21.12" E
	12883.00	90.05	356.89	10433.25	2835.28	2797.24	716.31	2.79	426782.01	663284.47	N 32° 0' 21.68" W	103° 56' 21.13" E
	12777.00	89.33	357.52	10432.85	2929.71	2892.12	711.68	0.73	426878.89	663278.83	N 32° 0' 22.81" W	103° 56' 21.18" E
	12872.00	87.83	304.32	10434.46	3024.07	2986.97	706.56	2.90	426971.72	663274.73	N 32° 0' 23.55" W	103° 56' 21.23" E
	12968.00	90.39	356.47	10435.91	3117.34	3080.78	709.67	2.71	427063.51	663268.82	N 32° 0' 24.48" W	103° 56' 21.30" E
	13081.00	91.53	356.16	10434.31	3211.78	3175.64	696.23	2.18	427160.38	663264.35	N 32° 0' 25.42" W	103° 56' 21.34" E
	13249.00	89.95	356.21	10431.89	3309.83	3363.36	687.03	1.34	427348.11	663255.10	N 32° 0' 27.28" W	103° 56' 21.44" E
	13344.00	89.28	358.76	10431.71	3493.11	3458.28	682.87	2.70	427443.00	663251.02	N 32° 0' 28.22" W	103° 56' 21.49" E
	13533.00	90.50	358.82	10430.48	3681.49	3647.24	679.04	0.15	427631.94	663247.20	N 32° 0' 30.09" W	103° 56' 21.52" E
	13627.00	90.91	358.88	10429.30	3775.20	3741.22	677.32	0.44	427725.91	663245.48	N 32° 0' 31.02" W	103° 56' 21.54" E
	13810.00	86.23	357.12	10430.72	3963.33	3930.08	670.89	1.73	427814.76	663238.05	N 32° 0' 32.89" W	103° 56' 21.81" E
	13911.00	90.19	1.38	10432.03	4058.04	4025.03	668.83	4.92	428006.71	663237.70	N 32° 0' 33.83" W	103° 56' 21.82" E
	14036.00	90.46	2.01	10431.49	4152.99	4119.99	672.42	0.74	428104.66	663240.58	N 32° 0' 34.77" W	103° 56' 21.50" E
	14100.00	90.70	1.79	10430.54	4246.95	4213.93	675.54	0.35	428198.59	663243.70	N 32° 0' 35.70" W	103° 56' 21.54" E
	14195.00	89.09	359.98	10431.54	4341.84	4308.91	678.99	3.38	428293.58			

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLB (ft/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ° °)	Longitude (E/W ° ° °)
	17885.00	90.81	358.60	10422.22	8021.34	7995.98	862.48	2.50	431980.34	683220.64	N 32 11 13.12 W	103 56 21.33
	17879.00	90.53	359.87	10421.12	8115.08	8089.95	861.22	1.38	432074.31	683229.38	N 32 11 14.05 W	103 56 21.54
	18074.00	87.89	359.22	10422.34	8209.84	8184.93	860.47	2.78	432189.29	683228.83	N 32 11 14.99 W	103 56 21.55
	18169.00	89.81	358.75	10424.17	8304.38	8279.84	857.13	3.23	432284.19	683225.29	N 32 11 15.83 W	103 56 21.58
	18264.00	90.29	357.50	10424.09	8398.80	8374.72	852.36	0.84	432359.08	683220.52	N 32 11 16.87 W	103 56 21.63
	18453.00	88.02	355.88	10426.87	8500.44	8503.36	841.42	1.48	432547.89	683209.58	N 32 11 18.74 W	103 56 21.75
	18548.00	80.53	357.28	10428.07	8680.74	8658.18	835.72	3.03	432842.50	683203.88	N 32 11 18.67 W	103 56 21.81
	18642.00	89.02	358.35	10428.44	8774.28	8752.10	832.12	1.98	432736.42	683200.28	N 32 11 21.53 W	103 56 21.85
	18738.00	90.70	0.06	10428.67	8888.01	8848.09	830.82	2.55	432830.39	683198.98	N 32 11 21.53 W	103 56 21.88
	18831.00	90.84	359.53	10427.40	8982.81	8941.08	830.48	0.58	432925.38	683198.84	N 32 11 22.47 W	103 56 21.88
	19020.00	91.15	1.00	10424.11	9131.49	9130.04	831.35	0.78	433114.33	683199.51	N 32 11 24.34 W	103 56 21.84
	19114.00	89.40	2.19	10423.68	9248.43	9224.00	833.97	2.25	433208.28	683202.13	N 32 11 25.27 W	103 56 21.81
	19209.00	90.38	2.00	10423.88	9340.40	9318.93	837.49	1.02	433303.20	683205.65	N 32 11 28.21 W	103 56 21.77
	19303.00	87.89	0.23	10425.22	9434.31	9412.89	839.37	3.19	433397.16	683207.53	N 32 11 27.14 W	103 56 21.74
	19397.00	82.35	2.37	10424.84	9528.21	9506.84	841.50	5.17	433481.10	683209.88	N 32 11 28.07 W	103 56 21.71
	19492.00	89.60	1.48	10423.32	9623.16	9601.78	844.87	3.05	433568.01	683212.83	N 32 11 29.95 W	103 56 21.67
	19587.00	90.28	0.90	10423.44	9718.08	9696.74	848.83	0.91	433660.98	683214.79	N 32 11 29.95 W	103 56 21.64
	19681.00	90.29	359.99	10422.99	9811.95	9799.74	847.38	0.97	433774.97	683215.92	N 32 11 31.81 W	103 56 21.63
	19775.00	89.71	359.40	10422.99	9905.75	9894.73	848.88	0.88	433868.96	683215.02	N 32 11 31.81 W	103 56 21.63
	19870.00	91.48	358.38	10422.02	10000.44	9979.71	845.02	2.13	433983.93	683213.18	N 32 11 32.75 W	103 56 21.65
	19964.00	90.70	357.92	10420.24	10094.02	10073.84	841.89	0.95	434057.85	683210.15	N 32 11 33.68 W	103 56 21.88
	20059.00	89.91	357.50	10419.74	10188.54	10168.56	838.19	0.94	434152.77	683208.35	N 32 11 34.62 W	103 56 21.72
	20154.00	89.28	357.62	10420.43	10283.03	10263.47	834.15	0.70	434247.67	683202.31	N 32 11 35.56 W	103 56 21.70
	20248.00	91.29	357.98	10419.98	10378.57	10357.40	830.54	2.19	434341.59	683199.70	N 32 11 36.49 W	103 56 21.80
	20343.00	91.84	358.64	10417.38	10471.15	10452.32	827.74	0.90	434438.50	683195.00	N 32 11 37.43 W	103 56 21.83
	20438.00	89.29	358.59	10416.44	10565.80	10547.28	825.44	2.68	434531.48	683193.60	N 32 11 38.37 W	103 56 21.85
	20532.00	91.48	358.71	10415.83	10659.48	10641.24	823.23	2.31	434625.42	683191.39	N 32 11 39.30 W	103 56 21.89
	20627.00	90.38	359.80	10414.32	10754.19	10738.22	821.99	1.63	434720.39	683190.15	N 32 11 40.24 W	103 56 21.89
Bottom Perf	20707.55	88.20	358.48	10415.33	10834.50	10818.75	820.78	3.15	434800.91	683188.94	N 32 11 41.03 W	103 56 21.90
Cross	20722.00	87.81	358.24	10415.84	10848.89	10831.19	820.37	3.15	434815.34	683188.53	N 32 11 41.18 W	103 56 21.90
Final MWD	20816.00	88.23	357.57	10418.08	10942.39	10925.07	818.93	0.84	434909.21	683185.10	N 32 11 42.11 W	103 56 21.94
Proj to Bit	20881.00	88.23	357.57	10420.47	10987.13	10970.00	815.03	0.00	434954.15	683183.19	N 32 11 42.25 W	103 56 21.98

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_NSQ+MSHOT-Depth Only	Original Borehole / Oxy Corral Canyon 36-25 Federal Com 33H MWD 0' - 20881ft MD
	1	26.500	26.500	Act Sns	30.000	30.000	NAL_NSQ+MSHOT-Depth Only	Original Borehole / Oxy Corral Canyon 36-25 Federal Com 33H MWD 0' - 20881ft MD
	1	26.500	568.500	Act Sns	30.000	30.000	NAL_NSQ+MSHOT	Original Borehole / Oxy Corral Canyon 36-25 Federal Com 33H
	1	568.500	9798.000	Act Sns	30.000	30.000	NAL_MWD_IFRI+MS	Original Borehole / Oxy Corral Canyon 36-25 Federal Com 33H
	1	9798.000	10138.000	Act Sns	30.000	30.000	NAL_MWD_PLUS_0.5_DEG	Original Borehole / Oxy Corral Canyon 36-25 Federal Com 33H
	1	10138.000	20881.000	Act Sns	30.000	30.000	NAL_MWD_IFRI+MS	Original Borehole / Oxy Corral Canyon 36-25 Federal Com 33H

...Original Borehole/Oxy Corral Canyon 36-25 Federal Com 33H MWD 0' - 20881ft MD

Schlumberger

OXY

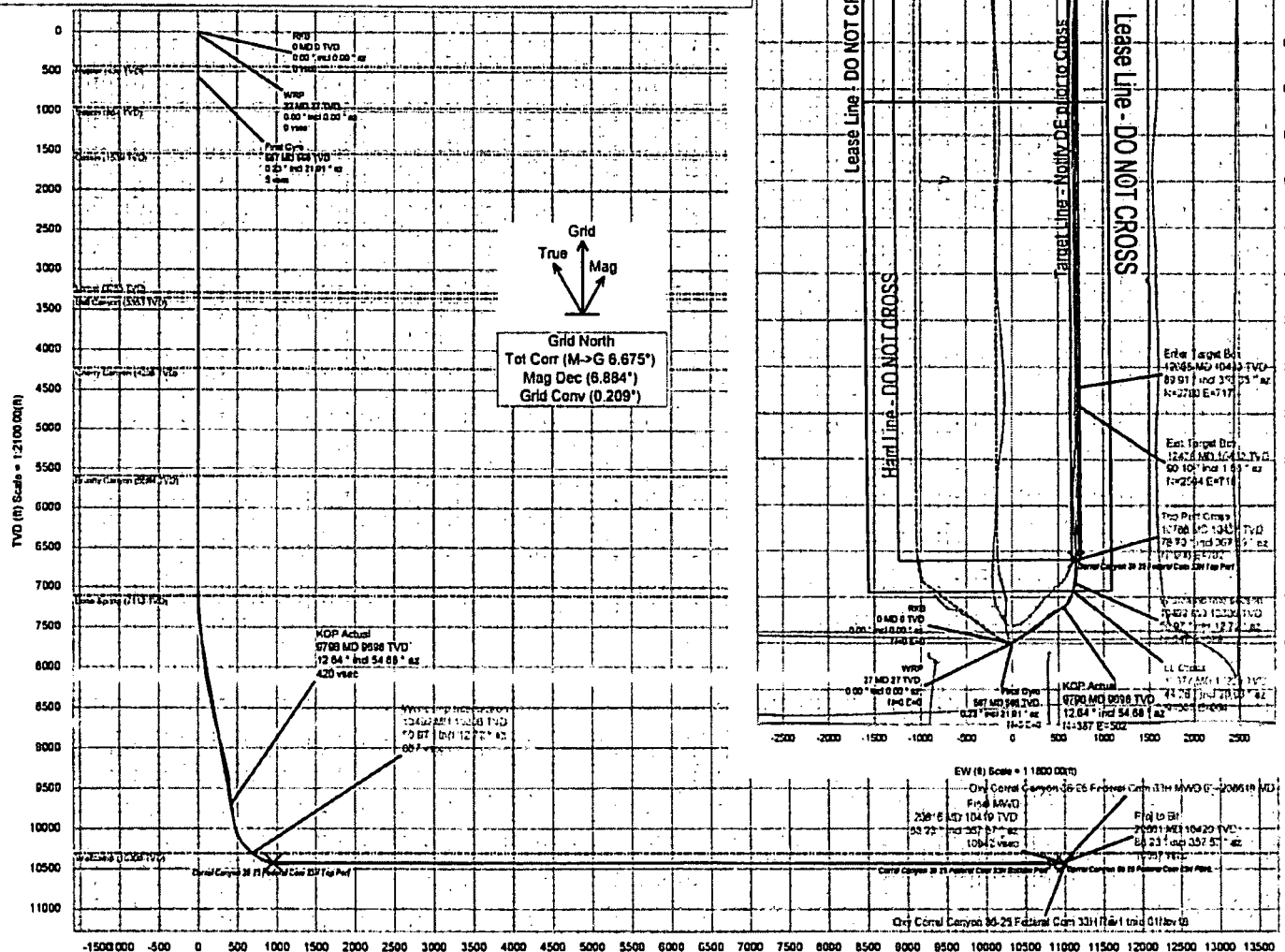
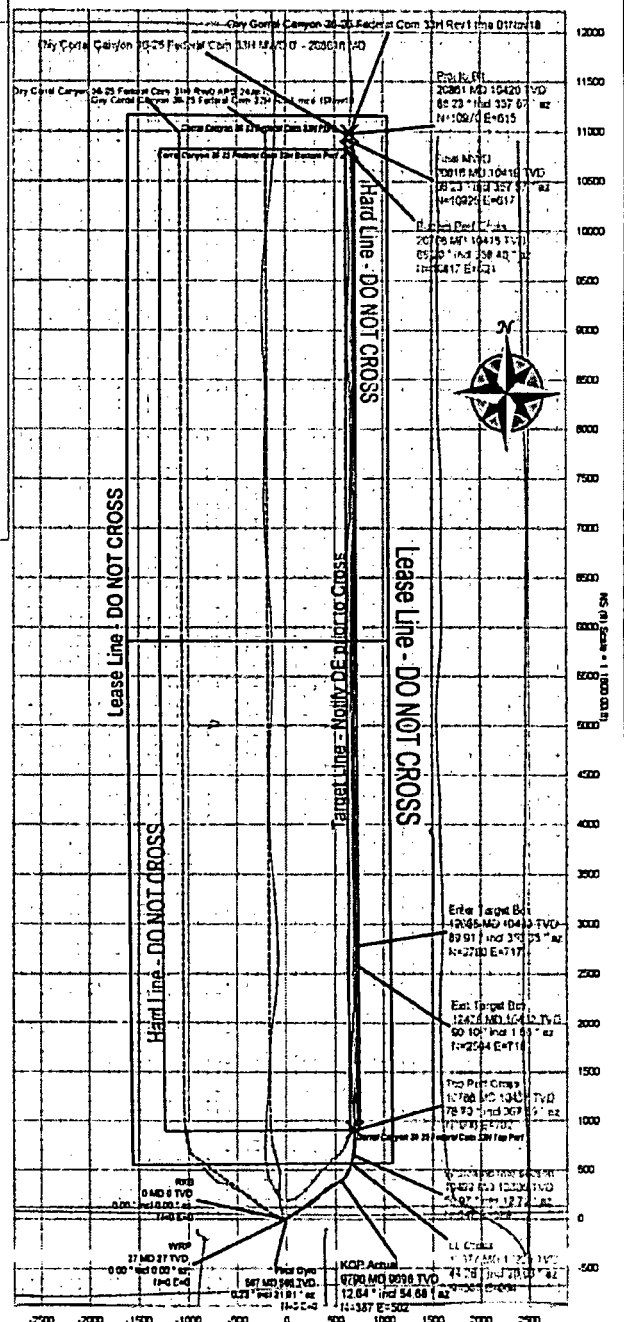


Borehole:	Well:	Field:	Structure:
Original Borehole	Corral Canyon 36-25 Federal Com 33H	NM Eddy County (NAD 83)	Oxy Corral Canyon 36-25 Federal Com 33H

Gravity & Magnetic Parameters				Surface Location				Miscellaneous			
Model:	SPR1	Dir:	50.000°	Date:	11-Dec-2018	Location:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	Well:	Oxy Corral Canyon	YVD Ref:	RKB=26.5' (11m above H&P)
MagnDec:	8.884°	PS:	42096mT	Gravity PS:	100.43m/s² (9.80665 m/s²)	Lat:	N 32° 0' 54.97"	Long:	W 103° 54' 25.58"	Scale:	0.000125

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	568.50	0.23	21.91	568.47	5.08	5.08	0.18	0.81
KCP Actual	9798.00	12.84	54.88	9807.51	419.89	386.57	582.08	2.73
LL Cross	10376.75	44.28	20.03	10229.13	804.39	585.46	603.80	7.55
Wolfcamp Intersection	10491.58	50.97	12.72	10308.00	887.08	848.78	689.14	8.41
Top Perf Cross	10788.00	78.70	357.89	10437.25	948.38	905.75	702.08	11.21
Exit Target Box	12478.37	90.10	1.86	10432.14	2632.20	2593.69	718.14	2.35
Enter Target Box	12684.77	89.91	357.35	10433.28	2818.15	2780.03	717.18	2.70
Bottom Perf Cross	20707.55	88.20	358.48	10415.33	10834.50	10816.75	620.78	3.15
Final MWD	20816.00	88.23	357.57	10419.08	10942.39	10925.07	616.93	0.84
Proj to Bit	20851.00	88.23	357.57	10420.47	10987.13	10970.00	615.03	0.00



Vertical Section (R) Azim = 3.45° Scale = 1:2100.00 (ft) Origin = 0N-0, 0E-0W