30-015-44729

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

January 24, 2019

OXY USA INC.

Re:

2, 25S, 29E, Eddy NM
N 32.16534 W 103.95083

CLIENT: OXY USA INC.
WELL: Corral Fly 35-26 Fed Com 34H
FIELD: Purple Sage Wolfcamp

RIG: H&P 636
COUNTY: Eddy
API NO: 30-015-44729
JOB NO: 18MLD4291

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.

Name & Title of Surveyor	Drainhole Number	Surveyed Depths	Dates Performed	Type of Survey
Andres Hernandez FE	Corral Fly 35-26 Fed Com 34H Original Hole	527.00 Ft to 20660.00 Ft	November 26, 2018 to January 20, 2019	SlimPulse Third Party Corrected

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

Jermaine Allen
Field Service Manager

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

Well Reference:
2, 25S, 29E, Eddy NM
N 32.16534 W 103.95083

I, Andres Hernandez certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of November 26, 2018 through January 20, 2019, conduct or supervise the taking of the SlimPulse & Third Party Corrected surveys from a depth of 527.00 feet to a depth of 20660.00 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 Corral Fly 35-26 Fed Com 34H Well (Original Hole) API No. 30-015-44729 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
Andres Hernandez
FE

Subscribed and Sworn to before me this 24th day of January (month) 2019 (yr)

My Commission expires:

2-16-2022

D Adams (signature)
Notary Public

Adams County Colorado
(County State)

DONNA ADAMS
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20164007693
MY COMMISSION EXPIRES FEBRUARY 16, 2022

Schlumberger

Oxy Corral Fly 35-26 Federal Com 34H Gyro + IFR 0-20705ft MD Survey
Geodetic Report
(Def Survey)

Report Date:	January 21, 2019 - 10:42 AM	**Survey / DLS Computation:**	Minimum Curvature / Lubinski
Client:	Oxy	**Vertical Section Azimuth:**	355.370 ° (Grid North)
Field:	NM Eddy County (NAD 83)	**Vertical Section Origin:**	0.000 ft, 0.000 ft
Structure / Slot:	Oxy Corral Fly 35-26 Federal Com 34H / Oxy Corral Fly 35-26 Federal Com 34H	**TVD Reference Datum:**	RKB - 26.5
Well:	Oxy Corral Fly 35-26 Federal Com 34H	**TVD Reference Elevation:**	3098.300 ft above MSL
Borehole:	Original Borehole	**Seabed / Ground Elevation:**	3071.800 ft above MSL
UWI / API#:	Unknown / Unknown	**Magnetic Declination:**	6.893 °
Survey Name:	Oxy Corral Fly 35-26 Federal Com 34H Gyro + IFR 0-20705ft MD	**Total Gravity Field Strength:**	998.4533mgn (9.80665 Based)
Survey Date:	November 20, 2018	**Gravity Model:**	GARM
Tort / AHD / DDI / ERD Ratio:	246.607 ° / 11346.189 ft / 6.747 / 1.095	**Total Magnetic Field Strength:**	47934.700 nT
Coordinate Reference System:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	**Magnetic Dip Angle:**	59.892 °
Location Lat / Long:	N 32° 9' 55.23005", W 103° 57' 2.97927"	**Declination Date:**	December 27, 2018
Location Grid N/E Y/X:	N 424096.670 ftUS, E 659696.830 ftUS	**Magnetic Declination Model:**	IFR
CRS Grid Convergence Angle:	0.2035 °	**North Reference:**	Grid North
Grid Scale Factor:	0.99992514	**Grid Convergance Used:**	0.2035 °
Version / Patch:	2.10.753.0	**Total Corr Mag North->Grid North:**	6.6894 °
		Local Coord Referenced To:	Structure Reference Point

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 ° ' ")
WRP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	424096.67	659696.83	N 32 9 55.23	W 103 57 2.98
SHL	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00	424096.67	659696.83	N 32 9 55.23	W 103 57 2.98
	94.50	1.32	142.43	94.49	-0.66	-0.62	0.48	1.94	424096.05	659697.31	N 32 9 55.22	W 103 57 2.97
	180.50	1.28	138.02	180.47	-2.25	-2.12	1.72	0.13	424094.55	659698.55	N 32 9 55.21	W 103 57 2.96
	267.50	1.19	141.08	267.45	-3.77	-3.55	2.94	0.13	424093.13	659699.77	N 32 9 55.19	W 103 57 2.95
	361.50	1.37	142.18	361.43	-5.52	-5.19	4.24	0.19	424091.48	659701.07	N 32 9 55.18	W 103 57 2.93
Last Gyro	448.50	1.11	146.36	448.41	-7.13	-6.72	5.35	0.32	424089.96	659702.18	N 32 9 55.16	W 103 57 2.92
	527.00	1.00	150.78	526.89	-8.41	-7.95	6.10	0.17	424088.72	659702.93	N 32 9 55.15	W 103 57 2.91
	650.00	0.09	104.13	649.89	-9.42	-8.91	6.72	0.76	424087.76	659703.55	N 32 9 55.14	W 103 57 2.90
	712.00	0.11	126.09	711.89	-9.47	-8.95	6.82	0.07	424087.72	659703.65	N 32 9 55.14	W 103 57 2.90
	775.00	0.15	127.88	774.89	-9.57	-9.04	6.93	0.06	424087.63	659703.76	N 32 9 55.14	W 103 57 2.90
	837.00	0.13	315.41	836.89	-9.57	-9.04	6.85	0.45	424087.63	659703.78	N 32 9 55.14	W 103 57 2.90
	934.00	0.14	299.70	933.89	-9.42	-8.90	6.77	0.04	424087.77	659703.59	N 32 9 55.14	W 103 57 2.90
	1028.00	0.13	274.87	1027.89	-9.34	-8.84	6.56	0.06	424087.83	659703.39	N 32 9 55.14	W 103 57 2.90
	1122.00	0.11	291.57	1121.89	-9.28	-8.79	6.37	0.04	424087.88	659703.20	N 32 9 55.14	W 103 57 2.91
	1216.00	0.11	141.66	1215.89	-9.32	-8.83	6.34	0.23	424087.84	659703.17	N 32 9 55.14	W 103 57 2.91
	1310.00	0.13	286.74	1309.89	-9.35	-8.87	6.29	0.24	424087.80	659703.12	N 32 9 55.14	W 103 57 2.91
	1404.00	0.13	343.84	1403.89	-9.21	-8.74	6.16	0.13	424087.93	659702.99	N 32 9 55.14	W 103 57 2.91
	1499.00	0.11	342.48	1498.89	-9.01	-8.55	6.11	0.02	424088.12	659702.93	N 32 9 55.15	W 103 57 2.91
	1593.00	0.11	29.39	1592.89	-8.85	-8.38	6.12	0.09	424088.29	659702.95	N 32 9 55.15	W 103 57 2.91
	1687.00	0.15	243.03	1686.89	-8.82	-8.36	6.06	0.27	424088.31	659702.89	N 32 9 55.15	W 103 57 2.91
	1783.00	0.08	39.23	1782.89	-8.82	-8.37	5.99	0.23	424088.30	659702.82	N 32 9 55.15	W 103 57 2.91
	1877.00	0.09	109.15	1876.89	-8.80	-8.34	6.10	0.10	424088.33	659702.93	N 32 9 55.15	W 103 57 2.91
	1972.00	0.22	165.46	1971.89	-9.01	-8.54	6.22	0.20	424088.13	659703.04	N 32 9 55.15	W 103 57 2.91
	2066.00	0.60	203.96	2065.88	-9.62	-9.17	6.06	0.48	424087.51	659702.89	N 32 9 55.14	W 103 57 2.91
	2161.00	0.65	193.30	2160.88	-10.57	-10.14	5.73	0.13	424086.53	659702.56	N 32 9 55.13	W 103 57 2.91
	2255.00	0.53	180.26	2254.87	-11.51	-11.10	5.61	0.19	424085.57	659702.44	N 32 9 55.12	W 103 57 2.91
	2350.00	0.44	177.93	2349.87	-12.32	-11.90	5.62	0.10	424084.77	659702.45	N 32 9 55.11	W 103 57 2.91
	2444.00	0.18	101.87	2443.87	-12.71	-12.29	5.76	0.46	424084.38	659702.59	N 32 9 55.11	W 103 57 2.91
	2539.00	0.14	51.99	2538.87	-12.69	-12.24	5.98	0.13	424084.43	659702.81	N 32 9 55.11	W 103 57 2.91
	2633.00	0.27	161.00	2632.87	-12.84	-12.38	6.15	0.36	424084.29	659702.98	N 32 9 55.11	W 103 57 2.91
	2729.00	0.17	163.79	2728.87	-13.20	-12.73	6.26	0.10	424083.94	659703.09	N 32 9 55.10	W 103 57 2.91
	2829.00	0.23	170.07	2828.87	-13.54	-13.07	6.34	0.06	424083.60	659703.17	N 32 9 55.10	W 103 57 2.91
	2923.00	0.16	201.42	2922.87	-13.85	-13.38	6.32	0.13	424083.29	659703.15	N 32 9 55.10	W 103 57 2.91
	3017.00	0.61	146.83	3016.88	-14.41	-13.92	6.55	0.57	424082.75	659703.38	N 32 9 55.09	W 103 57 2.90
	3112.00	0.27	181.49	3111.86	-15.07	-14.57	6.82	0.44	424082.10	659703.65	N 32 9 55.09	W 103 57 2.90
	3206.00	0.53	227.19	3205.86	-15.56	-15.09	6.49	0.42	424081.58	659703.32	N 32 9 55.08	W 103 57 2.90
	3301.00	0.06	102.62	3300.86	-15.85	-15.40	6.22	0.60	424081.27	659703.05	N 32 9 55.08	W 103 57 2.91
	3395.00	0.08	330.64	3394.86	-15.80	-15.35	6.23	0.14	424081.32	659703.06	N 32 9 55.08	W 103 57 2.91
	3490.00	0.08	207.31	3489.86	-15.80	-15.35	6.17	0.15	424081.32	659703.00	N 32 9 55.08	W 103 57 2.91
	3584.00	0.08	244.63	3583.86	-15.88	-15.44	6.08	0.05	424081.23	659702.91	N 32 9 55.08	W 103 57 2.91
	3679.00	0.11	251.04	3678.86	-15.92	-15.50	5.94	0.03	424081.18	659702.77	N 32 9 55.08	W 103 57 2.91
	3774.00	0.11	94.89	3773.86	-15.96	-15.53	5.94	0.23	424081.14	659702.77	N 32 9 55.08	W 103 57 2.91
	3868.00	0.11	179.81	3867.86	-16.07	-15.63	6.03	0.16	424081.04	659702.86	N 32 9 55.08	W 103 57 2.91
	3962.00	0.11	324.54	3961.86	-16.08	-15.65	5.98	0.22	424081.02	659702.81	N 32 9 55.07	W 103 57 2.91
	4057.00	0.09	116.41	4056.86	-16.04	-15.61	5.99	0.20	424081.06	659702.82	N 32 9 55.08	W 103 57 2.91
	4151.00	0.86	314.32	4150.85	-15.55	-15.15	5.55	1.01	424081.52	659702.38	N 32 9 55.08	W 103 57 2.92
	4252.00	2.28	307.97	4251.81	-13.81	-13.38	3.43	1.41	424083.29	659700.26	N 32 9 55.10	W 103 57 2.94
	4346.00	3.55	308.71	4345.69	-10.35	-10.41	-0.32	1.35	424086.26	659696.51	N 32 9 55.13	W 103 57 2.98
	4441.00	4.83	311.10	4440.43	-5.47	-5.94	-5.63	1.36	424090.73	659691.20	N 32 9 55.17	W 103 57 3.04
	4535.00	6.60	309.98	4533.96	1.18	0.13	-12.75	1.89	424096.80	659684.08	N 32 9 55.23	W 103 57 3.13
	4631.00	7.84	305.01	4629.20	9.21	7.43	-22.34	1.45	424104.10	659674.49	N 32 9 55.30	W 103 57 3.24
	4725.00	8.24	301.28	4722.28	17.25	14.61	-33.35	0.70	424111.28	659663.49	N 32 9 55.38	W 103 57 3.37
	4820.00	8.25	296.32	4816.30	24.75	21.17	-45.27	0.75	424117.83	659651.56	N 32 9 55.44	W 103 57 3.51
	4914.00	8.47	293.62	4909.30	31.50	26.93	-57.68	0.48	424123.60	659639.17	N 32 9 55.50	W 103 57 3.65
	5009.00	8.91	292.83	5003.21	38.20	32.59	-70.85	0.48	424129.25	659625.98	N 32 9 55.55	W 103 57 3.80
	5103.00	9.60	288.93	5095.98	44.69	37.95	-84.88	0.99	424134.62	659611.86	N 32 9 55.61	W 103 57 3.97
	5189.00	10.28	287.41	5180.69	50.44	42.58	-99.08	0.85	424139.24	659597.75	N 32 9 55.65	W 103 57 4.13
	5292.00	10.75	286.58	5281.96	57.38	48.07	-117.06	0.48	424144.73	659579.78	N 32 9 55.71	W 103 57 4.34
	5386.00	10.76	287.41	5374.31	63.82	53.19	-133.83	0.17	424149.86	659563.01	N 32 9 55.78	W 103 57 4.53
	5481.00	10.02	286.70	5467.75	70.16	58.22	-150.21	0.79	424154.89	659546.63	N 32 9 55.81	W 103 57 4.72
	5576.00	9.76	286.00	5561.34	76.00	62.82	-165.87	0.30	424159.48	659530.97	N 32 9 55.86	W 103 57 4.91
	5671.00	9.38	283.14	5655.02	81.20	66.80	-181.15	0.64	424163.46	659515.70	N 32 9 55.90	W 103 57 5.08
	5765.00	8.05	282.24	5747.93	85.45	69.83	-195.04	1.42	424166.50	659501.80	N 32 9 55.93	W 103 57 5.25
	5859.00	6.82	280.13	5841.14	88.78	72.31	-206.97	1.34	424168.98	659489.88	N 32 9 55.95	W 103 57 5.38
	5954.00	6.57	279.07	5935.49	91.51	74.16	-217.88	0.29	424170.82	659478.96	N 32 9 55.97	W 103 57 5.51
	6050.00	5.48	277.69	6030.91	94.02	75.79	-228.87	1.06	424172.46	659467.97	N 32 9 55.99	W 103 57 5.64
	6143.00	5.22	275.92	6123.55	96.55	76.71	-238.54	0.35	424173.37	659458.31	N 32 9 56.00	W 103 57 5.73
	6237.00	4.93	275.61	6217.18	97.05	77.54	-244.81	0.31	424174.21	659452.03	N 32 9 56.01	W 103 57 5.82
	6332.00	5.23	273.40	6311.80	98.38	78.20	-253.20	0.38	424174.88	659443.65	N 32 9 56.01	W 103 57 5.92
	6474.00	5.42	271.68	6453.19	100.02	78.78	-268.36	0.18	424175.44	659430.49	N 32 9 56.02	W 103 57 6.07
	6616.00	5.69	280.42	6594.53	102.59	80.25	-279.99	0.63	424176.91	659416.86	N 32 9 56.03	W 103 57 6.23
	6711.00	5.90	278.45	6689.04	104.91	81.82	-289.45	0.30	424178.48	659407.40	N 32 9 56.05	W 103 57 6.34
	6900.00	5.62	278.54	6877.09	109.22	84.62	-308.21	0.15	424181.28	659388.64	N 32 9 56.08	W 103 57 6.56
	6994.00	5.39	277.82	6970.65	111.22	85.90	-317.14	0.26	424182.56	659379.72	N 32 9 56.09	W 103 57 6.67
	7100.00	7.88	280.88	7075.94	114.24	87.95	-329.21	2.37	424184.61	659367.65	N 32 9 56.11	W 103 57 6.81
	7196.00	8.36	285.70	7170.97	118.42	91.08	-342.39	0.87	424187.74	659354.47	N 32 9 56.14	W 103 57 6.98
	7381.00	7.43	281.62	7354.22	126.44	97.13	-367.05	0.59	424193.79	659329.81	N 32 9 56.20	W 103 57 7.25

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 ° ' ")
	7571.00	7.59	255.51	7542.65	127.73	96.48	-391.24	1.78	424183.13	659305.62	N 32 9 56.20	W 103 57 7.53
	7665.00	6.87	247.07	7635.90	124.90	92.72	-402.43	1.36	424189.38	659294.43	N 32 9 56.16	W 103 57 7.66
	7760.00	5.72	246.94	7730.33	121.78	88.81	-412.08	1.23	424185.47	659284.78	N 32 9 56.12	W 103 57 7.77
	7854.00	3.83	259.85	7824.00	120.15	86.57	-419.54	2.22	424183.23	659277.32	N 32 9 56.10	W 103 57 7.86
	7949.00	2.89	282.00	7918.84	120.53	86.51	-425.01	1.67	424183.17	659271.85	N 32 9 56.10	W 103 57 7.92
	8043.00	3.44	299.37	8012.70	122.79	88.38	-429.79	1.17	424185.05	659267.08	N 32 9 56.12	W 103 57 7.98
	8137.00	5.78	303.23	8106.38	127.27	92.36	-436.20	2.51	424189.02	659260.68	N 32 9 56.16	W 103 57 8.05
	8232.00	7.70	303.83	8200.72	134.17	98.53	-445.49	2.02	424195.19	659251.37	N 32 9 56.22	W 103 57 8.16
	8326.00	8.85	296.81	8293.77	141.77	105.22	-457.03	1.46	424201.88	659239.83	N 32 9 56.29	W 103 57 8.29
	8421.00	8.45	299.05	8387.71	149.37	111.83	-469.51	0.41	424208.49	659227.35	N 32 9 56.35	W 103 57 8.44
	8515.00	5.81	307.02	8480.88	156.36	118.05	-479.35	2.99	424214.71	659217.52	N 32 9 56.42	W 103 57 8.55
	8610.00	5.41	297.02	8575.53	161.91	122.98	-487.18	1.11	424219.64	659209.69	N 32 9 56.46	W 103 57 8.64
	8704.00	6.56	296.40	8669.01	167.00	127.38	-495.94	1.23	424224.04	659200.93	N 32 9 56.51	W 103 57 8.74
	8798.00	5.87	301.42	8762.46	172.60	132.28	-504.85	0.93	424228.94	659192.02	N 32 9 56.56	W 103 57 8.85
	8893.00	5.11	299.65	8857.03	177.84	136.90	-512.67	0.82	424233.56	659184.20	N 32 9 56.60	W 103 57 8.94
	8987.00	5.62	303.35	8950.61	183.03	141.50	-520.15	0.66	424238.16	659176.72	N 32 9 56.65	W 103 57 9.02
	9082.00	5.40	303.39	9045.18	188.64	146.52	-527.77	0.23	424243.18	659169.10	N 32 9 56.70	W 103 57 9.11
	9176.00	6.21	299.18	9138.69	194.20	151.43	-535.90	0.97	424248.09	659160.97	N 32 9 56.75	W 103 57 9.21
	9271.00	6.68	288.61	9233.09	199.24	155.70	-545.63	1.35	424252.36	659151.24	N 32 9 56.79	W 103 57 9.32
	9365.00	3.45	269.98	9326.72	201.63	157.45	-553.65	3.82	424254.11	659143.22	N 32 9 56.81	W 103 57 9.41
	9459.00	3.31	283.49	9420.58	203.14	158.53	-558.97	1.47	424255.19	659137.90	N 32 9 56.82	W 103 57 9.48
	9554.00	5.61	315.04	9515.28	208.09	163.03	-564.89	3.15	424259.69	659131.99	N 32 9 56.88	W 103 57 9.54
	9648.00	8.23	318.60	9608.55	217.11	171.44	-572.70	2.61	424268.10	659124.18	N 32 9 56.95	W 103 57 9.63
KOP Actual	9685.00	9.29	319.85	9645.12	221.66	175.71	-576.38	2.91	424272.37	659120.50	N 32 9 56.99	W 103 57 9.68
	9764.00	13.28	324.66	9722.58	234.65	187.98	-585.73	5.18	424284.64	659111.14	N 32 9 57.11	W 103 57 9.79
	9859.00	24.56	328.07	9812.31	261.65	213.71	-602.53	11.95	424310.36	659094.35	N 32 9 57.37	W 103 57 9.98
	9954.00	32.18	326.88	9895.84	301.47	251.70	-626.82	8.02	424348.35	659070.06	N 32 9 57.74	W 103 57 10.26
	10048.00	39.18	321.90	9972.19	348.29	296.07	-658.85	8.06	424392.72	659038.03	N 32 9 58.18	W 103 57 10.63
	10143.00	42.01	321.42	10044.33	399.69	344.54	-697.19	3.02	424441.18	658999.69	N 32 9 58.66	W 103 57 11.08
	10237.00	49.62	329.50	10109.85	458.13	400.10	-735.07	10.16	424496.74	658961.82	N 32 9 59.21	W 103 57 11.51
	10332.00	58.79	336.46	10165.40	529.33	468.73	-769.76	11.33	424565.38	658927.13	N 32 9 59.90	W 103 57 11.91
Wolfcamp Intersection	*10387.71*	*59.45*	*339.35*	*10194.00*	*574.94*	*513.02*	*-787.74*	*4.61*	*424609.65*	*658909.15*	*N 32 10 0.33*	*W 103 57 12.12*
	10427.00	59.85	341.37	10213.82	607.70	544.97	-799.13	4.61	424641.60	658897.76	N 32 10 0.65	W 103 57 12.25
	10521.00	64.43	352.62	10257.78	689.77	625.81	-817.63	11.60	424722.43	658879.26	N 32 10 1.45	W 103 57 12.47
	10616.00	72.56	358.48	10292.60	778.03	713.82	-824.35	10.30	424810.43	658872.54	N 32 10 2.32	W 103 57 12.54
340' FSL Crossing	*10675.40*	*78.80*	*0.56*	*10307.29*	*835.40*	*771.34*	*-824.82*	*11.03*	*424867.95*	*658872.07*	*N 32 10 2.89*	*W 103 57 12.54*
	10711.00	82.54	1.76	10313.06	870.34	806.45	-824.11	11.03	424903.06	658872.78	N 32 10 3.24	W 103 57 12.53
	10806.00	89.33	2.31	10319.79	964.41	901.10	-820.74	7.17	424997.70	658876.15	N 32 10 4.18	W 103 57 12.49
	10925.00	89.98	3.02	10320.53	1082.44	1019.97	-815.21	0.80	425116.56	658881.68	N 32 10 5.35	W 103 57 12.42
	11018.00	89.82	1.45	10320.71	1174.77	1112.89	-811.59	1.69	425209.48	658885.31	N 32 10 6.27	W 103 57 12.37
	11112.00	89.85	0.95	10320.98	1268.29	1206.87	-809.62	0.53	425303.45	658887.28	N 32 10 7.20	W 103 57 12.35
	11206.00	89.89	0.55	10321.19	1361.87	1300.86	-808.39	0.43	425397.43	658888.51	N 32 10 8.13	W 103 57 12.33
	11301.00	89.82	0.45	10321.43	1456.49	1395.86	-807.56	0.13	425492.42	658889.33	N 32 10 9.07	W 103 57 12.32
	11395.00	90.20	0.78	10321.41	1550.10	1489.85	-806.55	0.54	425586.41	658890.34	N 32 10 10.00	W 103 57 12.30
	11490.00	89.65	358.68	10321.54	1644.82	1584.85	-807.00	2.29	425681.39	658889.90	N 32 10 10.94	W 103 57 12.30
	11584.00	89.98	357.74	10321.86	1738.70	1678.80	-809.93	1.05	425775.34	658886.96	N 32 10 11.87	W 103 57 12.33
	11679.00	90.09	358.17	10321.82	1833.60	1773.74	-813.32	0.47	425870.27	658883.57	N 32 10 12.81	W 103 57 12.37
	11868.00	89.75	358.37	10322.08	2022.36	1962.65	-819.03	0.21	426059.17	658877.87	N 32 10 14.68	W 103 57 12.43
	11963.00	89.89	358.05	10322.38	2117.24	2057.60	-822.00	0.37	426154.12	658874.90	N 32 10 15.62	W 103 57 12.46
	12057.00	89.75	358.20	10322.67	2211.13	2151.55	-825.07	0.22	426248.08	658871.82	N 32 10 16.55	W 103 57 12.49
	12151.00	89.82	358.69	10323.03	2305.00	2245.52	-827.62	0.53	426342.02	658869.27	N 32 10 17.48	W 103 57 12.51
	12246.00	89.96	359.02	10323.21	2399.82	2340.50	-829.52	0.38	426436.99	658867.37	N 32 10 18.42	W 103 57 12.53
	12341.00	89.47	358.75	10323.68	2494.64	2435.48	-831.37	0.59	426531.98	658865.53	N 32 10 19.36	W 103 57 12.55
	12436.00	91.50	0.63	10322.88	2589.36	2530.47	-831.88	2.91	426626.94	658865.01	N 32 10 20.30	W 103 57 12.55
	12531.00	91.19	359.80	10320.65	2683.99	2625.44	-831.53	0.93	426721.91	658865.37	N 32 10 21.24	W 103 57 12.54
	12625.00	91.02	359.84	10318.84	2777.69	2719.42	-831.82	0.19	426815.88	658865.07	N 32 10 22.17	W 103 57 12.54
	12720.00	90.13	359.12	10317.88	2872.44	2814.41	-832.68	1.20	426910.86	658864.21	N 32 10 23.11	W 103 57 12.55
	12815.00	89.68	358.19	10318.04	2967.28	2909.38	-834.91	1.09	427005.83	658861.98	N 32 10 24.05	W 103 57 12.57
	12909.00	89.65	359.23	10318.43	3061.12	3003.36	-837.03	1.12	427099.79	658859.86	N 32 10 24.98	W 103 57 12.59
	13004.00	89.75	358.10	10318.76	3155.96	3098.33	-839.24	1.19	427194.76	658857.65	N 32 10 25.92	W 103 57 12.62
	13099.00	90.13	358.79	10318.86	3250.82	3193.29	-841.82	0.83	427289.72	658855.07	N 32 10 26.86	W 103 57 12.64
	13193.00	90.02	358.70	10318.73	3344.66	3287.27	-843.86	0.15	427383.69	658853.01	N 32 10 27.79	W 103 57 12.66
	13288.00	89.47	358.24	10319.16	3439.52	3382.23	-846.42	0.75	427478.64	658850.48	N 32 10 28.73	W 103 57 12.69
	13478.00	91.06	359.47	10318.28	3629.16	3572.18	-850.21	1.06	427668.58	658846.68	N 32 10 30.61	W 103 57 12.72
	13572.00	90.64	359.17	10318.88	3722.92	3666.17	-851.33	0.55	427762.56	658845.57	N 32 10 31.54	W 103 57 12.73
	13667.00	89.44	358.54	10319.82	3817.75	3761.15	-853.23	1.43	427857.53	658843.67	N 32 10 32.48	W 103 57 12.75
	13762.00	90.47	359.28	10319.89	3912.56	3856.13	-855.03	1.34	427952.50	658841.86	N 32 10 33.42	W 103 57 12.77
	13951.00	89.58	358.61	10319.81	4101.19	4045.09	-858.51	0.59	428141.45	658838.38	N 32 10 35.29	W 103 57 12.80
	14140.00	89.47	358.18	10319.38	4289.92	4234.01	-863.81	0.23	428330.35	658833.09	N 32 10 37.16	W 103 57 12.85
	14235.00	89.37	358.53	10319.34	4384.79	4328.97	-866.53	0.38	428425.30	658830.38	N 32 10 38.10	W 103 57 12.88
	14330.00	89.99	359.01	10319.87	4479.62	4423.94	-868.57	0.83	428520.27	658828.32	N 32 10 39.04	W 103 57 12.90
	14424.00	89.30	358.36	10320.45	4573.48	4517.91	-870.73	1.01	428614.24	658826.17	N 32 10 39.97	W 103 57 12.92
	14614.00	89.58	358.29	10322.31	4763.20	4707.82	-876.28	0.15	428804.13	658820.61	N 32 10 41.85	W 103 57 12.98
	14803.00	89.03	357.79	10324.60	4951.98	4896.70	-882.75	0.39	428992.99	658814.15	N 32 10 43.71	W 103 57 13.05
	14897.00	89.51	358.62	10325.80	5045.85	4990.64	-885.69	1.02	429086.93	658811.21	N 32 10 44.64	W 103 57 13.08
	14992.00	89.82	1.19	10326.35	5140.54	5085.63	-885.85	2.72	429181.91	658811.05	N 32 10 45.58	W 103 57 13.08
	15182.00	89.58	359.80	10327.35	5329.78	5275.62	-884.21	0.74	429371.88	658812.69	N 32 10 47.46	W 103 57 13.05
	15371.00	90.23	1.62	10327.66	5517.95	5464.60	-881.67	1.02	429560.85	658815.03	N 32 10 49.33	W 103 57 13.01
	15465.00	89.61	1.21	10327.79	5611.42	5558.57	-879.54	0.79	429654.81	658817.35	N 32 10 50.26	W 103 57 12.98
	15560.00	89.47	0.58	10328.56	5705.98	5653.55	-878.06	0.68	429749.79	658818.84	N 32 10 51.20	W 103 57 12.96
	15654.00	89.54	1.87	10329.37	5799.50	5747.53	-876.22	1.38	429843.76	658820.68	N 32 10 52.13	W 103 57 12.94
	15749.00	89.23	1.59	10330.39	5893.93	5842.48	-873.51	0.34	429938.70	658823.38	N 32 10 53.07	W 103 57 12.90
	15844.00	88.55	0.57	10332.23	5988.44	5937.45	-871.72	1.29	430033.66	658825.17	N 32 10 54.01	W 103 57 12.88
	15939.00	90.61	1.62	10332.92	6082.96	6032.42	-869.91	2.43	430128.63	658826.99	N 32 10 54.95	W 103 57 12.85
	16033.00	89.41	0.98	10332.91	6176.45	6126.39	-867.79	1.46	430222.59	658829.11	N 32 10 55.88	W 103 57 12.82
	16128.00	89.27	1.25	10334.00	6270.97	6221.37	-865.98	0.34	430317.56	658830.94	N 32 10 56.82	W 103 57 12.80
	16222.00	88.44	0.52	10335.88	6364.51	6315.34	-864.51	1.18	430411.52	658832.39	N 32 10 57.75	W 103 57 12.78
	16317.00	89.27	0.95	10337.78	6459.08	6410.31	-863.29	0.98	430506.49	658833.61	N 32 10 58.69	W 103 57 12.76
	16506.00	89.20	1.57	10340.30	6647.06	6599.25	-859.13	0.33	430695.41	658837.78	N 32 11 0.56	W 103 57 12.70
	16600.00	89.37	1.33	10341.47	6740.53	6693.21	-856.76	0.31	430789.37	658840.14	N 32 11 1.49	W 103 57 12.67
	16789.00	89.10	2.74	10344.00	6928.23	6882.07	-850.04	0.76	430978.21	658846.85	N 32 11 3.36	W 103 57 12.59
	16978.00	90.64	2.35	10344.43	7115.74	7070.88	-841.65	0.84	431167.00	658855.24	N 32 11 5.23	W 103 57 12.48
	17167.00	91.26	1.25	10341.29	7303.52	7259.75	-835.72	0.67	431355.87	658861.18	N 32 11 7.10	W 103 57 12.40
	17261.00	91.18	0.31	10339.31	7397.08	7353.72	-834.44	1.01	431449.83	658862.48	N 32 11 8.03	W 103 57 12.38
	17356.00	90.68	359.83	10337.78	7491.75	7448.71	-834.32	0.71	431544.81	658862.57	N 32 11 8.97	W 103 57 12.38
	17450.00	89.68	359.26	10337.49	7585.50	7542.70	-835.07	1.22	431638.80	658861.83	N 32 11 9.90	W 103 57 12.39
	17545.00	89.41	359.07	10338.24	7680.29	7637.69	-836.45	0.35	431733.77	658860.44	N 32 11 10.84	W 103 57 12.40
	17639.00	89.54	358.72	10338.10	7774.11	7731.67	-838.26	0.40	431827.75	658858.63	N 32 11 11.77	W 103 57 12.41
	17734.00	89.61	358.62	10338.81	7868.94	7826.64	-840.47	0.13	431922.71	658856.42	N 32 11 12.71	W 103 57 12.44
	17828.00	91.57	0.04	10338.84	7962.71	7920.62	-841.57	2.57	432016.68	658855.33	N 32 11 13.64	W 103 57 12.44
	17923.00	89.92	359.41	10337.60	8057.42	8015.61	-842.03	1.86	432111.66	658854.87	N 32 11 14.58	W 103 57 12.45
	18017.00	89.61	359.57	10337.99	8151.18	8109.61	-842.66	0.37	432205.65	658854.03	N 32 11 15.51	W 103 57 12.45
	18205.00	90.27	359.53	10338.19	8338.68	8297.60	-844.34	0.35	432393.63	658852.56	N 32 11 17.37	W 103 57 12.48
	18394.00	89.41	358.14	10338.72	8527.32	8486.55	-848.18	0.88	432582.57	658848.71	N 32 11 19.24	W 103 57 12.50
	18489.00	89.51	358.92	10339.61	8622.18	8581.52	-850.62	0.83	432677.53	658846.28	N 32 11 20.18	W 103 57 12.52
	18678.00	89.68	358.45	10340.95	8810.85	8770.48	-854.96	0.26	432866.48	658841.94	N 32 11 22.05	W 103 57 12.56
	18867.00	89.06	359.32	10343.02	8999.48	8959.41	-858.63	0.57	433055.39	658838.26	N 32 11 23.91	W 103 57 12.60

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 ° ' ")
	18962.00	90.44	0.19	10343.44	9094.20	9054.41	-859.04	1.72	433150.38	658837.88	N 32 11 24.85	W 103 57 12.60
	19151.00	89.68	359.87	10343.24	9282.58	9243.40	-858.94	0.44	433339.36	658837.96	N 32 11 26.73	W 103 57 12.59
	19246.00	89.08	358.88	10344.29	9377.34	9338.39	-859.98	1.23	433434.34	658836.92	N 32 11 27.67	W 103 57 12.60
	19340.00	88.55	358.27	10346.25	9471.17	9432.34	-862.31	0.85	433528.29	658834.58	N 32 11 28.59	W 103 57 12.62
	19435.00	88.44	359.39	10348.74	9565.98	9527.29	-864.25	1.18	433623.22	658832.64	N 32 11 29.53	W 103 57 12.64
	19529.00	89.10	359.08	10350.78	9659.72	9621.28	-865.51	0.78	433717.19	658831.39	N 32 11 30.46	W 103 57 12.65
	19624.00	88.79	359.23	10352.51	9754.50	9716.23	-866.91	0.36	433812.15	658829.99	N 32 11 31.40	W 103 57 12.67
	19813.00	88.92	359.53	10356.29	9943.09	9905.18	-868.95	0.17	434001.09	658827.94	N 32 11 33.27	W 103 57 12.68
	19908.00	88.20	359.67	10358.67	10037.71	10000.15	-869.62	0.77	434096.05	658827.28	N 32 11 34.21	W 103 57 12.68
	20003.00	88.41	359.64	10361.48	10132.40	10095.10	-870.19	0.22	434191.00	658826.71	N 32 11 35.15	W 103 57 12.69
	20192.00	89.68	359.66	10364.63	10320.85	10284.07	-871.34	0.67	434379.95	658825.56	N 32 11 37.02	W 103 57 12.69
	20381.00	89.96	358.39	10365.23	10509.46	10473.04	-874.56	0.69	434568.90	658822.34	N 32 11 38.89	W 103 57 12.72
	20476.00	89.85	359.21	10365.38	10604.29	10568.02	-876.55	0.87	434663.87	658820.35	N 32 11 39.83	W 103 57 12.74
	20570.00	90.09	358.57	10365.43	10698.11	10662.00	-878.37	0.73	434757.85	658818.53	N 32 11 40.76	W 103 57 12.76
340' FNL Crossing	*20601.83*	*90.01*	*358.55*	*10365.41*	*10729.89*	*10693.82*	*-879.17*	*0.27*	*434789.67*	*658817.73*	*N 32 11 41.08*	*W 103 57 12.77*
Final MWD	20660.00	89.85	358.51	10365.48	10787.97	10751.97	-880.66	0.27	434847.81	658816.24	N 32 11 41.65	W 103 57 12.78
Proj to TD	20705.00	89.85	358.51	10365.80	10832.90	10796.95	-881.83	0.00	434892.78	658815.07	N 32 11 42.10	W 103 57 12.79

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 Fly 35-26 Federal Com 34H Gyro + IFR 0-20705ft MD
	1	26.500	26.500	Act Stns	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Corral Fly 35-26 Federal Com 34H Gyro + IFR 0-20705ft MD
	1	26.500	448.500	Act Stns	30.000	30.000	NAL_NSG+MSHOT	Original Borehole / Oxy Corral Fly 35-26 Federal Com 34H Gyro +
	1	448.500	20705.000	Act Stns	30.000	30.000	NAL_MWD_IFR1+MS	Original Borehole / Oxy Corral Fly 35-26 Federal Com 34H Gyro +

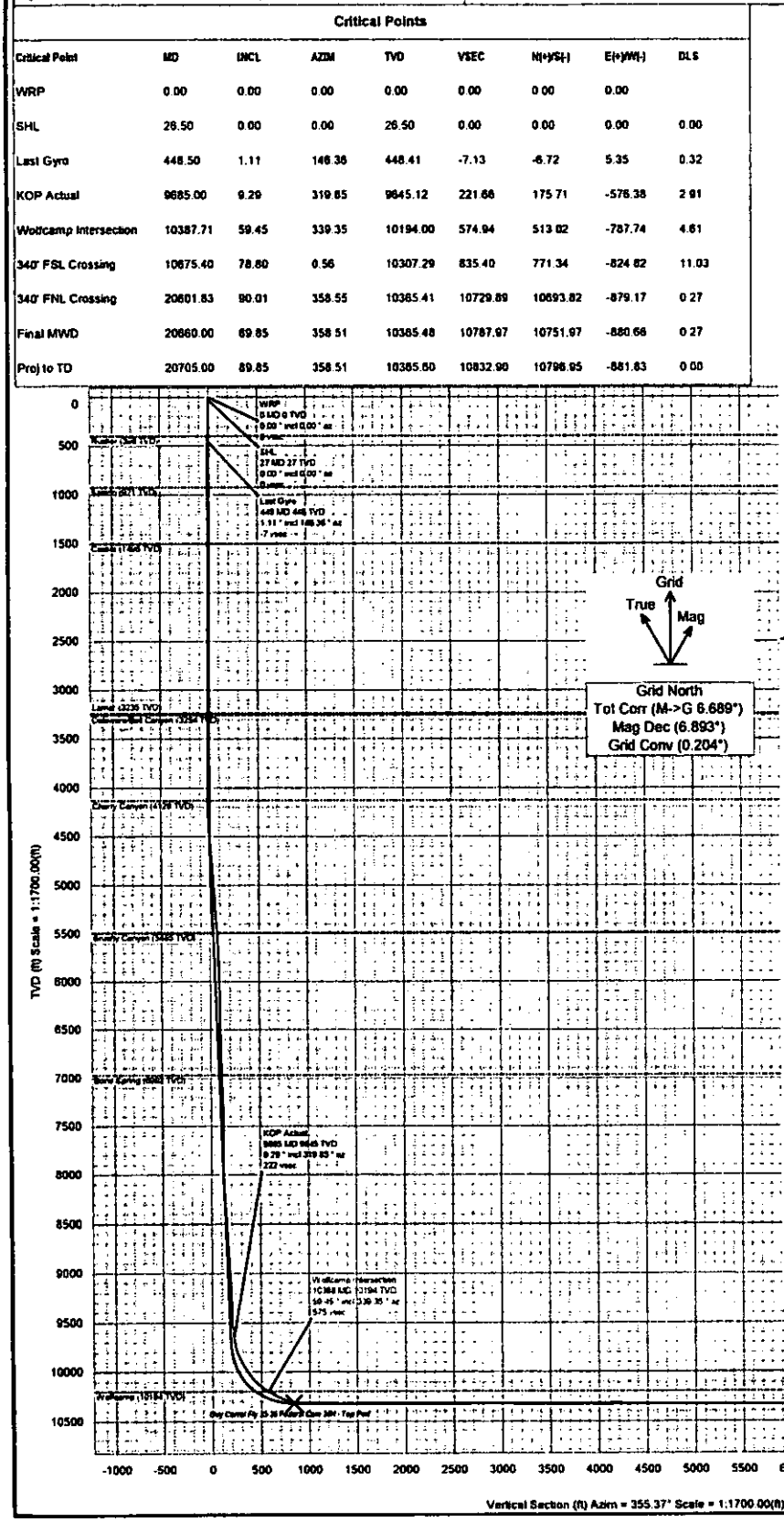
Schlumberger Oxy

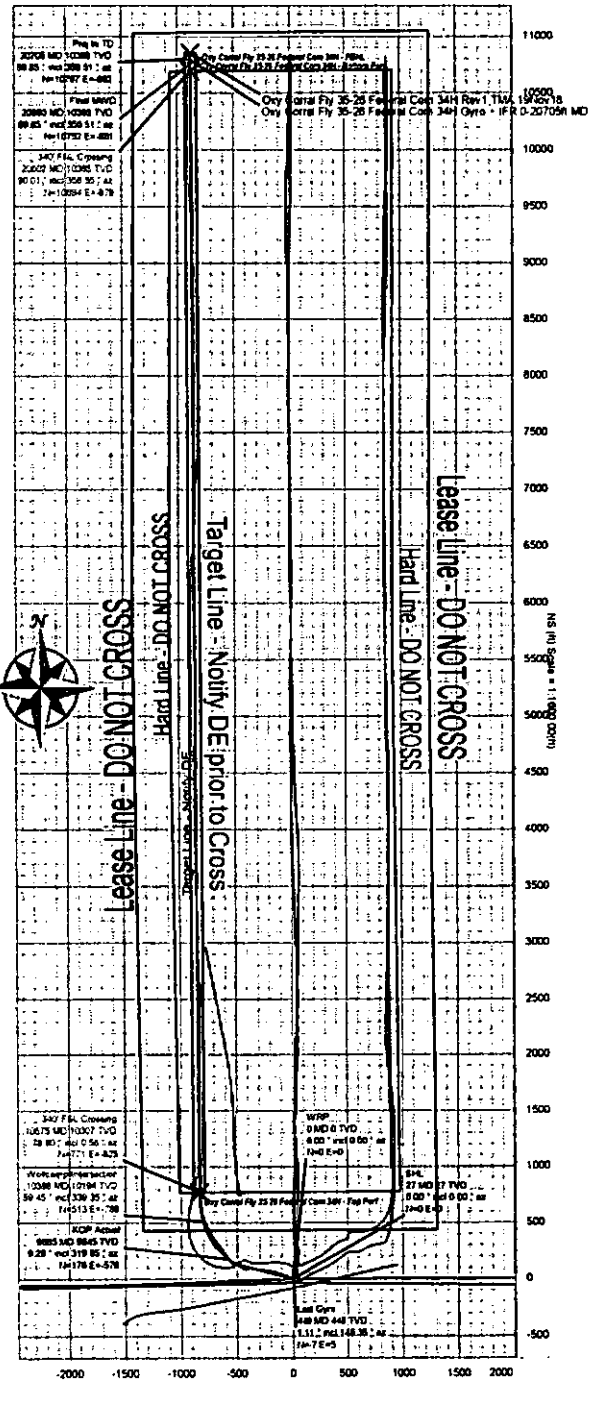
Borehole:	Well:	Field:	Structure:
Original Borehole	Oxy Corral Fly 35-26 Federal Com 34H	NM Eddy County (NAD 83)	Oxy Corral Fly 35-26 Federal Com 34H

Gravity & Magnetic Parameters — Surface Location — NAD83 New Mexico State Plane, Eastern Zone, US Feet — Miscellaneous

Critical Points

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
WRP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SHL	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00
Last Gyro	448.50	1.11	148.36	448.41	-7.13	-6.72	5.35	0.32
KOP Actual	9685.00	9.29	319.85	9645.12	221.68	175.71	-576.38	2.91
Wolfcamp Intersection	10387.71	59.45	339.35	10194.00	574.94	513.02	-787.74	4.61
340' FSL Crossing	10675.40	78.80	0.56	10307.29	835.40	771.34	-824.82	11.03
340' FNL Crossing	20601.83	90.01	358.55	10365.41	10729.89	10693.82	-879.17	0.27
Final MWD	20860.00	89.85	358.51	10365.48	10787.97	10751.97	-880.66	0.27
Proj to TD	20705.00	89.85	358.51	10365.50	10832.90	10796.95	-881.83	0.00





Vertical Section (ft) Azim = 355.37° Scale = 1:1700.00(ft) Origin = 0N/-S, 0E/-W