

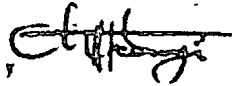
Oilfield Services, Central U.S. Land
Schlumberger Drilling and Measurements
Drilling Group
Geo Market Area: South West Texas Basin
7220 W I-H 20
Midland, Texas 79706
Phone : (432) 742-5400 (Main)
Fax : (432) 742-5606 (Shared)

Schlumberger

Well Reference:
2, 25S, 29E, Eddy NM
N 32.16463 W 103.96024

I, Chris Onyeke certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of January 17, 2019 through March 24, 2019, conduct or supervise the taking of the SlimPulse & Third Party Corrected surveys from a depth of 843.00 feet to a depth of 20947.00 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 Federal Com 33H Well (Original Hole) API No. 30-015-44728 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
Chris Onyeke
FS



Subscribed and Sworn to before me this 28th day of March (month) 2019 (yr)

My Commission expires:

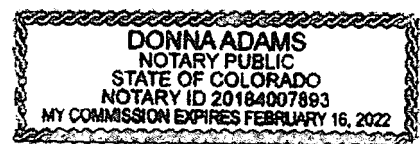
2-16-2022

D. Adams

Notary Public

(signature)

Adams County Colorado
(County State)



Schlumberger

OXY

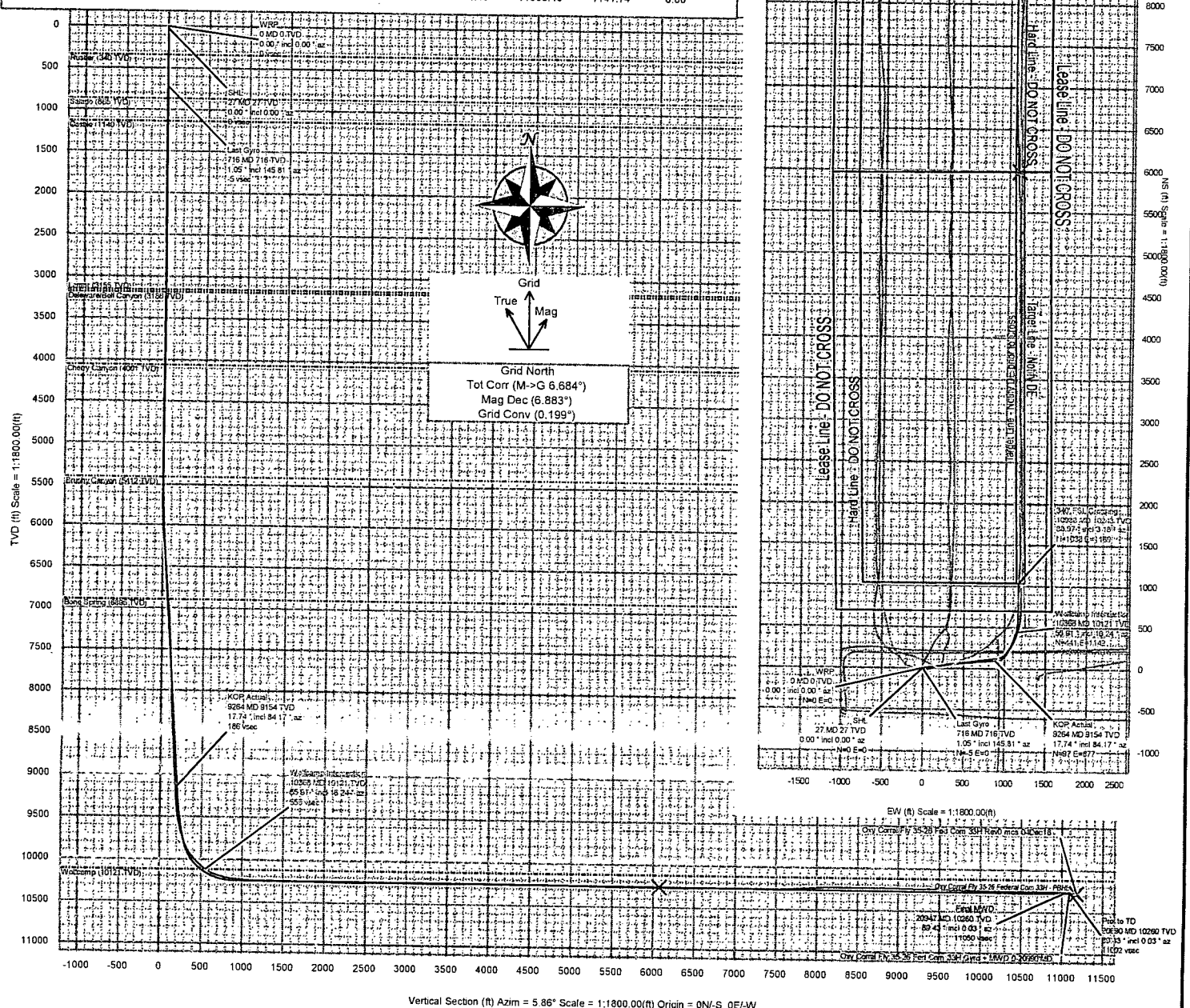


Borehole:	Well:	Field:	Structure:
Original Borehole	Oxy Corral Fly 35-26 Federal Com 33H	NM Eddy County (NAD 83)	Oxy Corral Fly 35-26 Federal Com 33H

Gravity & Magnetic Parameters	Surface Location	Miscellaneous
Model: IFR1 Dip: 59.887° Date: 08-Mar-2019	NAD83 New Mexico State Plane, Eastern Zone, US Feet	Oxy Corral Fly
MagDec: 6.883° FS: 47914.1nT Gravity FS: 998.458mgm (9.80665 Based)	Lat: N 32 9 52.66 North: 423826.68NUS Grid Conv: 0.1998°	Slot: 35-26 Federal
	Lon: W 103 57 36.87 Easting: 656784.77NUS Scale Fact: 0.9992436	Plan: Oxy Corral Fly 35-26 Fed Com 33H Gyro + MWD 0-20990TVD
		TVD Ref: RKB(2046.1ft above NSL)
		NS: 11032.00E+1142

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	716.20	1.05	145.81	716.14	-4.93	-4.98	0.26	1.21
KOP Actual	9264.00	17.74	84.17	9153.91	186.46	97.43	876.83	0.30
Wolfcamp Intersection	10367.88	55.91	16.24	10121.00	555.46	441.12	1142.26	17.16
340' FSL Crossing	10987.50	88.97	3.18	10242.90	1152.45	1038.50	1169.12	3.79
340' FNL Crossing	20914.00	89.70	0.64	10259.49	11016.78	10957.50	1141.53	2.02
Final MWD	20947.00	89.43	0.03	10259.74	11049.63	10990.49	1141.72	2.02
Proj to TD	20990.00	89.43	0.03	10260.17	11092.40	11033.49	1141.74	0.00



Oxy Corral Fly 35-26 Fed Com 33H Gyro + MWD 0-20990' MD Survey

Geodetic Report

(Def Survey)



Report Date: March 25, 2019 - 09:34 AM
 Client: OXY
 Field: NM Eddy County (NAD 83)
 Structure / Slot: Oxy Corral Fly 35-26 Federal Com 33H / Oxy Corral Fly 35-26 Federal Com 33H
 Well: Oxy Corral Fly 35-26 Federal Com 33H
 Borehole: Original Borehole
 UWI / API#: Unknown / 30-015-44728
 Survey Name: Oxy Corral Fly 35-26 Fed Com 33H Gyro + MWD 0-20990' MD
 Survey Date: December 07, 2018
 Tort / AHD / DDI / ERD Ratio: 313.213' / 11973.225 ft / 6.885' / 1.166
 Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
 Location Lat / Long: N 32° 9' 52.65940", W 103° 57' 36.86913"
 Location Grid N/E Y/X: N 423826.680 ftUS, E 656784.770 ftUS
 CRS Grid Convergence Angle: 0.1986°
 Grid Scale Factor: 0.99992436
 Version / Patch: 2.10.753.0

Survey / DLS Computation: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 5.861° (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft
 TVD Reference Datum: RKB
 TVD Reference Elevation: 3040.100 ft above MSL
 Seabed / Ground Elevation: 3013.600 ft above MSL
 Magnetic Declination: 6.883°
 Total Gravity Field Strength: 998.4577 mgn (9.80665 Based)
 Gravity Model: GARM
 Total Magnetic Field Strength: 47914.100 nT
 Magnetic Dip Angle: 59.887°
 Declination Date: March 08, 2019
 Magnetic Declination Model: IFR1
 North Reference: Grid North
 Grid Convergence Used: 0.1986°
 Total Corr Mag North->Grid: 6.5844°
 North: Well Head
 Local Coord Referenced To: Well Head

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	423826.68	656784.77	N 32° 9' 52.66"	W 103° 57' 36.87"
SHL	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00	423826.68	656784.77	N 32° 9' 52.66"	W 103° 57' 36.87"
	105.20	0.40	328.06	105.20	0.22	0.23	-0.15	0.51	423826.91	656784.52	N 32° 9' 52.66"	W 103° 57' 36.87"
	160.20	0.34	281.21	160.20	0.38	0.43	-0.41	0.54	423827.11	656784.36	N 32° 9' 52.66"	W 103° 57' 36.87"
	246.20	1.02	215.68	246.19	-0.26	-0.14	-1.10	1.08	423826.54	656783.67	N 32° 9' 52.66"	W 103° 57' 36.88"
	341.20	0.94	208.48	341.18	-1.71	-1.52	-1.97	0.15	423825.16	656782.80	N 32° 9' 52.66"	W 103° 57' 36.89"
	435.20	0.68	171.86	435.17	-2.96	-2.75	-2.26	0.60	423823.93	656782.51	N 32° 9' 52.64"	W 103° 57' 36.90"
	530.20	0.84	159.46	530.16	-4.13	-3.96	-1.93	0.24	423822.72	656782.84	N 32° 9' 52.62"	W 103° 57' 36.89"
	624.20	0.93	77.81	624.15	-4.51	-4.44	-0.95	1.23	423822.24	656783.82	N 32° 9' 52.61"	W 103° 57' 36.88"
	716.20	1.05	145.81	716.14	-4.93	-4.98	0.26	1.21	423821.70	656785.03	N 32° 9' 52.62"	W 103° 57' 36.87"
	843.00	0.19	294.63	842.94	-5.75	-5.85	0.72	0.96	423820.83	656785.49	N 32° 9' 52.60"	W 103° 57' 36.86"
	935.00	0.50	143.87	934.94	-6.00	-6.11	0.82	0.73	423820.57	656785.59	N 32° 9' 52.59"	W 103° 57' 36.86"
	1119.00	0.17	131.87	1118.93	-6.76	-6.94	1.49	0.18	423819.74	656786.26	N 32° 9' 52.59"	W 103° 57' 36.85"
	1304.00	0.17	53.85	1303.93	-6.73	-6.97	1.92	0.12	423819.71	656786.69	N 32° 9' 52.59"	W 103° 57' 36.85"
	1489.00	0.17	175.74	1488.93	-6.82	-7.08	2.16	0.16	423819.60	656786.93	N 32° 9' 52.59"	W 103° 57' 36.84"
	1676.00	0.23	201.98	1675.93	-7.45	-7.70	2.04	0.06	423818.98	656786.81	N 32° 9' 52.58"	W 103° 57' 36.85"
	1770.00	0.18	241.52	1769.93	-7.72	-7.95	1.84	0.16	423818.73	656786.61	N 32° 9' 52.58"	W 103° 57' 36.85"
	1865.00	0.13	278.48	1864.93	-7.80	-8.00	1.60	0.11	423818.68	656786.37	N 32° 9' 52.58"	W 103° 57' 36.85"
	1959.00	0.20	209.63	1958.93	-7.94	-8.13	1.42	0.21	423818.55	656786.19	N 32° 9' 52.58"	W 103° 57' 36.85"
	2054.00	0.16	53.49	2053.93	-8.01	-8.20	1.44	0.37	423818.49	656786.21	N 32° 9' 52.58"	W 103° 57' 36.85"
	2148.00	0.09	22.46	2147.93	-7.85	-8.05	1.58	0.10	423818.63	656786.35	N 32° 9' 52.58"	W 103° 57' 36.85"
	2242.00	0.13	296.79	2241.93	-7.74	-7.93	1.51	0.16	423818.75	656786.28	N 32° 9' 52.58"	W 103° 57' 36.85"
	2337.00	0.22	81.08	2336.93	-7.65	-7.86	1.59	0.35	423818.82	656786.36	N 32° 9' 52.58"	W 103° 57' 36.85"
	2431.00	0.07	330.52	2430.93	-7.56	-7.78	1.74	0.27	423818.90	656786.51	N 32° 9' 52.58"	W 103° 57' 36.85"
	2526.00	0.10	151.61	2525.93	-7.58	-7.80	1.75	0.18	423818.88	656786.52	N 32° 9' 52.58"	W 103° 57' 36.85"
	2620.00	0.13	175.78	2619.93	-7.75	-7.98	1.80	0.06	423818.70	656786.57	N 32° 9' 52.58"	W 103° 57' 36.85"
	2715.00	0.11	288.04	2714.93	-7.84	-8.06	1.72	0.21	423818.62	656786.49	N 32° 9' 52.58"	W 103° 57' 36.85"
	2809.00	0.13	312.25	2808.93	-7.76	-7.96	1.56	0.06	423818.72	656786.33	N 32° 9' 52.58"	W 103° 57' 36.85"
	2904.00	0.19	110.45	2903.93	-7.73	-7.94	1.63	0.33	423818.74	656786.39	N 32° 9' 52.58"	W 103° 57' 36.85"
	2998.00	0.20	35.76	2997.93	-7.63	-7.86	1.87	0.25	423818.82	656786.64	N 32° 9' 52.58"	W 103° 57' 36.85"
	3093.00	0.26	283.45	3092.93	-7.46	-7.68	1.75	0.40	423819.00	656786.52	N 32° 9' 52.58"	W 103° 57' 36.85"
	3187.00	0.13	331.67	3186.93	-7.34	-7.53	1.50	0.21	423819.15	656786.27	N 32° 9' 52.58"	W 103° 57' 36.85"
	3281.00	0.19	308.06	3280.93	-7.17	-7.34	1.32	0.09	423819.34	656786.09	N 32° 9' 52.59"	W 103° 57' 36.85"
	3375.00	0.18	222.50	3374.93	-7.21	-7.36	1.10	0.27	423819.32	656785.87	N 32° 9' 52.59"	W 103° 57' 36.86"
	3470.00	0.17	102.23	3469.92	-7.34	-7.50	1.14	0.32	423819.18	656785.91	N 32° 9' 52.59"	W 103° 57' 36.86"
	3564.00	0.22	213.79	3563.92	-7.52	-7.68	1.17	0.34	423819.00	656785.94	N 32° 9' 52.58"	W 103° 57' 36.86"
	3658.00	0.17	307.18	3657.92	-7.60	-7.74	0.96	0.30	423818.94	656785.73	N 32° 9' 52.58"	W 103° 57' 36.86"
	3753.00	0.21	40.24	3752.92	-7.39	-7.52	0.96	0.29	423819.16	656785.73	N 32° 9' 52.58"	W 103° 57' 36.86"
	3847.00	0.19	81.06	3846.92	-7.26	-7.37	1.23	0.15	423819.31	656786.00	N 32° 9' 52.59"	W 103° 57' 36.86"
	3941.00	0.22	245.48	3940.92	-7.26	-7.42	1.22	0.43	423819.26	656785.99	N 32° 9' 52.59"	W 103° 57' 36.86"
	4036.00	0.19	291.33	4035.92	-7.31	-7.44	0.90	0.17	423819.24	656785.67	N 32° 9' 52.59"	W 103° 57' 36.86"
	4130.00	0.18	71.88	4129.92	-7.20	-7.33	0.90	0.37	423819.35	656785.67	N 32° 9' 52.59"	W 103° 57' 36.86"
	4225.00	0.17	178.96	4224.92	-7.28	-7.43	1.04	0.10	423819.25	656785.81	N 32° 9' 52.59"	W 103° 57' 36.86"
	4319.00	0.19	158.77	4318.92	-7.56	-7.71	1.17	0.07	423819.97	656785.87	N 32° 9' 52.58"	W 103° 57' 36.86"
	4414.00	0.17	4.24	4413.92	-7.72	-7.87	1.34	0.37	423819.96	656785.94	N 32° 9' 52.58"	W 103° 57' 36.86"
	4602.00	0.17	32.30	4601.92	-7.03	-7.21	1.34	0.04	423819.47	656786.11	N 32° 9' 52.59"	W 103° 57' 36.85"
	4790.00	0.13	135.69	4789.92	-6.92	-7.12	1.64	0.13	423819.56	656786.41	N 32° 9' 52.59"	W 103° 57' 36.85"
	4885.00	0.20	205.38	4884.92	-7.14	-7.35	1.84	0.21	423819.33	656786.41	N 32° 9' 52.59"	W 103° 57' 36.85"
	5074.00	0.18	294.81	5073.92	-7.36	-7.52	1.23	0.14	423819.16	656786.00	N 32° 9' 52.58"	W 103° 57' 36.86"
	5168.00	0.16	289.14	5167.92	-7.28	-7.42	0.97	0.03	423819.26	656785.74	N 32° 9' 52.59"	W 103° 57' 36.86"
	5262.00	0.34	127.20	5261.92	-7.40	-7.54	1.07	0.53	423819.14	656785.84	N 32° 9' 52.58"	W 103° 57' 36.86"
	5356.00	0.85	96.80	5355.91	-7.55	-7.80	1.99	0.62	423818.89	656786.76	N 32° 9' 52.58"	W 103° 57' 36.85"
	5451.00	2.09	95.19	5450.88	-7.54	-8.04	4.41	1.31	423818.85	656789.18	N 32° 9' 52.58"	W 103° 57' 36.82"
	5545.00	3.14	98.26	5544.78	-7.63	-8.56	8.67	1.13	423818.12	656793.44	N 32° 9' 52.57"	W 103° 57' 36.77"
	5639.00	4.87	95.21	5638.55	-7.69	-9.29	15.19	1.85	423817.39	656799.96	N 32° 9' 52.57"	W 103° 57' 36.69"
	5734.00	7.50	88.84	5732.99	-6.89	-9.53	25.40	2.86	423817.53	656824.46	N 32° 9' 52.57"	W 103° 57' 36.61"
	5828.00	9.99	88.19	5825.89	-5.05	-9.15	39.69	2.65	423817.53	656842.83	N 32° 9' 52.58"	W 103° 57' 36.19"
	5922.00	12.60	85.29	5918.06	-2.08	-8.05	58.06	2.84	423818.63	656864.26	N 32° 9' 52.60"	W 103° 57' 35.94"
	6017.00	13.71	80.64	6010.57	2.78	-5.37	79.50	1.61	423821.31	656885.88	N 32° 9' 52.65"	W 103° 57' 35.69"
	6111.00	13.49	75.72	6101.94	9.48	-0.85	101.11	1.25	423825.83	656907.24	N 32° 9' 52.70"	W 103° 57' 35.44"
	6205.00	13.62	76.13	6193.32	16.99	4.50	122.48	0.17	423831.18	656929.02	N 32° 9' 52.75"	W 103° 57' 35.19"
	6300.00	13.65	76.88	6285.64	24.41	9.73	144.26	0.19	423836.41	656950.75	N 32° 9' 52.80"	W 103° 57' 34.94"
	6395.00	13.57	76.07	6377.97	31.83	14.96	165.99	0.22	423841.64	656972.33	N 32° 9' 52.85"	W 103° 57' 34.69"
	6489.00	13.72	77.30	6469.32	39.11	20.06	187.57	0.35	423846.74	656994.22	N 32° 9' 52.90"	W 103° 57' 34.43"
	6584.00	13.67	76.32	6561.62	46.45	25.19	209.47	0.25	423851.87	657015.61	N 32° 9' 52.95"	W 103° 57' 34.18"
	6678.00	13.41	76.39	6653.01	53.80	30.39	230.86	0.28	423857.06	657036.35	N 32° 9' 53.00"	W 103° 57' 33.94"
	6772.00	13.44	77.11	6744.44	60.95	35.39	252.10	0.18	423862.07	657058.36	N 32° 9' 53.05"	W 103° 57' 33.68"
	6867.00	13.47	76.34	6836.83	68.19	40.46	273.61	0.19	423867.14	657079.70	N 32° 9' 53.10"	W 103° 57' 33.44"
	6961.00	13.49	77.46	6928.24	75.31	45.43	294.95	0.28	423872.11	657101.97	N 32° 9' 53.14"	W 103° 57' 33.18"
	7055.00	14.45	80.40	7019.46	81.90	49.77	317.22	1.27	423876.44	657125.52	N 32° 9' 53.17"	W 103° 57' 32.90"
	7150.00	14.52	85.33	7111.44	87.24	52.71	340.78	1.30	423879.39	657148.73	N 32° 9' 53.19"	W 103° 57' 32.63"
	7244.00	14.18	84.56	7202.51	91.65	54.76	363.98	0.41	423881.4			

Comments	MD (ft)	Incl (°)	Azim (°)	Grid (ft)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	North (ft)	East (ft)	Lat (N/S ° ° °)	Long (E/W ° ° °)
	7905.00	13.27	85.26	7846.76	121.98	70.17	510.92	1.22	423896.85	657295.65	N 32	9 53.34	W 103 57 30.92
	7974.00	14.40	92.03	7913.76	124.01	70.52	527.39	2.86	423897.20	657312.12	N 32	9 53.34	W 103 57 30.73
	8068.00	14.23	95.09	8004.84	124.94	69.08	550.58	0.82	423898.12	657335.30	N 32	9 53.32	W 103 57 30.46
	8163.00	13.57	93.12	8097.06	125.63	67.44	573.33	0.85	423899.66	657358.06	N 32	9 53.31	W 103 57 30.20
	8339.00	11.69	74.83	8268.86	133.02	70.98	611.18	2.50	423902.74	657395.90	N 32	9 53.34	W 103 57 29.76
	8446.00	13.50	79.64	8373.29	140.40	76.07	633.93	1.95	423906.32	657418.65	N 32	9 53.39	W 103 57 29.49
	8540.00	16.18	82.95	8464.14	146.40	78.65	657.73	2.99	423908.70	657442.44	N 32	9 53.42	W 103 57 29.21
	8635.00	17.76	87.02	8555.01	151.58	82.03	685.33	2.08	423910.33	657470.05	N 32	9 53.45	W 103 57 28.89
	8729.00	16.62	86.24	8644.81	156.03	83.65	713.07	1.24	423911.67	657497.78	N 32	9 53.46	W 103 57 28.57
	8792.00	17.73	85.52	8705.00	159.26	84.99	731.62	1.79	423913.30	657516.33	N 32	9 53.49	W 103 57 28.35
	8886.00	18.83	88.06	8794.25	163.89	86.63	761.05	1.44	423915.15	657545.76	N 32	9 53.51	W 103 57 28.01
	8981.00	17.85	84.77	8884.43	168.77	88.47	790.88	1.50	423918.01	657575.58	N 32	9 53.53	W 103 57 27.67
	9075.00	17.53	83.72	8973.99	174.52	91.33	819.29	0.48	423921.09	657604.00	N 32	9 53.56	W 103 57 27.33
	9169.00	18.02	83.95	9063.50	180.50	94.41	847.82	0.53	423926.36	657632.53	N 32	9 53.59	W 103 57 26.99
	9264.00	17.74	84.17	9153.91	186.46	97.43	876.83	0.30	423936.95	657661.54	N 32	9 53.61	W 103 57 26.65
	9358.00	14.64	86.13	9244.17	191.37	99.69	902.94	3.35	423963.81	657734.94	N 32	9 53.72	W 103 57 25.81
	9547.00	15.41	69.07	9426.80	206.74	110.28	950.25	2.37	423978.48	657775.31	N 32	9 54.13	W 103 57 25.34
	9735.00	15.23	43.50	9608.33	237.58	137.14	990.62	3.57	424023.42	657821.50	N 32	9 54.57	W 103 57 24.80
	9808.00	15.83	39.25	9678.66	253.49	151.81	1003.52	1.76	424064.90	657874.18	N 32	9 54.98	W 103 57 24.50
	9987.00	25.44	34.79	9827.30	301.60	196.76	1036.81	6.12	424119.15	657872.94	N 32	9 55.52	W 103 57 24.20
	10062.00	36.52	29.58	9908.63	345.49	238.23	1062.49	11.99	424181.54	657896.79	N 32	9 56.82	W 103 57 23.63
	10157.00	42.11	21.70	9982.15	402.09	292.49	1088.26	7.88	424267.77	657926.94	N 32	9 56.98	W 103 57 23.56
	10251.00	48.54	20.22	10048.20	466.60	354.89	1112.11	6.93	424330.19	657947.46	N 32	9 57.60	W 103 57 23.41
	10346.00	52.99	19.14	10108.28	538.04	424.16	1136.86	4.77	424417.48	657959.01	N 32	9 58.47	W 103 57 23.32
	10367.88	55.91	16.24	10121.00	555.46	441.12	1142.26	17.16	424509.16	657951.35	N 32	9 59.37	W 103 57 23.29
	10441.00	66.07	7.80	10156.46	618.89	503.55	1155.32	17.16	424603.11	657951.35	N 32	9 59.37	W 103 57 23.29
	10535.00	71.74	2.09	10190.31	706.50	590.85	1162.78	8.27	424697.85	657950.99	N 32	9 59.37	W 103 57 23.26
	10630.00	78.30	1.10	10214.85	797.96	682.53	1165.33	6.98	424776.72	657953.90	N 32	9 59.37	W 103 57 23.23
	10725.00	85.29	0.54	10228.40	891.57	776.49	1166.67	7.38	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	10820.00	86.43	359.26	10235.25	985.81	871.24	1166.50	1.80	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	10899.00	87.00	0.46	10239.78	1064.24	950.11	1166.31	1.68	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	10987.50	88.97	3.18	10242.90	1152.45	1038.50	1169.12	3.79	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	10992.00	89.07	3.32	10242.97	1156.95	1042.99	1169.37	3.79	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	11086.00	89.48	2.89	10244.16	1250.83	1128.84	1174.47	0.63	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	11179.00	89.48	3.21	10245.01	1343.72	1136.71	1179.41	0.34	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	11305.00	89.07	3.64	10246.60	1469.59	1355.47	1186.94	0.47	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	11400.00	91.13	3.64	10246.44	1564.52	1450.28	1192.97	2.17	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	11494.00	89.45	2.46	10245.96	1658.40	1544.14	1197.97	2.18	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	11684.00	89.21	358.06	10248.18	1847.43	1734.07	1198.83	2.32	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	11779.00	89.31	359.42	10249.41	1941.69	1829.04	1196.75	1.44	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	11873.00	88.93	358.80	10250.85	2035.02	1923.02	1195.29	0.77	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	11968.00	89.45	359.55	10252.20	2129.37	2018.00	1193.92	0.96	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	12063.00	89.41	359.35	10253.14	2223.77	2112.99	1193.01	0.21	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	12251.00	90.72	359.17	10252.93	2410.52	2300.97	1190.58	0.70	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	12346.00	90.96	356.30	10251.54	2504.54	2395.87	1186.82	3.03	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	12534.00	90.13	357.84	10249.75	2690.32	2583.61	1177.22	0.93	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	12629.00	89.93	1.17	10249.70	2784.72	2678.60	1176.40	3.51	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	12723.00	90.27	358.98	10249.53	2878.24	2772.59	1176.52	2.36	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	12913.00	88.45	358.70	10251.66	3066.79	2962.53	1172.67	0.97	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	13102.00	90.48	358.66	10253.42	3254.29	3151.46	1168.32	1.07	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	13197.00	89.76	359.31	10253.22	3348.61	3246.45	1166.64	1.02	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	13291.00	90.31	0.32	10253.16	3536.57	3435.44	1166.33	1.22	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	13386.00	90.17	359.50	10252.77	3630.92	3530.43	1166.18	0.88	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	13481.00	90.20	358.85	10252.46	3724.29	3624.42	1163.24	0.68	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	13575.00	90.55	359.61	10251.84	3769.02	3669.42	1163.24	1.22	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	13620.00	90.00	359.59	10251.63	3817.72	3718.42	1162.83	0.45	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	13669.00	90.17	359.45	10251.56	3862.45	3763.42	1162.44	0.54	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	13714.00	89.96	359.57	10251.50	3911.15	3812.41	1162.07	0.49	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	13763.00	90.20	359.55	10251.44	3958.77	3857.41	1161.81	1.14	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	13808.00	89.75	359.30	10251.46	4005.52	3907.41	1160.86	1.18	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	13858.00	90.24	358.97	10251.46	4052.20	3954.40	1160.15	1.76	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	13905.00	89.48	359.30	10251.57	4098.88	4002.40	1159.59	2.50	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	13953.00	90.68	359.04	10251.24	4146.57	4049.39	1158.93	1.68	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	14000.00	89.96	359.04	10251.24	4194.25	4097.39	1158.37	1.39	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	14048.00	90.31	359.61	10251.13	4240.93	4144.38	1157.64	2.23	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	14095.00	90.65	358.62	10250.74	4288.55	4192.36	1156.57	4.31	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	14143.00	88.59	358.81	10251.06	4335.15	4239.32	1155.52	2.89	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	14190.00	87.24	358.65	10252.77	4382.73	4287.28	1154.20	5.69	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	14238.00	89.93	358.19	10253.95	4477.01	4382.26	1152.24	1.33	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	14333.00	89.96	359.45	10254.04	4571.25	4477.01	1151.09	0.85	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	14522.00	90.06	1.06	10254.01	4665.24	4571.25	1150.93	0.79	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	14617.00	90.06	0.31	10253.91	4759.71	4665.24	1150.22	1.19	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	14807.00	89.45	358.13	10254.72	4846.21	4759.71	1149.40	0.36	424865.10	657953.90	N 32	9 59.37	W 103 57 23.23
	14901.00	89.72	357.92	10255.40	4932.41	4846.21	1148.59	1.23	424865.10	657953.90	N		

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 ° ' '')
	18209.00	89.77	359.14	10235.28	8326.85	8254.43	1131.79	0.74	432080.47	657916.47	N 32 11 14.30	W 103 57 23.37
	18304.00	90.32	359.81	10235.21	8421.26	8349.43	1130.92	0.91	432175.46	657915.60	N 32 11 15.24	W 103 57 23.37
	18398.00	90.25	359.38	10234.74	8514.70	8443.42	1130.26	0.46	432269.45	657914.94	N 32 11 16.17	W 103 57 23.38
	18493.00	89.50	359.09	10234.95	8609.07	8538.41	1128.99	0.85	432364.43	657913.67	N 32 11 17.11	W 103 57 23.39
	18587.00	89.84	2.00	10235.49	8702.65	8632.40	1129.88	3.12	432458.41	657914.57	N 32 11 18.04	W 103 57 23.37
	18682.00	90.49	2.37	10235.22	8797.45	8727.33	1133.51	0.79	432553.33	657918.19	N 32 11 18.98	W 103 57 23.33
	18777.00	89.46	2.16	10235.26	8892.26	8822.25	1137.26	1.11	432646.25	657921.94	N 32 11 19.92	W 103 57 23.28
	18872.00	89.01	0.67	10236.53	8986.97	8917.21	1139.61	1.64	432743.20	657924.29	N 32 11 20.86	W 103 57 23.25
	18966.00	88.71	0.00	10238.40	9080.51	9011.19	1140.16	0.78	432837.17	657928.69	N 32 11 21.79	W 103 57 23.24
	19061.00	89.46	4.65	10239.91	9175.29	9106.07	1144.01	4.96	432932.05	657935.05	N 32 11 22.73	W 103 57 23.19
	19155.00	90.22	3.11	10240.18	9269.23	9199.85	1150.37	1.83	433026.82	657935.05	N 32 11 23.65	W 103 57 23.11
	19250.00	90.46	359.40	10239.61	9363.91	9294.81	1152.45	3.91	433120.77	657934.69	N 32 11 24.59	W 103 57 23.08
	19345.00	89.15	357.66	10239.94	9458.12	9389.77	1150.01	2.29	433215.73	657933.44	N 32 11 25.53	W 103 57 23.12
	19440.00	89.05	0.83	10241.43	9552.47	9484.74	1148.76	3.34	433310.69	657932.44	N 32 11 26.47	W 103 57 23.13
	19534.00	88.57	357.95	10243.38	9645.84	9578.71	1147.76	3.11	433404.64	657929.75	N 32 11 27.40	W 103 57 23.15
	19628.00	89.39	358.77	10245.06	9739.02	9672.65	1145.07	1.23	433498.58	657928.29	N 32 11 28.33	W 103 57 23.19
	19723.00	87.81	357.05	10247.38	9833.07	9767.55	1141.61	2.46	433593.48	657920.70	N 32 11 29.27	W 103 57 23.25
	19818.00	87.02	356.20	10251.66	9926.74	9862.29	1136.02	1.22	433688.20	657916.02	N 32 11 30.21	W 103 57 23.30
	19912.00	88.15	358.08	10255.62	10019.57	9956.08	1131.34	2.33	433781.99	657913.81	N 32 11 31.14	W 103 57 23.32
	20007.00	89.74	359.25	10257.37	10113.80	10051.04	1129.12	2.08	433876.94	657913.81	N 32 11 32.08	W 103 57 23.32
	20196.00	90.39	0.77	10257.16	10301.81	10240.03	1129.16	0.87	434065.92	657913.84	N 32 11 33.95	W 103 57 23.32
	20291.00	90.18	4.57	10256.68	10396.64	10334.91	1133.58	4.01	434160.79	657918.26	N 32 11 34.89	W 103 57 23.26
	20386.00	90.29	1.99	10256.29	10491.54	10429.75	1139.02	2.72	434255.62	657923.70	N 32 11 35.82	W 103 57 23.19
	20480.00	89.84	2.56	10256.19	10585.35	10523.67	1142.75	0.77	434349.53	657927.43	N 32 11 36.75	W 103 57 23.15
	20575.00	89.67	0.70	10256.59	10680.09	10618.63	1145.45	1.97	434444.48	657930.13	N 32 11 37.69	W 103 57 23.11
	20669.00	88.88	357.72	10257.78	10773.44	10712.60	1144.15	3.28	434538.45	657928.83	N 32 11 38.62	W 103 57 23.12
	20764.00	89.50	358.06	10259.13	10867.51	10807.52	1140.66	0.74	434633.37	657925.34	N 32 11 39.56	W 103 57 23.16
	20859.00	90.15	1.66	10259.42	10961.97	10902.51	1140.42	3.85	434728.34	657925.11	N 32 11 40.50	W 103 57 23.16
340' FNL Crossing	20914.00	89.70	0.64	10259.49	11016.78	10957.50	1141.53	2.02	434783.32	657926.21	N 32 11 41.05	W 103 57 23.14
Final MWD	20947.00	89.43	0.03	10259.74	11049.63	10990.49	1141.72	2.02	434816.32	657926.40	N 32 11 41.37	W 103 57 23.14
Proj to TD	20990.00	89.43	0.03	10260.17	11092.40	11033.49	1141.74	0.00	434859.32	657926.43	N 32 11 41.80	W 103 57 23.14

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 Corral Fly 35-26 Fed Com 33H Gyro + MWD 0-20990MD
	1	26.500	26.500	Act Stns	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Corral Fly 35-26 Fed Com 33H Gyro + MWD 0-20990MD
	1	26.500	716.200	Act Stns	30.000	30.000	NAL_NSG+MSHOT	Original Borehole / Oxy Corral Fly 35-26 Fed Com 33H Gyro + MWD
	1	716.200	7905.000	Act Stns	30.000	30.000	NAL_MWD_IFR1+MS	Original Borehole / Oxy Corral Fly 35-26 Fed Com 33H Gyro + MWD
	1	7905.000	9808.000	Act Stns	30.000	30.000	NAL_MWD_PLUS_0.5_DEG	Original Borehole / Oxy Corral Fly 35-26 Fed Com 33H Gyro + MWD
	1	9808.000	20990.000	Act Stns	30.000	30.000	NAL_MWD_IFR1+MS	Original Borehole / Oxy Corral Fly 35-26 Fed Com 33H Gyro + MWD

...Original Borehole\Oxy Corral Fly 35-26 Fed Com 33H Gyro + MWD 0-20990MD