



Louis Dreyfus Natural Gas

Well: LOCO HILLS 4 FED COM 4

Location: PATTERSON #55, EDDY COUNTY, NEW MEXICO

Job Number: MD0500STW161

A Gyrodata Directional Survey

MEASURED DEPTH feet	I N C L deg.	AZIMUTH deg.	BORE HOLE BEARING deg. min.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
6690.0	3.20	128.00	S 52 0 E	1.25	6682.4	168.6 319.0	127.34 N
6722.0	2.80	128.20	S 51 48 E	1.25	6714.4	167.0 319.2	126.31 N
6752.0	3.30	140.20	S 39 48 E	2.69	6744.3	165.4 319.2	125.19 N
6782.0	3.40	147.20	S 32 48 E	1.40	6774.3	163.7 319.1	123.78 N
6813.0	3.30	143.40	S 36 36 E	0.79	6805.2	161.9 319.1	122.29 N
6844.0	3.00	142.10	S 37 54 E	0.99	6836.2	160.2 319.0	120.94 N
6876.0	3.00	138.10	S 41 54 E	0.65	6868.1	158.5 319.0	119.65 N
6938.0	3.20	151.80	S 28 12 E	1.23	6930.0	155.2 318.9	116.92 N
6969.0	3.10	152.80	S 27 12 E	0.37	6961.0	153.5 318.7	115.41 N
7033.0	3.20	160.50	S 19 30 E	0.68	7024.9	150.2 318.3	112.19 N
7065.0	2.90	155.80	S 24 12 E	1.22	7056.8	148.6 318.1	110.61 N
7097.0	3.10	153.90	S 26 6 E	0.70	7088.8	147.0 317.9	109.09 N
7221.0	3.20	148.40	S 31 36 E	0.26	7212.6	140.4 317.3	103.14 N
7284.0	3.80	143.80	S 36 12 E	1.05	7275.5	136.6 317.0	99.95 N
7348.0	3.80	140.10	S 39 54 E	0.38	7339.3	132.3 316.9	96.61 N
7410.0	3.70	140.00	S 40 0 E	0.16	7401.2	128.3 316.8	93.51 N
7440.0	3.70	137.10	S 42 54 E	0.62	7431.2	126.4 316.8	92.06 N
7501.0	3.10	141.30	S 38 42 E	1.06	7492.0	122.7 316.7	89.33 N
7526.0	3.00	142.10	S 37 54 E	0.43	7517.0	121.4 316.6	88.28 N
7589.0	2.70	145.20	S 34 48 E	0.54	7579.9	118.3 316.5	85.76 N
7621.0	2.40	145.10	S 34 54 E	0.94	7611.9	116.9 316.4	84.59 N
7652.0	2.10	147.40	S 32 36 E	1.01	7642.9	115.7 316.3	83.58 N
7714.0	1.60	142.80	S 37 12 E	0.84	7704.8	113.7 316.1	81.94 N
7776.0	2.60	149.30	S 30 42 E	1.66	7766.8	111.5 315.9	80.04 N
7840.0	3.20	157.40	S 22 36 E	1.13	7830.7	108.4 315.4	77.14 N
7870.0	3.30	157.20	S 22 48 E	0.34	7860.7	106.9 315.0	75.57 N

Final Station Closure: Distance: 106.86 ft Az: 315.01 deg.