

Sperry-Sun Drilling Services



Survey Report for Roaring Springs 14 Fed. #3

Data Source: Information from Location

Surveyed: 12 November, 1998

Santa Fe Energy Resources
New Mexico

Eddy County
Sec. 14-T21S-R23E

Measured Depth (ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
Gyro Survey							
0.00	0.000	0.000	0.00	0.00 N	0.00 E	0.00	
100.00	0.340	211.050	100.00	0.25 S	0.15 W	0.21	0.340
200.00	0.240	103.510	200.00	0.56 S	0.10 W	0.24	0.472
300.00	1.020	63.110	299.99	0.20 S	0.90 E	-0.81	0.852
400.00	2.120	95.530	399.95	0.02 N	3.53 E	-3.42	1.373
500.00	1.630	114.140	499.90	0.74 S	6.67 E	-6.27	0.775
600.00	1.190	111.630	599.87	1.70 S	8.93 E	-8.21	0.444
700.00	1.230	125.710	699.85	2.71 S	10.77 E	-9.74	0.299
800.00	0.520	137.870	799.84	3.68 S	11.94 E	-10.63	0.730
900.00	0.050	264.270	899.84	4.02 S	12.21 E	-10.80	0.551
1000.00	1.360	331.370	999.83	2.98 S	11.59 E	-10.47	1.341
1100.00	1.250	347.880	1099.80	0.87 S	10.80 E	-10.23	0.390
1200.00	1.080	342.380	1199.78	1.09 N	10.28 E	-10.23	0.203
1300.00	0.910	354.080	1299.76	2.78 N	9.91 E	-10.30	0.264
1400.00	0.930	358.410	1399.75	4.38 N	9.81 E	-10.60	0.072
1500.00	0.710	5.580	1499.74	5.81 N	9.85 E	-10.99	0.242
1600.00	0.960	3.070	1599.73	7.26 N	9.95 E	-11.46	0.253
1700.00	1.220	339.000	1699.71	9.09 N	9.62 E	-11.60	0.521
1800.00	1.460	20.110	1799.69	11.28 N	9.67 E	-12.20	0.967
1900.00	1.550	23.970	1899.65	13.72 N	10.66 E	-13.77	0.136
2000.00	1.570	26.460	1999.62	16.18 N	11.82 E	-15.51	0.071
2100.00	1.590	26.570	2099.58	18.65 N	13.05 E	-17.33	0.020
2200.00	1.280	26.330	2199.55	20.89 N	14.17 E	-18.97	0.310
2300.00	1.070	13.950	2299.53	22.79 N	14.89 E	-20.15	0.328
2400.00	1.300	56.340	2399.51	24.33 N	16.06 E	-21.67	0.883
2500.00	1.200	16.550	2499.48	25.96 N	17.30 E	-23.28	0.856
2600.00	1.520	16.250	2599.46	28.24 N	17.97 E	-24.50	0.320
2700.00	1.460	8.090	2699.42	30.77 N	18.52 E	-25.67	0.220
2800.00	1.270	31.350	2799.39	32.98 N	19.28 E	-26.96	0.581
2900.00	1.230	16.310	2899.37	34.96 N	20.15 E	-28.31	0.330
3000.00	1.450	6.280	2999.34	37.25 N	20.59 E	-29.31	0.321
3100.00	1.350	24.100	3099.31	39.58 N	21.21 E	-30.50	0.445
3200.00	1.440	4.370	3199.29	41.91 N	21.79 E	-31.64	0.486
3300.00	1.270	27.080	3299.26	44.15 N	22.39 E	-32.79	0.559
3400.00	1.240	9.600	3399.23	46.20 N	23.07 E	-33.97	0.383
3500.00	1.050	17.080	3499.21	48.14 N	23.52 E	-34.89	0.241
3600.00	0.960	348.780	3599.20	49.84 N	23.63 E	-35.42	0.499
3700.00	0.900	357.860	3699.19	51.45 N	23.44 E	-35.64	0.159
3800.00	1.210	355.680	3799.17	53.28 N	23.33 E	-36.00	0.313
3900.00	0.950	4.450	3899.15	55.16 N	23.31 E	-36.46	0.307

Continued...