

A Gyrodata Directional Survey

Marathon Oil Company
Well: INDIAN HILLS #30, 5" DRILLPIPE
Location: NABORS #311, EDDY COUNTY, NEW MEXICO
Job Number: MD0601GMO236

MEASURED DEPTH feet	I N C L deg.	A Z I M U T H deg.	V E R T I C A L SECTION feet	D O G L E G SEVERITY deg./ 100 ft.	V E R T I C A L DEPTH feet	C L O S U R E D I S T . A Z I M U T H feet deg.	H O R I Z O N T A L C O O R D I N A T E S feet
0.0	0.00	0.00	0.0	0.00	0.0	0.0 0.0	0.00 N 0.00 E

0 - 7025 FT RATE GYROSCOPIC MULTISHOT SURVEY RUN INSIDE 5" DRILLPIPE							
ALL MEASUREMENTS AND COORDINATES REFERENCED TO NABORS #311 R.K.B.							

100.0	0.40	301.14	0.1	0.40	100.0	0.3 301.1	0.18 N 0.30 W
200.0	0.30	266.90	0.0	0.23	200.0	0.9 291.8	0.34 N 0.86 W
300.0	0.34	276.86	-0.2	0.07	300.0	1.5 284.4	0.37 N 1.42 W
400.0	0.22	203.21	-0.4	0.35	400.0	1.8 277.2	0.23 N 1.79 W
500.0	0.39	155.07	-0.8	0.29	500.0	1.7 261.6	0.25 S 1.73 W
600.0	0.46	163.42	-1.4	0.09	600.0	1.7 237.3	0.94 S 1.47 W
700.0	0.12	190.51	-1.8	0.35	700.0	2.0 223.9	1.43 S 1.38 W
800.0	0.41	118.15	-2.0	0.39	800.0	2.0 212.3	1.71 S 1.08 W
900.0	0.45	121.63	-2.1	0.04	900.0	2.1 191.5	2.08 S 0.42 W
1000.0	0.71	130.16	-2.4	0.27	1000.0	2.7 171.9	2.69 S 0.38 E
1100.0	1.07	150.07	-3.2	0.47	1100.0	4.1 161.3	3.90 S 1.32 E
1200.0	1.09	148.90	-4.4	0.03	1200.0	6.0 157.6	5.52 S 2.28 E
1300.0	1.12	154.41	-5.6	0.11	1299.9	7.9 156.1	7.22 S 3.19 E
1400.0	1.00	118.21	-6.4	0.67	1399.9	9.6 152.7	8.52 S 4.39 E
1500.0	2.64	44.75	-4.4	2.55	1499.9	10.0 137.1	7.30 S 6.78 E
1600.0	5.39	33.75	2.3	2.84	1599.6	11.2 99.1	1.75 S 11.02 E
1700.0	7.70	26.16	13.5	2.47	1699.0	18.5 63.8	8.16 N 16.58 E
1800.0	9.86	22.78	28.7	2.22	1797.8	31.8 46.0	22.08 N 22.85 E
1900.0	11.83	19.94	47.6	2.04	1896.0	49.5 36.8	39.62 N 29.67 E
2000.0	13.92	19.31	69.8	2.09	1993.5	71.1 31.5	60.61 N 37.14 E