

Marathon Oil Company
Indian Hills Unit #33, slot #1
Indian Basin, EDDY COUNTY, NM.

SURVEY LISTING Page 1
Your ref : BHI MWD 2822'-8444'
Last revised : 22-Aug-2001

Measured Depth	Inclin. Degrees	Azimuth Degrees	True Vert Depth	R E C T A N G U L A R C O O R D I N A T E S		Dogleg Deg/100ft	Vert Sect
0.00	0.00	0.00	0.00	0.00 N	0.00 E	0.00	0.00
100.00	0.08	158.48	100.00	0.07 S	0.03 E	0.08	-0.06
200.00	0.36	270.95	200.00	0.13 S	0.26 W	0.40	0.11
300.00	0.19	168.71	300.00	0.28 S	0.54 W	0.44	0.21
400.00	0.48	33.29	400.00	0.10 S	0.28 W	0.63	0.14
500.00	0.23	342.35	500.00	0.45 N	0.11 W	0.38	0.38
600.00	0.54	175.83	599.99	0.18 N	0.14 W	0.77	0.22
700.00	0.68	154.66	699.99	0.83 S	0.15 E	0.26	-0.67
800.00	0.71	115.92	799.98	1.64 S	0.97 E	0.46	-1.82
900.00	0.60	84.55	899.98	1.86 S	2.05 E	0.37	-2.77
1000.00	0.53	94.72	999.97	1.85 S	3.03 E	0.12	-3.49
1100.00	0.36	212.50	1099.97	2.15 S	3.32 E	0.77	-3.91
1200.00	0.56	199.20	1199.97	2.88 S	3.00 E	0.23	-4.15
1300.00	0.56	209.83	1299.96	3.76 S	2.59 E	0.10	-4.44
1400.00	1.12	207.42	1399.95	5.05 S	1.90 E	0.56	-4.80
1500.00	1.02	217.21	1499.93	6.63 S	0.91 E	0.21	-5.12
1600.00	1.31	228.57	1599.91	8.10 S	0.49 W	0.37	-5.07
1700.00	0.93	232.41	1699.89	9.35 S	1.99 W	0.38	-4.79
1800.00	1.18	232.70	1799.88	10.47 S	3.45 W	0.24	-4.46
1900.00	1.10	201.92	1899.86	11.98 S	4.63 W	0.61	-4.60
2000.00	1.01	214.07	1999.84	13.60 S	5.48 W	0.24	-5.06
2100.00	1.13	218.74	2099.82	15.10 S	6.59 W	0.15	-5.24
2200.00	1.40	196.13	2199.80	17.04 S	7.54 W	0.57	-5.83
2300.00	1.00	202.07	2299.78	19.03 S	8.21 W	0.42	-6.67
2400.00	1.07	196.91	2399.76	20.73 S	8.81 W	0.11	-7.36
2500.00	1.15	202.19	2499.74	22.55 S	9.46 W	0.13	-8.10
2600.00	1.38	189.43	2599.72	24.67 S	10.04 W	0.36	-9.09
2700.00	1.07	187.90	2699.69	26.79 S	10.37 W	0.31	-10.27
2750.00	1.02	197.00	2749.69	27.68 S	10.56 W	0.35	-10.72
2822.00	1.10	192.70	2821.67	28.97 S	10.90 W	0.15	-11.34
2854.00	0.80	222.20	2853.67	29.44 S	11.12 W	1.76	-11.49
2885.00	1.30	278.80	2884.66	29.54 S	11.61 W	3.51	-11.19
2917.00	2.50	309.10	2916.65	29.05 S	12.51 W	4.77	-10.19
2948.00	3.50	312.20	2947.60	27.98 S	13.74 W	3.27	-8.57
2980.00	4.40	310.10	2979.53	26.54 S	15.40 W	2.85	-6.37
3012.00	5.50	315.00	3011.41	24.66 S	17.42 W	3.68	-3.61
3044.00	6.70	316.10	3043.23	22.23 S	19.80 W	3.77	-0.22
3075.00	7.60	318.20	3073.99	19.40 S	22.42 W	3.02	3.63
3107.00	8.60	318.50	3105.67	16.03 S	25.42 W	3.13	8.11
3138.00	9.70	317.50	3136.27	12.37 S	28.72 W	3.59	13.01
3169.00	9.90	317.50	3166.82	8.48 S	32.28 W	0.65	18.27
3233.00	11.60	318.50	3229.69	0.40 N	40.26 W	2.67	30.14
3295.00	12.90	318.50	3290.28	10.25 N	48.98 W	2.10	43.21
3357.00	14.60	318.20	3350.50	21.26 N	58.78 W	2.74	57.86
3421.00	16.30	315.40	3412.19	33.67 N	70.46 W	2.90	74.85
3485.00	17.50	314.30	3473.42	46.78 N	83.65 W	1.94	93.43
3548.00	18.30	312.60	3533.37	60.09 N	97.71 W	1.52	112.79
3612.00	18.50	312.60	3594.10	73.77 N	112.58 W	0.31	132.99
3675.00	19.00	312.90	3653.76	87.51 N	127.45 W	0.81	153.24
3739.00	19.10	312.90	3714.25	101.73 N	142.75 W	0.16	174.12

All data is in feet unless otherwise stated.
Coordinates from structure and TVD from rotary table.
Bottom hole distance is 1595.23 on azimuth 311.62 degrees from wellhead.
Vertical section is from wellhead on azimuth 312.10 degrees.
Calculation uses the minimum curvature method.
Presented by Baker Hughes INTEQ