

Marathon Oil Company
INDIAN HILLS UNIT 45, slot #1
INDIAN BASIN, Eddy County New Mexico

SURVEY LISTING Page 1
Your ref : MWD
Last revised : 7-Aug-2002

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	G R I D Easting	C O O R D S Northing
0.00	0.00	0.00	0.00	0.00N	0.00E	0.00	0.00	449465.20	529464.40
100.00	0.40	138.10	100.00	0.26S	0.23E	0.40	-0.28	449465.43	529464.14
200.00	0.23	140.71	200.00	0.68S	0.59E	0.16	-0.74	449465.79	529463.72
300.00	0.30	149.23	300.00	1.06S	0.86E	0.07	-1.15	449466.06	529463.34
400.00	0.20	174.94	400.00	1.45S	1.00E	0.15	-1.56	449466.20	529462.95
500.00	0.15	149.16	500.00	1.73S	1.09E	0.09	-1.85	449466.29	529462.67
600.00	0.13	142.00	599.99	1.94S	1.23E	0.03	-2.07	449466.43	529462.46
700.00	0.20	76.84	699.99	1.99S	1.47E	0.19	-2.15	449466.67	529462.41
800.00	0.57	86.14	799.99	1.92S	2.14E	0.37	-2.16	449467.34	529462.48
900.00	0.65	101.74	899.99	2.00S	3.18E	0.18	-2.36	449468.38	529462.40
1000.00	0.65	111.69	999.98	2.32S	4.26E	0.11	-2.81	449469.46	529462.08
1100.00	0.93	127.15	1099.97	3.02S	5.43E	0.35	-3.65	449470.63	529461.38
1200.00	1.33	142.31	1199.95	4.43S	6.79E	0.50	-5.21	449471.99	529459.97
1300.00	1.59	145.04	1299.92	6.49S	8.29E	0.27	-7.43	449473.49	529457.91
1400.00	1.64	141.23	1399.88	8.74S	9.99E	0.12	-9.87	449475.19	529455.66
1500.00	1.70	148.95	1499.84	11.13S	11.65E	0.23	-12.45	449476.85	529453.27
1600.00	1.65	147.41	1599.79	13.62S	13.19E	0.07	-15.10	449478.39	529450.78
1700.00	1.67	148.58	1699.75	16.08S	14.73E	0.04	-17.72	449479.93	529448.32
1800.00	1.59	147.72	1799.71	18.49S	16.23E	0.08	-20.30	449481.43	529445.91
1900.00	1.65	149.62	1899.67	20.90S	17.70E	0.08	-22.87	449482.90	529443.50
2000.00	1.55	145.51	1999.63	23.26S	19.19E	0.15	-25.39	449484.39	529441.14
2100.00	1.54	142.98	2099.60	25.45S	20.76E	0.07	-27.75	449485.96	529438.95
2200.00	1.44	144.79	2199.56	27.55S	22.30E	0.11	-30.02	449487.50	529436.85
2300.00	1.41	144.43	2299.53	29.58S	23.74E	0.04	-32.21	449488.94	529434.82
2400.00	1.39	148.03	2399.50	31.60S	25.10E	0.09	-34.38	449490.30	529432.80
2500.00	1.36	147.34	2499.47	33.63S	26.38E	0.03	-36.55	449491.58	529430.77
2600.00	1.32	149.56	2599.45	35.63S	27.60E	0.07	-38.68	449492.80	529428.77
2700.00	1.28	151.48	2699.42	37.60S	28.72E	0.06	-40.77	449493.92	529426.80
2800.00	1.30	153.55	2799.39	39.60S	29.76E	0.05	-42.88	449494.96	529424.80
2900.00	1.29	150.64	2899.37	41.60S	30.82E	0.07	-44.99	449496.02	529422.80
3000.00	1.22	148.88	2999.34	43.50S	31.93E	0.08	-47.01	449497.13	529420.90
3100.00	1.09	147.66	3099.32	45.22S	32.99E	0.14	-48.84	449498.19	529419.18
3200.00	1.02	148.19	3199.31	46.78S	33.96E	0.07	-50.51	449499.16	529417.62
3300.00	0.96	155.09	3299.29	48.29S	34.79E	0.13	-52.11	449499.99	529416.11
3400.00	0.88	160.79	3399.28	49.78S	35.39E	0.12	-53.66	449500.59	529414.62
3474.00	0.62	149.40	3473.27	50.66S	35.78E	0.40	-54.58	449500.98	529413.74
3506.00	0.26	244.40	3505.27	50.84S	35.81E	2.17	-54.77	449501.01	529413.56
3538.00	1.20	313.30	3537.27	50.64S	35.50E	3.54	-54.53	449500.70	529413.76
3569.00	2.20	322.70	3568.26	49.95S	34.90E	3.34	-53.77	449500.10	529414.45
3601.00	2.90	327.00	3600.22	48.78S	34.09E	2.27	-52.51	449499.29	529415.62
3633.00	3.40	331.50	3632.18	47.27S	33.19E	1.74	-50.90	449498.39	529417.13
3664.00	4.00	333.60	3663.11	45.49S	32.28E	1.98	-49.03	449497.48	529418.91
3696.00	5.00	334.40	3695.01	43.23S	31.18E	3.13	-46.66	449496.38	529421.17
3727.00	5.20	336.40	3725.89	40.73S	30.03E	0.86	-44.03	449495.23	529423.67
3759.00	6.20	336.10	3757.73	37.82S	28.75E	3.13	-40.99	449493.95	529426.58
3791.00	6.00	338.20	3789.55	34.69S	27.43E	0.94	-37.72	449492.63	529429.71
3823.00	6.50	337.50	3821.36	31.46S	26.11E	1.58	-34.36	449491.31	529432.94
3854.00	7.20	336.50	3852.14	28.06S	24.67E	2.29	-30.81	449489.87	529436.34
3886.00	8.10	338.60	3883.85	24.12S	23.05E	2.94	-26.71	449488.25	529440.28
3918.00	8.50	340.30	3915.52	19.79S	21.43E	1.47	-22.22	449486.63	529444.61

All data in feet unless otherwise stated. Calculation uses minimum curvature method.
Coordinates from slot #1 and TVD from rotary table.
Bottom hole distance is 1118.13 on azimuth 353.52 degrees from wellhead.
Vertical section is from S 0.00 E 0.00 on azimuth 353.12 degrees.
Grid is mercator - New Mexico East (3001).
Grid coordinates in FEET and computed using the Clarke - 1866 spheroid
Presented by Baker Hughes INTEQ