

Marathon Oil Company
NIBU #22

slot #1
NIBU
Eddy County New Mexico

S U R V E Y L I S T I N G

by
Baker Hughes INTEQ

Your ref : MWD
Our ref : svy2562
License :

Date printed : 7-Apr-2005
Date created : 23-Apr-2004
Last revised : 4-May-2004

Field is centred on n32 30 0.000,w103 10 0
Structure is centred on n32 30 0.000,w103 10 0

Slot location is n32 30 0.000,w103 10 0.000
Slot Grid coordinates are N 547580.662, E 859694.731
Slot local coordinates are 0.00 N 0.00 E

Projection type: mercator - New Mexico East (3001), Spheroid: Clarke - 1866

Reference North is Grid North

Marathon Oil Company
NIBU #22, slot #1
NIBU, Eddy County New Mexico

SURVEY LISTING Page 1
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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 C O O R D S Easting Northing	
0.00	0.00	0.00	0.00	0.00N	0.00E	0.00	172.85	859694.73	547580.66
200.00	0.60	212.23	200.00	0.89S	0.56W	0.30	172.29	859694.17	547579.78
400.00	1.38	214.82	399.96	3.75S	2.49W	0.39	170.36	859692.24	547576.91
600.00	0.87	221.80	599.93	6.86S	4.88W	0.26	167.97	859689.85	547573.80
800.00	0.78	223.42	799.91	8.98S	6.83W	0.05	166.02	859687.90	547571.68
1000.00	0.68	240.57	999.89	10.55S	8.80W	0.12	164.05	859685.93	547570.11
1200.00	0.79	240.81	1199.87	11.81S	11.03W	0.06	161.82	859683.70	547568.86
1400.00	0.91	234.64	1399.85	13.40S	13.53W	0.08	159.32	859681.20	547567.26
1600.00	1.03	235.79	1599.82	15.33S	16.31W	0.06	156.54	859678.42	547565.33
1800.00	1.04	234.86	1799.79	17.38S	19.29W	0.01	153.57	859675.45	547563.28
2000.00	1.11	232.82	1999.75	19.60S	22.31W	0.04	150.54	859672.42	547561.06
2200.00	1.17	234.98	2199.71	21.94S	25.53W	0.04	147.32	859669.20	547558.72
2400.00	1.22	232.03	2399.67	24.42S	28.88W	0.04	143.97	859665.85	547556.24
2600.00	1.23	235.71	2599.63	26.94S	32.33W	0.04	140.52	859662.40	547553.72
2800.00	1.25	241.18	2799.58	29.20S	36.02W	0.06	136.83	859658.72	547551.46
3000.00	1.22	237.03	2999.53	31.41S	39.71W	0.05	133.14	859655.02	547549.25
3200.00	1.21	238.08	3199.49	33.69S	43.29W	0.01	129.56	859651.44	547546.97
3400.00	1.18	243.79	3399.44	35.71S	46.93W	0.06	125.92	859647.80	547544.95
3600.00	1.12	249.77	3599.40	37.30S	50.61W	0.07	122.24	859644.12	547543.36
3800.00	1.88	246.84	3799.33	39.27S	55.46W	0.38	117.39	859639.27	547541.40
4000.00	1.92	246.04	3999.22	41.92S	61.54W	0.02	111.31	859633.19	547538.75
4200.00	1.96	253.50	4199.11	44.25S	67.88W	0.13	104.97	859626.85	547536.41
4400.00	2.00	257.14	4398.99	46.00S	74.57W	0.07	98.29	859620.17	547534.67
4600.00	1.86	269.49	4598.88	46.80S	81.21W	0.22	91.64	859613.52	547533.86
4800.00	1.71	286.63	4798.78	45.98S	87.32W	0.28	85.53	859607.41	547534.68
5000.00	1.83	306.45	4998.69	43.23S	92.75W	0.31	80.10	859601.99	547537.44
5200.00	2.11	297.83	5198.57	39.61S	98.57W	0.20	74.28	859596.16	547541.05
5400.00	2.37	295.05	5398.42	36.14S	105.57W	0.14	67.28	859589.16	547544.52
5600.00	2.53	291.95	5598.23	32.74S	113.41W	0.10	59.44	859581.32	547547.92
5800.00	2.41	283.61	5798.05	30.10S	121.59W	0.19	51.26	859573.14	547550.56
6000.00	2.29	282.44	5997.88	28.25S	129.58W	0.06	43.27	859565.15	547552.41
6200.00	1.94	277.21	6197.74	26.96S	136.84W	0.20	36.01	859557.89	547553.70
6400.00	1.77	266.68	6397.64	26.72S	143.29W	0.19	29.56	859551.45	547553.94
6600.00	1.42	261.89	6597.56	27.25S	148.82W	0.19	24.03	859545.91	547553.42
6800.00	1.56	275.05	6797.50	27.36S	153.99W	0.18	18.86	859540.74	547553.31
7000.00	0.71	257.82	6997.45	27.38S	157.91W	0.45	14.94	859536.82	547553.28
7200.00	0.22	243.18	7197.45	27.81S	159.47W	0.25	13.39	859535.27	547552.85
7400.00	1.15	258.10	7397.43	28.40S	161.77W	0.47	11.08	859532.96	547552.26
7600.00	1.31	274.40	7597.39	28.64S	166.02W	0.19	6.84	859528.72	547552.02
7800.00	1.42	270.58	7797.33	28.44S	170.77W	0.07	2.08	859523.96	547552.22
7900.00	0.97	262.34	7897.31	28.54S	172.85W	0.48	0.00	859521.88	547552.12
8074.00	1.50	249.60	8071.27	29.53S	176.44W	0.34	-3.59	859518.29	547551.13
8105.00	1.30	255.80	8102.26	29.76S	177.17W	0.81	-4.32	859517.57	547550.91
8137.00	0.50	218.60	8134.25	29.95S	177.61W	2.97	-4.75	859517.13	547550.71
8169.00	0.50	151.80	8166.25	30.19S	177.63W	1.72	-4.78	859517.11	547550.48
8200.00	1.10	111.70	8197.25	30.42S	177.29W	2.54	-4.44	859517.45	547550.25
8231.00	2.50	100.80	8228.23	30.65S	176.35W	4.63	-3.49	859518.39	547550.01
8263.00	3.80	102.60	8260.18	31.01S	174.62W	4.07	-1.77	859520.11	547549.65
8294.00	5.40	102.30	8291.08	31.55S	172.20W	5.16	0.65	859522.53	547549.11
8326.00	6.60	100.50	8322.91	32.20S	168.92W	3.80	3.93	859525.81	547548.46

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 435.49 on azimuth 94.58 degrees from wellhead.
Vertical section is from S 28.54 W 172.85 on azimuth 90.00 degrees.
Grid is mercator - New Mexico East (3001).
Grid coordinates in FEET and computed using the Clarke - 1866 spheroid
Presented by Baker Hughes INTEQ

Marathon Oil Company
NIBU #22, slot #1
NIBU, Eddy County New Mexico

SURVEY LISTING Page 3
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Last revised : 4-May-2004

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
8358.00	7.60	96.30	8354.66	32.77S	165.01W	3.52	7.84	859529.73
8390.00	8.80	91.40	8386.33	33.06S	160.46W	4.34	12.40	859534.28
8421.00	10.50	86.80	8416.90	32.96S	155.26W	6.02	17.59	859539.47
8452.00	12.20	85.40	8447.29	32.54S	149.18W	5.56	23.67	859545.55
8484.00	14.50	84.70	8478.42	31.90S	141.82W	7.21	31.03	859552.91
8516.00	15.90	84.30	8509.30	31.10S	133.47W	4.39	39.38	859561.26
8548.00	17.30	83.30	8539.97	30.11S	124.38W	4.47	48.47	859570.35
8580.00	19.20	84.00	8570.36	29.00S	114.42W	5.98	58.43	859580.31
8611.00	21.20	84.70	8599.45	27.95S	103.77W	6.50	69.08	859590.96
8642.00	22.60	88.20	8628.21	27.25S	92.23W	6.17	80.62	859602.50
8674.00	24.30	89.90	8657.57	27.04S	79.50W	5.72	93.35	859615.23
8706.00	25.60	91.00	8686.58	27.15S	66.00W	4.31	106.85	859628.73
8737.00	27.20	90.30	8714.35	27.30S	52.22W	5.26	120.63	859642.51
8769.00	28.90	89.90	8742.59	27.33S	37.17W	5.34	135.68	859657.56
8801.00	29.20	89.90	8770.56	27.30S	21.64W	0.94	151.21	859673.09
8865.00	28.00	91.40	8826.75	27.64S	9.00E	2.18	181.85	859703.73
8896.00	26.20	94.90	8854.35	28.40S	23.09E	7.75	195.94	859717.82
8927.00	25.10	97.30	8882.29	29.82S	36.43E	4.88	209.28	859731.16
8960.00	25.20	96.60	8912.17	31.52S	50.35E	0.95	223.20	859745.08
8991.00	27.00	95.00	8940.00	32.89S	63.92E	6.23	236.77	859758.65
9023.00	25.70	93.50	8968.68	33.95S	78.08E	4.56	250.93	859772.81
9055.00	26.70	91.70	8997.39	34.59S	92.19E	3.99	265.05	859786.93
9087.00	27.90	90.30	9025.83	34.84S	106.87E	4.25	279.72	859801.60
9119.00	29.10	88.50	9053.95	34.68S	122.13E	4.61	294.98	859816.87
9183.00	31.10	85.40	9109.32	32.94S	154.17E	3.96	327.02	859848.90
9246.00	31.40	84.70	9163.18	30.12S	186.73E	0.75	359.58	859881.46
9308.00	31.40	84.70	9216.10	27.14S	218.90E	0.00	391.75	859913.63
9371.00	31.20	87.10	9269.93	24.80S	251.54E	2.00	424.39	859946.27
9434.00	31.00	87.10	9323.88	23.15S	284.04E	0.32	456.89	859978.77
9498.00	30.40	89.20	9378.91	22.09S	316.69E	1.92	489.54	860011.42
9561.00	30.40	89.60	9433.25	21.76S	348.57E	0.32	521.42	860043.30
9625.00	28.20	96.30	9489.07	23.30S	379.80E	6.16	552.65	860074.53
9688.00	25.80	104.00	9545.22	28.25S	407.91E	6.72	580.77	860102.65
9750.00	25.80	104.00	9601.04	34.78S	434.10E	0.00	606.95	860128.83

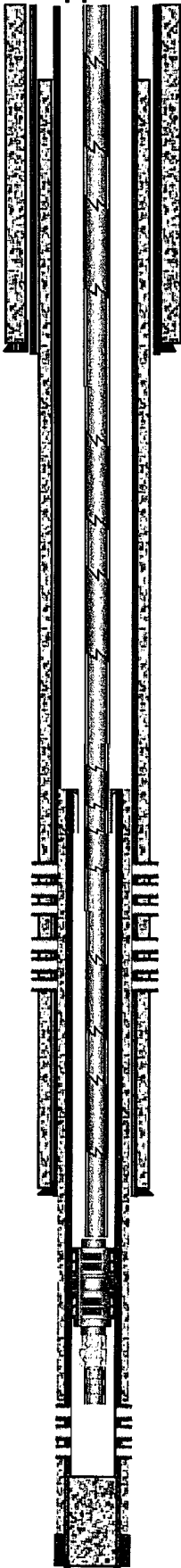
All data in feet unless otherwise stated. Calculation uses minimum curvature method.
Coordinates from slot #1 and TVD from rotary table.
Bottom hole distance is 435.49 on azimuth 94.58 degrees from wellhead.
Vertical section is from S 28.54 W 172.85 on azimuth 90.00 degrees.
Grid is mercator - New Mexico East (3001).
Grid coordinates in FEET and computed using the Clarke - 1866 spheroid
Presented by Baker Hughes INTEQ



North Indian Basin Unit No. 22
Morrow completion / Upper Penn Abandoned

Marathon Oil Company
North Indian Basin Unit No. 22
27-May-04

Well Spudded 11/07/1995



Surface 9 5/8" 36# K-55 Set @ 1210' w/550 sks
Hole size 12 1/4" cement to surface

Top of 4 1/2" 11.6# liner set @ 6989'
cement to top of liner.

Squeezed Upper Penn Perfs 7060' to 7080'

Squeezed Upper Penn Perfs 7732' to 7824'

Production Casing 7" 23&26# K-55 set @ 8050'
w/ 1085 sks. Hole size 8 3/4" cement to surface

4 1/2" packer @ 8905'

Landing nipple, XN nipple & 1 jt 2 3/8" tubing
below packer
Bottom of assembly ~8940'

Cement, Float collar, and Float shoe @
9690' - 9750'

Morrow Perfs 9070'-9084' 9389'-9393', &
9432' - 9448'

4 1/2" 11.6# liner set @ 9750 MD, 9601 TVD
w/ 200 sks cement.

Well Name & Number:	North Indian Basin Unit No. 22		Lease	North Indian Basin Unit	
County or Parish:	Eddy	State/Prov.	New Mexico	Country:	USA
Perforations: (MD)	9070'-9084', 9389'-9393', & 9432'- 9448'		TD MD/TVD	9750' / 9601'	
Date Completed:	05/27/04				RKB:
Prepared By:	Charles Kendrix		Last Revision Date:	04/08/05	