

MARATHON OIL COMPANY - MID CONTINENT REGION
DIRECTIONAL SURVEY DATA

WELLNAME: NIBU 27	RIG NUMBER: McVay 4
FIELD: Indian Basin	COUNTY/STATE: Eddy County, New Mexico
TARGET AZIMUTH (0-360): 97.04 (S83.96E)	SPUD DATE: 30-May-98

MEASURED DEPTH (FT.)	HOLE ANGLE (DEG)	HOLE AZIMUTH (0-360D)	TRUE VERTICAL DEPTH (FT.)	+ NORTH - SOUTH (FT.)	+ EAST - WEST (FT.)	CLOSURE (FT.)	TRUE SECTION (FT.)	DOGLEG SEVERITY (D/100')	+ BUILD - DROP RATE (D/100')	WALK RATE + R/L (D/100')
4800	1.21	338.98	4799.0	-62.49	30.00	69.32	37.43	0.23	0.09	10.54
4900	1.58	329.87	4899.0	-60.35	28.89	88.91	36.07	0.39	0.35	-7.29
5000	1.70	330.80	4998.9	-57.88	27.48	84.07	34.37	0.14	0.14	1.13
5100	1.72	329.89	5098.9	-55.29	26.01	81.10	32.59	0.03	0.02	-0.91
5200	1.97	328.53	5198.8	-62.55	24.31	57.90	30.56	0.27	0.25	-3.38
5250	2.08	331.23	5248.8	-61.04	23.39	55.14	29.47	0.41	0.24	9.40
5389	1.40	18.40	5367.8	-47.73	22.74	52.87	28.41	1.23	-0.58	37.12
5400	1.80	87.50	5398.7	-47.11	23.25	52.53	28.84	3.90	1.29	138.81
5431	2.20	88.20	5429.7	-46.60	24.20	52.50	29.73	1.55	1.29	24.84
5481	3.10	78.20	5458.7	-46.16	25.51	52.74	30.97	3.43	3.00	38.67
5493	3.90	80.00	5491.8	-45.77	27.42	53.35	32.82	2.80	2.50	11.88
5525	5.20	80.00	5523.5	-45.32	29.92	54.81	35.25	4.06	4.06	0.00
5556	5.80	86.50	5554.4	-44.98	32.87	55.71	38.13	2.79	1.94	20.97
5588	6.20	89.90	5586.2	-44.85	36.21	57.67	41.44	1.85	1.25	10.31
5619	6.20	92.70	5617.0	-44.95	39.55	59.88	44.77	1.01	0.00	9.35
5651	7.10	90.50	5648.8	-45.05	43.26	62.46	48.45	2.92	2.51	-8.88
5682	7.70	89.10	5679.6	-45.04	47.25	65.28	52.41	2.02	1.94	-4.62
5714	7.40	82.00	5711.3	-45.07	51.45	68.40	56.59	1.52	-0.84	9.06
5744	8.50	94.10	5741.0	-45.30	55.80	71.71	60.73	3.79	3.67	7.00
5778	9.80	85.50	5772.6	-45.73	60.67	75.97	65.81	4.12	4.06	4.38
5807	9.80	96.80	5803.1	-46.30	65.91	80.55	71.09	0.77	0.00	4.82
5839	10.80	98.70	5834.8	-47.12	71.52	85.65	76.75	2.94	2.50	8.75
5879	12.00	95.50	5873.9	-48.14	79.28	92.75	84.58	4.06	3.50	-10.50
5909	12.40	98.70	5903.2	-48.76	85.59	98.51	90.92	1.34	1.33	0.67
5941	13.70	94.80	5934.3	-49.42	92.79	105.13	98.14	4.11	4.06	-2.81
5971	14.20	94.10	5963.8	-49.98	100.00	111.79	105.37	1.76	1.87	-2.43
6001	15.30	94.80	5992.5	-50.57	107.81	118.90	113.00	3.71	3.67	2.33
6094	13.90	92.00	6082.5	-51.99	131.00	140.84	136.39	1.69	-1.51	-3.01
6186	13.20	92.00	6171.9	-52.74	152.55	161.41	157.86	0.76	-0.76	0.00
6278	11.30	82.70	6261.8	-53.53	172.05	180.19	177.31	2.07	-2.07	0.75
6371	14.80	97.60	6352.4	-55.54	193.01	200.84	198.36	4.05	3.87	5.27
6461	17.20	84.80	6438.9	-58.19	217.74	228.38	223.23	2.70	2.56	-3.11
6554	17.90	94.10	6527.5	-60.36	246.70	253.01	251.25	0.79	0.75	-0.75
6646	16.80	89.00	6615.4	-63.43	272.79	280.06	275.50	2.12	-1.41	5.33
6738	16.00	103.10	6703.7	-68.36	298.12	305.85	304.25	1.41	-0.65	4.48
6789	14.20	105.10	6733.5	-70.32	305.85	313.93	312.28	5.04	-5.81	6.48
6800	12.80	105.30	6763.8	-72.21	312.93	321.16	319.42	4.52	-4.52	0.85
6830	11.40	108.70	6793.1	-73.94	318.98	327.44	325.84	4.77	-4.67	4.67
6861	10.40	108.10	6823.5	-75.89	324.57	333.28	331.40	3.34	-3.23	4.52
6892	10.30	102.90	6854.0	-77.19	329.93	338.84	336.91	3.03	-0.32	-16.77
6922	10.50	104.80	6883.6	-78.47	335.19	344.26	342.28	1.22	0.87	5.87
6953	10.90	104.50	6914.0	-79.82	340.76	350.01	347.89	1.29	1.28	0.00
6984	10.90	108.50	6944.5	-81.59	346.38	355.86	353.77	2.38	0.00	12.58
7015	10.70	114.50	6974.9	-83.71	351.76	361.60	359.38	3.68	-0.65	19.85
7046	11.00	116.80	7005.4	-86.23	357.04	367.31	364.92	1.60	0.97	6.77
7076	12.00	113.00	7034.7	-88.73	362.47	373.17	370.81	4.10	3.33	-12.00
7107	13.40	107.40	7065.0	-91.08	368.87	379.94	377.25	6.01	4.52	-18.06
7138	14.10	104.80	7095.1	-93.09	375.95	387.30	384.62	3.12	2.26	-9.03

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7168	14.10	102.60	7124.2	-94.81	383.05	394.61	391.78	1.62	0.00	-6.67
7199	13.40	103.80	7184.3	-96.48	390.22	401.98	398.11	2.44	-2.28	3.87
7230	12.00	108.10	7184.6	-96.35	398.78	408.78	408.84	5.45	-4.52	13.87
7281	11.30	111.80	7214.9	-100.47	402.68	418.01	411.94	3.21	-2.28	11.28
7291	10.00	115.90	7244.4	-102.69	407.74	420.47	417.25	5.08	-4.33	14.33
7322	9.10	120.20	7275.0	-106.09	412.28	426.46	422.06	3.70	-2.90	13.87
7425	6.70	133.00	7377.0	-113.29	423.72	438.60	434.41	2.88	-2.33	12.43
7517	4.00	112.00	7468.8	-118.15	430.62	446.83	441.88	3.88	-2.93	-22.83
7639	6.00	100.00	7590.1	-120.86	440.84	457.11	452.33	1.84	1.64	-9.84
7760	10.00	106.00	7709.8	-124.68	457.23	473.92	469.06	3.35	3.31	4.13
7830	12.00	110.00	7778.6	-128.74	469.94	487.25	482.17	3.16	2.86	7.14
7876	13.00	112.00	7823.5	-132.31	478.23	497.18	481.83	2.37	2.17	4.25
7999	10.00	110.00	7944.1	-141.15	502.09	521.56	515.61	2.46	-2.44	-1.63
8152	7.00	135.00	8085.4	-152.29	521.18	542.87	535.92	3.07	-1.96	16.84
8243	6.50	150.00	8185.8	-160.67	527.68	551.60	543.39	2.01	-0.55	16.48
8300	6.50	150.00	8242.4	-166.26	530.90	556.33	547.28	0.00	0.00	0.00
			-39.8	241.03	295.76	381.53	263.98	-0.06	0.06	1.81
			-39.8	241.03	295.76	381.53	263.98	#DIV/0!	#DIV/0!	#DIV/0!
			-39.8	241.03	295.76	381.53	263.98	#DIV/0!	#DIV/0!	#DIV/0!
			-39.8	241.03	295.76	381.53	263.98	#DIV/0!	#DIV/0!	#DIV/0!
			-39.8	241.03	295.76	381.53	263.98	#DIV/0!	#DIV/0!	#DIV/0!
			-39.8	241.03	295.76	381.53	263.98	#DIV/0!	#DIV/0!	#DIV/0!
			-39.8	241.03	295.76	381.53	263.98	#DIV/0!	#DIV/0!	#DIV/0!