

RECORD OF TVD SURVEY
 Date: 06-Oct-2004 10:55
 Calculated by Desktop Petrophysics TVD, Minimum Curvature Method

MEAS. DEPTH (M)	DRIFT ANGLE (DEG)	T.V.D. (M)	HOLE BEARING (DEG)	COURSE COORDINATES				TOTAL COORDINATES			
				NORTH (M)	SOUTH (M)	EAST (M)	WEST (M)	NORTH (M)	SOUTH (M)	EAST (M)	WEST (M)
876.10	1.43	876.10	303.41	0.00		-0.00		0.00		-0.00	
901.67	0.56	901.67	336.09	0.07		-0.11		0.17		-0.33	
914.46	0.54	914.46	266.22	0.05		-0.09		0.22		-0.42	
927.25	0.50	927.25	257.93	-0.02		-0.11		0.21		-0.53	
940.03	0.78	940.03	167.91	-0.10		-0.04		0.11		-0.57	
952.82	0.57	952.81	246.14	-0.11		-0.04		0.00		-0.61	
965.60	0.39	965.59	241.04	-0.05		-0.10		-0.05		-0.71	
978.39	0.69	978.38	265.24	-0.03		-0.11		-0.07		-0.82	
991.18	1.16	991.17	307.38	0.07		-0.18		-0.00		-1.00	
1003.96	1.40	1003.95	299.50	0.16		-0.24		0.15		-1.24	
1016.75	0.99	1016.74	300.11	0.13		-0.23		0.29		-1.47	
1029.54	1.23	1029.52	313.95	0.15		-0.19		0.44		-1.66	
1042.32	1.16	1042.30	329.96	0.21		-0.16		0.64		-1.83	
1055.11	1.35	1055.09	5.58	0.26		-0.05		0.91		-1.88	
1067.90	1.39	1067.87	316.53	0.26		-0.09		1.17		-1.97	
1080.68	1.68	1080.65	344.18	0.29		-0.16		1.46		-2.13	
1093.47	1.95	1093.43	316.57	0.34		-0.20		1.80		-2.33	
1106.26	1.64	1106.22	107.21	0.10		0.03		1.90		-2.30	
1119.04	1.57	1119.00	306.80	0.05		0.03		1.95		-2.27	
1131.83	1.59	1131.79	274.35	0.12		-0.32		2.07		-2.59	
1144.62	1.79	1144.57	56.73	0.12		-0.01		2.20		-2.60	
1157.40	1.74	1157.35	273.25	0.12		-0.03		2.32		-2.62	
1170.19	1.77	1170.13	273.13	0.02		-0.39		2.34		-3.01	
1182.97	1.94	1182.91	275.63	0.03		-0.41		2.37		-3.43	
1195.76	1.79	1195.69	260.49	-0.01		-0.41		2.36		-3.84	
1208.55	1.79	1208.48	91.67	-0.04		0.00		2.32		-3.84	
1221.33	1.90	1221.25	82.93	0.02		0.41		2.34		-3.43	
1234.12	1.62	1234.04	288.39	0.08		0.04		2.42		-3.39	
1246.91	1.89	1246.82	274.87	0.07		-0.38		2.50		-3.77	
1259.69	2.05	1259.60	274.09	0.03		-0.44		2.53		-4.21	
1272.48	2.02	1272.38	277.53	0.05		-0.45		2.58		-4.66	
1285.27	2.16	1285.17	91.60	0.02		0.02		2.60		-4.64	
1298.05	2.10	1297.94	80.63	0.03		0.47		2.63		-4.17	
1310.84	2.22	1310.72	96.83	0.01		0.48		2.64		-3.69	
1323.63	2.14	1323.50	268.77	-0.03		0.01		2.61		-3.69	
1336.41	2.25	1336.28	114.57	-0.11		-0.01		2.50		-3.70	
1349.20	2.46	1349.07	262.23	-0.14		-0.04		2.36		-3.74	
1361.98	2.42	1361.84	271.08	-0.03		-0.54		2.32		-4.28	
1374.77	2.28	1374.62	130.81	-0.16		-0.08		2.16		-4.36	
1387.56	2.67	1387.41	257.97	-0.23		-0.10		1.93		-4.46	
1400.34	2.65	1400.17	259.64	-0.12		-0.58		1.82		-5.04	
1413.13	2.92	1412.95	274.29	-0.03		-0.62		1.79		-5.65	
1425.92	2.89	1425.72	268.27	0.01		-0.65		1.80		-6.30	
1438.70	3.30	1438.48	273.37	0.01		-0.69		1.82		-6.99	
1451.49	2.95	1451.25	309.39	0.23		-0.62		2.05		-7.61	
1464.28	3.29	1464.03	276.00	0.25		-0.62		2.29		-8.23	
1477.06	2.99	1476.79	287.27	0.14		-0.68		2.43		-8.92	
1489.85	2.72	1489.56	291.86	0.21		-0.60		2.64		-9.52	
1502.64	2.84	1502.34	265.45	0.09		-0.60		2.73		-10.11	
1515.42	2.61	1515.10	242.58	-0.16		-0.57		2.57		-10.69	
1528.21	1.98	1527.88	250.52	-0.21		-0.47		2.36		-11.15	
1540.99	2.03	1540.65	267.99	-0.08		-0.43		2.28		-11.59	
1553.78	2.04	1553.44	292.17	0.08		-0.44		2.36		-12.03	
1566.57	2.11	1566.22	304.73	0.22		-0.40		2.58		-12.43	
1579.35	2.31	1578.99	300.04	0.26		-0.42		2.84		-12.85	
1592.14	2.95	1591.77	303.22	0.31		-0.50		3.15		-13.34	
1604.93	3.36	1604.54	286.52	0.29		-0.63		3.44		-13.98	
1617.71	2.78	1617.30	281.24	0.17		-0.66		3.61		-14.64	
1630.50	2.67	1630.07	292.33	0.17		-0.58		3.78		-15.22	
1643.29	2.28	1642.85	327.27	0.33		-0.41		4.11		-15.64	
1656.07	2.74	1655.63	212.85	-0.04		-0.30		4.06		-15.94	
1668.86	2.54	1668.40	263.22	-0.29		-0.45		3.77		-16.39	
1681.65	2.72	1681.18	293.15	0.09		-0.56		3.86		-16.95	
1694.43	2.88	1693.95	306.95	0.31		-0.54		4.17		-17.48	
1707.22	3.27	1706.72	315.51	0.45		-0.51		4.63		-17.99	
1720.00	3.35	1719.48	303.35	0.47		-0.57		5.09		-18.56	
1732.79	3.33	1732.24	319.89	0.49		-0.55		5.58		-19.11	

1745.58	3.22	1745.01	339.70	0.62	-0.36	6.20	-19.48
1758.36	3.55	1757.77	322.59	0.65	-0.36	6.85	-19.84
1771.15	3.54	1770.54	256.39	0.22	-0.62	7.07	-20.47
1783.94	3.85	1783.31	247.57	-0.26	-0.78	6.82	-21.25
1796.72	3.59	1796.06	247.77	-0.32	-0.77	6.50	-22.01
1809.51	3.98	1808.82	251.85	-0.29	-0.79	6.21	-22.81
1822.30	3.49	1821.59	284.69	-0.04	-0.80	6.17	-23.61
1835.08	2.88	1834.35	305.78	0.29	-0.64	6.46	-24.24
1847.87	2.87	1847.12	317.71	0.42	-0.48	6.88	-24.72
1860.66	3.79	1859.89	355.14	0.66	-0.25	7.54	-24.97
1873.44	3.91	1872.65	108.56	0.28	0.38	7.82	-24.59
1886.23	3.80	1885.42	197.09	-0.54	0.29	7.28	-24.30
1899.01	4.06	1898.18	248.14	-0.57	-0.54	6.71	-24.85
1911.80	4.45	1910.93	249.39	-0.34	-0.88	6.36	-25.73
1924.59	4.55	1923.68	249.34	-0.35	-0.94	6.01	-26.67
1937.37	4.13	1936.43	257.18	-0.28	-0.92	5.73	-27.59
1950.16	4.80	1949.18	260.22	-0.19	-0.98	5.54	-28.57
1962.95	4.35	1961.93	256.91	-0.20	-1.00	5.34	-29.57
1975.73	4.55	1974.67	251.94	-0.27	-0.95	5.07	-30.52
1988.52	5.16	1987.41	253.22	-0.32	-1.03	4.75	-31.56
2001.31	4.60	2000.16	241.50	-0.41	-1.00	4.33	-32.56
2014.09	5.02	2012.89	232.16	-0.59	-0.89	3.75	-33.45
2026.88	4.73	2025.64	238.65	-0.62	-0.89	3.13	-34.34
2039.67	5.15	2038.38	273.65	-0.24	-1.02	2.89	-35.37
2052.45	5.13	2051.11	276.54	0.10	-1.14	2.99	-36.51
2065.24	5.19	2063.85	272.67	0.09	-1.15	3.08	-37.65
2078.02	4.80	2076.58	264.39	-0.03	-1.11	3.06	-38.76
2090.81	5.01	2089.32	261.16	-0.14	-1.08	2.92	-39.85
2103.60	4.85	2102.07	260.49	-0.18	-1.09	2.75	-40.93
2116.38	5.01	2114.80	263.56	-0.15	-1.09	2.59	-42.02
2129.17	4.99	2127.54	270.95	-0.05	-1.11	2.54	-43.13
2141.96	5.03	2140.28	265.80	-0.03	-1.12	2.51	-44.25
2154.74	5.01	2153.01	266.09	-0.08	-1.12	2.43	-45.36
2167.53	5.31	2165.75	268.85	-0.05	-1.15	2.38	-46.51
2180.32	5.23	2178.49	262.74	-0.09	-1.17	2.29	-47.68
2193.10	5.18	2191.21	264.82	-0.13	-1.15	2.17	-48.83
2205.89	5.08	2203.95	262.15	-0.13	-1.14	2.04	-49.97
2218.68	5.19	2216.69	264.95	-0.13	-1.14	1.91	-51.10
2231.46	5.32	2229.42	265.31	-0.10	-1.17	1.81	-52.27
2244.25	5.40	2242.15	264.15	-0.11	-1.19	1.70	-53.46
2257.03	5.37	2254.88	266.28	-0.10	-1.19	1.60	-54.66
2269.82	5.63	2267.61	271.83	-0.02	-1.22	1.58	-55.88
2282.61	4.86	2280.34	266.83	-0.01	-1.17	1.57	-57.05
2295.39	4.71	2293.08	285.69	0.11	-1.05	1.69	-58.09
2308.18	4.50	2305.83	294.09	0.35	-0.96	2.03	-59.06
2320.97	4.11	2318.58	298.35	0.42	-0.86	2.45	-59.92
2333.75	3.83	2331.33	296.37	0.41	-0.79	2.86	-60.70
2346.54	3.87	2344.09	304.09	0.43	-0.74	3.29	-61.44
2359.33	3.17	2356.86	302.98	0.43	-0.65	3.73	-62.10
2372.11	3.53	2369.62	310.61	0.45	-0.60	4.18	-62.69
2384.90	3.51	2382.38	308.54	0.50	-0.61	4.68	-63.30
2397.69	3.01	2395.15	301.96	0.42	-0.59	5.10	-63.89
2410.47	3.16	2407.91	310.26	0.41	-0.55	5.50	-64.44
2423.26	2.71	2420.69	319.72	0.46	-0.46	5.96	-64.91
2436.04	2.83	2433.45	314.95	0.45	-0.42	6.42	-65.33
2448.83	2.74	2446.23	325.63	0.48	-0.40	6.89	-65.72
2461.62	2.51	2459.00	326.04	0.48	-0.33	7.38	-66.05
2474.40	2.26	2471.77	336.88	0.46	-0.26	7.84	-66.31
2487.19	2.68	2484.55	342.90	0.52	-0.19	8.36	-66.49
2499.98	2.29	2497.33	344.20	0.53	-0.16	8.89	-66.65
2512.76	2.22	2510.10	348.74	0.49	-0.12	9.38	-66.77
2525.55	2.18	2522.88	359.70	0.49	-0.05	9.86	-66.82
2538.34	2.53	2535.66	14.62	0.52	0.07	10.38	-66.75
2551.12	2.37	2548.43	95.30	0.25	0.33	10.63	-66.41
2563.91	2.34	2561.21	210.18	-0.25	0.13	10.38	-66.28
2576.70	2.46	2573.99	280.99	-0.17	-0.40	10.20	-66.68
2589.48	2.67	2586.76	308.04	0.24	-0.50	10.44	-67.19
2602.27	2.71	2599.54	320.14	0.42	-0.43	10.86	-67.62
2615.05	2.66	2612.30	317.02	0.45	-0.40	11.30	-68.01
2627.84	2.64	2625.08	311.17	0.41	-0.42	11.72	-68.44
2640.63	2.77	2637.86	311.43	0.40	-0.45	12.11	-68.89
2653.41	2.98	2650.62	306.54	0.40	-0.50	12.52	-69.39
2666.20	2.78	2663.39	306.36	0.38	-0.52	12.90	-69.90
2678.99	3.07	2676.17	313.35	0.42	-0.50	13.32	-70.40
2691.77	3.06	2688.93	313.26	0.47	-0.50	13.79	-70.90
2704.56	2.78	2701.70	313.32	0.45	-0.47	14.23	-71.37
2717.35	3.09	2714.48	309.97	0.43	-0.49	14.67	-71.86
2730.13	2.57	2727.24	299.78	0.36	-0.51	15.03	-72.38
2742.92	2.54	2740.02	298.68	0.28	-0.50	15.31	-72.87
2755.71	2.20	2752.80	283.72	0.19	-0.49	15.50	-73.36

2768.49	2.06	2765.57	320.83	0.24	-0.38	15.74	-73.74
2781.28	1.94	2778.35	30.18	0.37	-0.04	16.10	-73.78
2794.06	1.93	2791.13	183.26	-0.03	0.10	16.08	-73.68
2806.85	1.86	2803.91	261.34	-0.25	-0.22	15.83	-73.90
2819.64	1.48	2816.70	283.08	0.01	-0.37	15.84	-74.27
2832.42	1.78	2829.47	309.32	0.16	-0.31	16.00	-74.58
2845.21	1.59	2842.26	320.65	0.26	-0.27	16.26	-74.85
2858.00	1.77	2855.04	318.14	0.28	-0.24	16.55	-75.09
2870.78	2.18	2867.82	320.72	0.34	-0.29	16.88	-75.38
2883.57	2.46	2880.59	310.88	0.37	-0.36	17.25	-75.74
2896.36	2.54	2893.37	312.80	0.37	-0.42	17.62	-76.16
2909.14	2.62	2906.14	303.70	0.35	-0.45	17.98	-76.61
2921.93	2.36	2918.92	302.64	0.30	-0.46	18.28	-77.07
2934.72	1.61	2931.70	299.57	0.23	-0.38	18.51	-77.45
2947.50	1.22	2944.48	316.93	0.19	-0.25	18.70	-77.70
2960.29	1.17	2957.26	310.75	0.18	-0.19	18.88	-77.89
2973.07	1.42	2970.04	319.46	0.21	-0.20	19.09	-78.09
2985.86	1.79	2982.82	321.68	0.28	-0.23	19.37	-78.32
2998.65	1.69	2995.61	319.67	0.30	-0.25	19.67	-78.57
3011.43	2.12	3008.38	316.97	0.32	-0.28	19.98	-78.85
3024.22	1.95	3021.16	326.10	0.35	-0.28	20.34	-79.13
3037.01	2.32	3033.95	298.88	0.31	-0.35	20.64	-79.48
3049.79	1.74	3046.72	278.66	0.15	-0.42	20.80	-79.90
3062.58	1.43	3059.50	285.19	0.07	-0.35	20.87	-80.24
3075.37	1.48	3072.29	307.73	0.14	-0.28	21.01	-80.53
3088.15	1.90	3085.06	297.11	0.20	-0.32	21.21	-80.85
3100.94	1.67	3097.85	294.97	0.18	-0.36	21.38	-81.20
3113.73	1.98	3110.63	289.66	0.15	-0.38	21.54	-81.58
3126.51	2.35	3123.40	277.69	0.11	-0.47	21.65	-82.05
3139.30	2.30	3136.18	253.80	-0.04	-0.51	21.61	-82.56
3152.09	1.52	3148.96	234.02	-0.17	-0.38	21.44	-82.94
3164.87	1.05	3161.74	270.13	-0.10	-0.25	21.34	-83.19
3177.66	1.99	3174.53	277.65	0.03	-0.34	21.37	-83.53
3190.44	2.31	3187.30	259.92	-0.02	-0.47	21.35	-84.00
3203.23	2.16	3200.08	241.80	-0.16	-0.47	21.19	-84.47
3216.02	1.53	3212.86	223.86	-0.24	-0.33	20.96	-84.80
3228.80	1.33	3225.64	203.27	-0.26	-0.18	20.70	-84.98
3241.59	0.76	3238.43	213.52	-0.21	-0.11	20.49	-85.08
3254.38	1.32	3251.21	207.39	-0.20	-0.11	20.29	-85.20
3267.16	1.53	3263.99	185.03	-0.30	-0.08	19.99	-85.28
3279.95	2.25	3276.77	200.13	-0.41	-0.10	19.58	-85.38
3292.74	2.78	3289.55	188.40	-0.54	-0.13	19.04	-85.51
3305.52	2.60	3302.32	186.68	-0.59	-0.08	18.45	-85.59
3318.31	2.13	3315.09	197.65	-0.51	-0.11	17.93	-85.70
3331.10	1.74	3327.88	191.83	-0.42	-0.11	17.52	-85.81
3343.88	1.49	3340.65	196.04	-0.35	-0.09	17.17	-85.90
3356.67	1.28	3353.44	179.47	-0.30	-0.04	16.86	-85.94
3369.45	0.74	3366.22	147.40	-0.21	0.05	16.65	-85.90
3382.24	0.28	3379.01	233.36	-0.09	0.02	16.56	-85.88
3395.03	1.11	3391.80	186.78	-0.14	-0.04	16.42	-85.92
3407.81	1.20	3404.57	150.24	-0.24	0.05	16.18	-85.86
3420.60	1.07	3417.36	128.29	-0.19	0.16	15.99	-85.70
3420.60	1.07	3417.36	128.29	-0.19	0.16	15.99	-85.70

MAGNETIC DECLINATION (Directional Offset) = 0.00
 CLOSURE DISTANCE = 87.18 METERS
 CLOSURE ANGLE = 280.57 DEGREE

Hole Bearing is corrected for Magnetic Declination (Directional Offset).