Company:	TRILOGY	Job Number:	PA-2530	Calculation Method	Minimum Curvature	8" Mud Mtr SN: 775-77259	8" Circ Hrs:
Field:	WATTENBERG	Magnetic Decl.:	8.74	Proposed Azimuth	357.71	Surface TD: 700	8" Bit Hrs:
Cty/Blk/Par:	WELD	Grid Corr.:	TRUE	Depth Reference	RKB	6.5" Mud Mtr SN: 65036B051	6.5" Circ Hrs:
Well Name:	WIND 17-23	Total Survey Corr.:	8.74	Tie Into Drill SURFACE		Production TD: 7563	6.5" Bit Hrs:
Rig:	CADE 25	Target Info:	BHL 1971'FSL & 1832'FWL			Spud Date: 29-Apr	Completion Date:

Survey Depth (ft)	Incl (°)	Azimuth (°)	Course Lgth (ft)	TVD (ft)	VS (ft)	Coordinates N/S (ft)		E/W (ft)		DLS (°/100')	Bld Rate (°/100')	Wlk Rate (°/100')	Remarks
87	0.10	309.20	87	87.00	0.05	0.05	N	0.06	W	0.11	0.1	355.4	
180	0.50	22.60	93	180.00	0.47	0.47	N	0.03	E	0.52	0.4	-308.2	
270	0.90	11.20	90	269.99	1.52	1.53	N	0.32	E	0.47	0.4	-12.7	
360	2.10	6.50	90	359.96	3.83	3.86	N	0.65	E	1.34	1.3	-5.2	
449	3.10	2.10	89	448.87	7.84	7.89	N	0.92	E	1.14	1.1	-4.9	
539	2.90	3.60	90	538.74	12.53	12.59	N	1.15	E	0.24	-0.2	1.7	
650	1.60	349.10	111	649.66	16.86	16.92	N	1.03	E	1.27	-1.2	311.3	SURFACE TD @ 700'
752	1.70	352.90	102	751.61	19.78	19.81	N	0.58	E	0.15	0.1	3.7	
848	1.70	349.20	96	847.57	22.60	22.63	N	0.14	E	0.11	0.0	-3.9	
943	2.60	3.50	95	942.50	26.14	26.16	N	0.00	E	1.10	0.9	-363.9	
1037	4.70	2.40	94	1036.31	32.10	32.14	N	0.29	E	2.24	2.2	-1.2	
1131	5.50	359.80	94	1129.94	40.44	40.49	N	0.44	E	0.89	0.9	380.2	
1226	6.40	356.60	95	1224.42	50.28	50.33	N	0.11	E	1.01	0.9	-3.4	
1321	7.90	355.70	95	1318.68	62.10	62.13	N	0.69	W	1.58	1.6	-0.9	
1415	8.70	355.20	94	1411.70	75.66	75.65	N	1.77	W	0.85	0.9	-0.5	
1510	9.50	357.50	95	1505.50	90.68	90.64	N	2.72	W	0.92	0.8	2.4	
1605	11.90	356.30	95	1598.84	108.31	108.25	N	3.69	W	2.54	2.5	-1.3	
1700	13.10	354.30	95	1691.59	128.85	128.74	N	5.39	W	1.34	1.3	-2.1	
1794	13.90	353.80	94	1782.99	150.75	150.57	N	7.67	W	0.86	0.9	-0.5	
1889	17.00	355.70	95	1874.55	176.02	175.76	N	9.94	W	3.31	3.3	2.0	
1983	17.70	357.00	94	1964.27	204.04	203.74	N	11.72	W	0.85	0.7	1.4	
2079	18.70	358.50	96	2055.47	234.03	233.70	N	12.89	W	1.15	1.0	1.6	
2173	19.70	358.50	94	2144.24	264.94	264.60	N	13.70	W	1.06	1.1	0.0	
2267	20.80	358.50	94	2232.43	297.47	297.12	N	14.55	W	1.17	1.2	0.0	
2362	22.00	357.80	95	2320.87	332.13	331.77	N	15.67	W	1.29	1.3	-0.7	
2457	23.50	356.80	95	2408.48	368.86	368.46	N	17.41	W	1.63	1.6	-1.1	
2551	24.30	356.10	94	2494.42	406.94	406.47	N	19.78	W	0.90	0.9	-0.7	
2646	24.20	354.90	95	2581.04	445.92	445.37	N	22.84	W	0.53	-0.1	-1.3	
2740	21.90	354.00	94	2667.53	482.66	482.00	N	26.38	W	2.48	-2.4	-1.0	
2835	22.20	355.00	95	2755.58	518.27	517.49	N	29.80	W	0.51	0.3	1.1	
2930	22.20	356.50	95	2843.54	554.14	553.29	N	32.46	W	0.60	0.0	1.6	
3025	20.60	355.40	95	2931.99	588.79	587.86	N	34.89	W	1.74	-1.7	-1.2	
3119	19.90	357.00	94	3020.18	621.31	620.32	N	37.06	W	0.95	-0.7	1.7	
3214	19.50	359.60	95	3109.62	653.32	652.32	N	38.01	W	1.01	-0.4	2.7	
3308	18.60	0.10	94	3198.47	683.98	683.01	N	38.10	W	0.97	-1.0	-382.4	
3403	19.90	1.70	95	3288.16	715.25	714.32	N	37.59	W	1.48	1.4	1.7	
3499	19.20	358.00	96	3378.62	747.34	746.43	N	37.66	W	1.48	-0.7	371.1	
3594	18.50	357.50	95	3468.53	778.03	777.10	N	38.86	W	0.76	-0.7	-0.5	
3689	18.80	356.80	95	3558.54	808.41	807.44	N	40.37	W	0.39	0.3	-0.7	
3784	19.20	355.70	95	3648.36	839.32	838.30	N	42.40	W	0.57	0.4	-1.2	
3879	20.30	356.40	95	3737.78	871.41	870.32	N	44.60	W	1.18	1.2	0.7	
3975	20.80	355.70	96	3827.67	905.09	903.94	N	46.93	W	0.58	0.5	-0.7	
4069	19.10	356.30	94	3916.02	937.15	935.93	N	49.17	W	1.82	-1.8	0.6	
4162	17.20	356.10	93	4004.39	966.11	964.84	N	51.09	W	2.04	-2.0	-0.2	
4258	16.90	357.50	96	4096.17	994.25	992.94	N	52.66	W	0.53	-0.3	1.5	
4353	16.80	355.60	95	4187.09	1021.78	1020.43	N	54.32	W	0.59	-0.1	-2.0	
4448	16.90	357.00	95	4278.02	1049.31	1047.90	N	56.09	W	0.44	0.1	1.5	
4544	15.90	359.80	96	4370.11	1076.40	1074.99	N	56.87	W	1.33	-1.0	2.9	
4639	15.90	2.10	95	4461.48	1102.38	1101.01	N	56.44	W	0.66	0.0	-376.5	
4734	16.20	0.10	95	4552.77	1128.60	1127.26	N	55.94	W	0.66	0.3	-2.1	
4828	16.90	359.40	94	4642.88	1155.36	1154.04	N	56.06	W	0.77	0.7	382.2	
4924	17.40	360.00	96	4734.61	1183.65	1182.35	N	56.21	W	0.55	0.5	0.6	
5020	15.30	359.10	96	4826.72	1210.65	1209.37	N	56.40	W	2.20	-2.2	-0.9	
5116	13.20	1.20	96	4919.76	1234.26	1232.99	N	56.37	W	2.25	-2.2	-372.8	
5210	12.60	2.90	94	5011.39	1255.18	1253.96	N	55.63	W	0.76	-0.6	1.8	
5305	12.10	357.70	95	5104.20	1275.46	1274.26	N	55.51	W	1.28	-0.5	373.5	
5399	11.90	355.90	94	5196.14	1295.00	1293.77	N	56.59	W	0.45	-0.2	-1.9	
5494	10.30	355.70	95	5289.36	1313.28	1312.01	N	57.93	W	1.68	-1.7	-0.2	
5587	7.60	356.30	93	5381.22	1327.74	1326.44	N	58.95	W	2.90	-2.9	0.6	
5682	7.00	349.60	95	5475.45	1339.75	1338.41	N	60.40	W	1.10	-0.6	-7.1	
5777	5.60	346.10	95	5569.88	1350.02	1348.60	N	62.56	W	1.53	-1.5	-3.7	
5872	4.70	342.90	95	5664.49	1358.33	1356.82	N	64.82	W	0.99	-0.9	-3.4	
5967	3.40	337.80	95	5759.25	1364.74	1363.15	N	67.03	W	1.42	-1.4	-5.4	
6062	2.70	325.30	95	5854.12	1369.27	1367.60	N	69.37	W	1.01	-0.7	-13.2	
6252	1.90	307.00	190	6043.97	1375.05	1373.17	N	74.43	W	0.57	-0.4	-9.6	
6442	1.60	284.50	190	6233.88	1377.81	1375.73	N	79.51	W	0.39	-0.2	-11.8	
6632	1.80	266.40	190	6423.80	1378.51	1376.21	N	85.06	W	0.30	0.1	-9.5	
6820	1.60	265.70	188	6611.72	1378.35	1375.82	N	90.62	W	0.11	-0.1	-0.4	
7009	1.20	261.20	189	6800.66	1378.03	1375.32	N	95.21	W	0.22	-0.2	-2.4	
7198	1.40	273.50	189	6989.61	1378.04	1375.16	N	99.47	W	0.18	0.1	6.5	
7386	0.80	188.70	188	7177.58	1376.98	1374.00	N	101.96	W	0.82	-0.3	-45.1	
7513	0.90	203.30	127	7304.57	1375.21	1372.21	N	102.49	W	0.19	0.1	11.5	TD SURVEY
7563	0.90	203.30	50	7354.56	1374.50	1371.49	N	102.80	W	0.00	0.0	0.0	PROJECTION TO BIT

Surveys

N/S	E/W	VS	TVD
0.05	-0.06	0.05	87.00
0.47	0.03	0.47	180.00
1.53	0.32	1.52	269.99
3.86	0.65	3.83	359.96
7.89	0.92	7.84	448.87
12.59	1.15	12.53	538.74
16.92	1.03	16.86	649.66
19.81	0.58	19.78	751.61
22.63	0.14	22.60	847.57
26.16	0.00	26.14	942.50
32.14	0.29	32.10	1036.31
40.49	0.44	40.44	1129.94
50.33	0.11	50.28	1224.42
62.13	-0.69	62.10	1318.68
75.65	-1.77	75.66	1411.70
90.64	-2.72	90.68	1505.50
108.25	-3.69	108.31	1598.84
128.74	-5.39	128.85	1691.59
150.57	-7.67	150.75	1782.99
175.76	-9.94	176.02	1874.55
203.74	-11.72	204.04	1964.27
233.70	-12.89	234.03	2055.47
264.60	-13.70	264.94	2144.24
297.12	-14.55	297.47	2232.43
331.77	-15.67	332.13	2320.87
368.46	-17.41	368.86	2408.48
406.47	-19.78	406.94	2494.42
445.37	-22.84	445.92	2581.04
482.00	-26.38	482.66	2667.53
517.49	-29.80	518.27	2755.58
553.29	-32.46	554.14	2843.54
587.86	-34.89	588.79	2931.99
620.32	-37.06	621.31	3020.18
652.32	-38.01	653.32	3109.62
683.01	-38.10	683.98	3198.47
714.32	-37.59	715.25	3288.16
746.43	-37.66	747.34	3378.62
777.10	-38.86	778.03	3468.53
807.44	-40.37	808.41	3558.54
838.30	-42.40	839.32	3648.36
870.32	-44.60	871.41	3737.78
903.94	-46.93	905.09	3827.67
935.93	-49.17	937.15	3916.02
964.84	-51.09	966.11	4004.39
992.94	-52.66	994.25	4096.17
1020.43	-54.32	1021.78	4187.09
1047.90	-56.09	1049.31	4278.02
1074.99	-56.87	1076.40	4370.11
1101.01	-56.44	1102.38	4461.48
1127.26	-55.94	1128.60	4552.77
1154.04	-56.06	1155.36	4642.88
1182.35	-56.21	1183.65	4734.61
1209.37	-56.40	1210.65	4826.72
1232.99	-56.37	1234.26	4919.76
1253.96	-55.63	1255.18	5011.39
1274.26	-55.51	1275.46	5104.20
1293.77	-56.59	1295.00	5196.14
1312.01	-57.93	1313.28	5289.36
1326.44	-58.95	1327.74	5381.22
1338.41	-60.40	1339.75	5475.45
1348.60	-62.56	1350.02	5569.88
1356.82	-64.82	1358.33	5664.49
1363.15	-67.03	1364.74	5759.25
1367.60	-69.37	1369.27	5854.12
1373.17	-74.43	1375.05	6043.97
1375.73	-79.51	1377.81	6233.88
1376.21	-85.06	1378.51	6423.80
1375.82	-90.62	1378.35	6611.72
1375.32	-95.21	1378.03	6800.66
1375.16	-99.47	1378.04	6989.61
1374.00	-101.96	1376.98	7177.58
1372.21	-102.49	1375.21	7304.57
1371.49	-102.80	1374.50	7354.56
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