

## **Wellpath Geographic Report**

Report Date:	30-Jan-04	Grid Convergence Angle:	1.05 deg
Client:	ChevronTexaco	Grid Scale Factor:	0.999664
Field:	Captain	Survey / DLS Computation Method:	Minimum Curvature
Structure / Slot:	Captain WPP / Slot #5	Vertical Section Azimuth:	134.76 deg
Well Name:	13/22a-C16y	Vertical Section Origin:	20.23S, 3.27W
Wellbore Name:	13/22a-C16y (AWB)	TVD Reference Datum:	RKB
Wellpath Name:	13/22a-C16y Defintive Survey	TVD Reference Elevation:	Rig ( Captain WPP 155.0ft above Mean Sea Level )
Grid Coordinate System:	European Datum 1950 / UTM Zone 30 N	Sea Bed / Ground Level Elevation:	-345.50 ft to Mean Sea Level
Slot Location Lat/Long:	N58 18 26.7314, W1 46 6.7672	North Reference:	Grid
Slot Location Grid N/E Y/X:	6463745.0760 m, 572166.4340 m	Local Coordinates Referenced To:	Installation

							Grid Cod	ordinates	Geographic				
MD	Inc	Azi	TVD	TVD(SS)	N/-S	E/-W	Northing	Easting	Latitude	Longitude	DLS	VS	Comment
(ft)	(deg)	(deg)	(ft)	(ft)	(ft)	(ft)	(m)	(m)			(deg/100ft)	(ft)	
0.00	0.00		0.00	-155.00			6463745.080	572166.430	N58 18 26.7314	W1 46 6.7672		0.00	
500.50	0.00	133.27	500.50	345.50	-20.23	-3.27	6463745.080	572166.430	N58 18 26.7314	W1 46 6.7672	0.00	0.00	
550.00	0.53	154.04	550.00	395.00	-20.44	-3.17	6463745.010	572166.460	N58 18 26.7293	W1 46 6.7654	1.07	0.22	
600.00	0.42	151.66	600.00	445.00	-20.81	-2.98	6463744.900	572166.520	N58 18 26.7256	W1 46 6.7620	0.22	0.61	
650.00	0.82	149.19	650.00	494.99	-21.27		6463744.760	572166.600	N58 18 26.7210	W1 46 6.7571	0.80	1.13	
700.00	1.26	140.05	699.99	544.99	-22.00	-2.17	6463744.540	572166.770	N58 18 26.7137	W1 46 6.7473	0.94	2.03	
750.00	2.19	134.45	749.96	594.96	-23.09	-1.14	6463744.200	572167.080	N58 18 26.7028	W1 46 6.7283	1.89	3.53	
800.00	3.61	138.05	799.90	644.90	-24.93	0.59	6463743.640	572167.610	N58 18 26.6843	W1 46 6.6965	2.86	6.06	
850.00	5.30	139.26	849.75	694.74	-27.85	3.15	6463742.750	572168.390	N58 18 26.6551	W1 46 6.6496	3.39	9.93	
900.00	5.46	150.66	899.53	744.53	-31.68	5.83	6463741.590	572169.210	N58 18 26.6170	W1 46 6.6009	2.16	14.52	
950.00	5.31	164.38	949.31	794.31	-35.98	7.62	6463740.280	572169.750	N58 18 26.5743	W1 46 6.5689	2.59	18.82	
1000.00	5.10	159.25	999.10	844.10	-40.28	9.03	6463738.970	572170.180	N58 18 26.5316	W1 46 6.5440	1.02	22.85	
1050.00	5.28	157.46	1048.90	893.90	-44.49	10.70	6463737.680	572170.690	N58 18 26.4899	W1 46 6.5142	0.48	27.00	
1100.00	5.48	150.90	1098.68	943.68	-48.70	12.74	6463736.400	572171.310	N58 18 26.4481	W1 46 6.4774	1.29	31.41	
1150.00	6.44	148.44	1148.41	993.41	-53.17	15.37	6463735.040	572172.110	N58 18 26.4035	W1 46 6.4297	1.99	36.43	
1200.00	8.14	144.74	1198.00	1043.00	-58.45	18.88	6463733.430	572173.180	N58 18 26.3509	W1 46 6.3658	3.53	42.64	
1250.00	10.51	142.54	1247.34	1092.34	-64.97	23.70	6463731.450	572174.650	N58 18 26.2859	W1 46 6.2779	4.79	50.65	
1300.00	12.83	141.95	1296.30	1141.30	-72.96	29.89	6463729.010	572176.540	N58 18 26.2060	W1 46 6.1647	4.65	60.67	
1350.00	14.22	141.46	1344.91	1189.91	-82.13	37.14	6463726.210	572178.750	N58 18 26.1144	W1 46 6.0322	2.79	72.28	
1400.00	15.99	141.60	1393.18	1238.18	-92.33	45.25	6463723.110	572181.220	N58 18 26.0124	W1 46 5.8840	3.54	85.22	
1450.00	17.59	140.44	1441.05	1286.05	-103.56	54.34	6463719.690	572183.990	N58 18 25.9003	W1 46 5.7178	3.27	99.58	
1500.00	19.20	138.54	1488.49	1333.49	-115.55	64.59	6463716.030	572187.110	N58 18 25.7803	W1 46 5.5300	3.44	115.30	
1550.00	20.98	137.10	1535.45	1380.45	-128.26	76.13	6463712.160	572190.630	N58 18 25.6530	W1 46 5.3184	3.69	132.45	
1600.00	22.52	135.00	1581.89	1426.89	-141.59	88.99	6463708.100	572194.550	N58 18 25.5194	W1 46 5.0822	3.45	150.97	
1650.00	23.72	134.49	1627.87	1472.87	-155.41	102.94	6463703.890	572198.800	N58 18 25.3808	W1 46 4.8260	2.43	170.60	
1690.00	24.75	134.68	1664.35	1509.35	-166.94	114.63	6463700.370	572202.360	N58 18 25.2651	W1 46 4.6112	2.58	187.02	
1700.00	24.79	133.48	1673.43	1518.43	-169.85	117.64	6463699.490	572203.280	N58 18 25.2359	W1 46 4.5558	5.04	191.21	
1725.00	25.07	133.76	1696.10	1541.10	-177.12	125.27		572205.600	N58 18 25.1629	W1 46 4.4156	1.22	201.75	
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							Grid Cod	ordinates	Geographic (	Coordinates			
MD	Inc	Azi	TVD	TVD(SS)	N/-S	E/-W	Northing	Easting	Latitude	Longitude	DLS	<b>VS</b>	Comment
(ft)	(deg)	(deg)	(ft)	(ft)	(ft)	(ft)	(m)	(m)		Ğ	(deg/100ft)		
1750.00		133.87	1718.71	1563.71	-184.50	132.96	6463695.020	572207.940	N58 18 25.0888	W1 46 4.2742	1.37	212.40	
1775.00		133.87	1741.26	1586.26			6463692.740		N58 18 25.0138	W1 46 4.1311	1.32	223.20	
1800.00	26.62	133.59		1608.70			6463690.420		N58 18 24.9372	W1 46 3.9846	3.55	234.22	
1825.00		133.34		1630.92			6463688.020	572215.270		W1 46 3.8318	5.02	245.66	
1850.00		133.27	1807.95	1652.95			6463685.550	572217.890		W1 46 3.6737	2.76	257.48	
1875.00		133.12		1674.83			6463683.030		N58 18 24.6937	W1 46 3.5116	2.89	269.57	
1900.00		133.58		1696.51	-232.41		6463680.420		N58 18 24.6078	W1 46 3.3450	4.97	282.02	
1925.00		133.80		1717.93			6463677.710		N58 18 24.5185	W1 46 3.1737	4.26	294.90	
1950.00	32.42			1739.13			6463674.910		N58 18 24.4263	W1 46 2.9982	3.46	308.15	
1975.00		134.42		1760.09			6463672.020		N58 18 24.3310	W1 46 2.8186	5.02	321.77	
2000.00		134.76		1780.77			6463669.020		N58 18 24.2321	W1 46 2.6349	4.31	335.82	
2025.00				1801.22			6463665.920		N58 18 24.1302	W1 46 2.4478	3.31	350.20	
2050.00	36.23	135.10		1821.48			6463662.760		N58 18 24.0262	W1 46 2.2577	2.84	364.85	
2075.00				1841.52			6463659.540		N58 18 23.9200	W1 46 2.0640	3.84	379.79	
2100.00	38.15			1861.31	-311.79		6463656.240			W1 46 1.8658	3.84	395.07	
2125.00	38.98	135.04		1880.86			6463652.880	572251.220		W1 46 1.6635	3.32	410.66	
2150.00	39.92			1900.16			6463649.460	572254.650		W1 46 1.4568	3.82	426.54	
2175.00	41.00	134.54		1919.18			6463645.990	572258.170		W1 46 1.2448	4.36	442.76	
2200.00		134.22		1937.90			6463642.460	572261.780		W1 46 1.0271	4.21	459.33	
2225.00		134.17		1956.37			6463638.880		N58 18 23.2400	W1 46 0.8051	2.68	476.18	
2250.00	43.55	134.16		1974.62			6463635.250		N58 18 23.1205	W1 46 0.5798	3.40	493.27	
2275.00	44.71	133.71	2147.56	1992.56			6463631.570		N58 18 22.9993	W1 46 0.3494	4.81	510.67	
2300.00	45.88	133.39		2010.15			6463627.840	572276.940		W1 46 0.1126	4.77	528.44	
2325.00	46.77	133.19		2027.41	-417.38		6463624.060		N58 18 22.7519	W1 45 59.8706	3.61	546.51	
2350.00	47.66	133.30		2044.40			6463620.230	572285.020		W1 45 59.6248	3.57	564.85	
2375.00	48.47	133.33	2216.10	2061.10		399.45	6463616.350	572289.140	N58 18 22.4976	W1 45 59.3760	3.24	583.44	
2400.00	49.30	133.28		2077.54			6463612.410	572293.320		W1 45 59.1239	3.32	602.27	
2425.00	50.25	133.26		2093.69			6463608.420	572297.550		W1 45 58.8683	3.80	621.35	
2450.00	51.12	133.21	2264.53	2109.53		441.15	6463604.390	572301.850		W1 45 58.6092	3.48	640.69	
2475.00	52.06	133.28	2280.06	2125.06	-495.38	455.42	6463600.300	572306.200	N58 18 21.9687	W1 45 58.3468	3.77	660.27	
2500.00	52.84	133.17	2295.29	2140.29		469.86	6463596.160	572310.600	N58 18 21.8324	W1 45 58.0812	3.14	680.08	
2525.00	53.70	133.03	2310.24	2155.24		484.49	6463591.990	572315.050	N58 18 21.6949	W1 45 57.8121	3.47	700.11	
2550.00	54.83	133.13	2324.85	2169.85		499.31	6463587.770	572319.570	N58 18 21.5557	W1 45 57.5395	4.53	720.40	
2575.00	55.67	133.14		2184.10		514.30	6463583.490		N58 18 21.4147	W1 45 57.2639	3.36	740.93	
2600.00	56.17	132.93		2198.10		529.44	6463579.180		N58 18 21.2728	W1 45 56.9855	2.12	761.63	
2625.00	56.83	132.81	2366.90	2211.90	-578.87	544.72	6463574.860	572333.400	N58 18 21.1303	W1 45 56.7045	2.67	782.46	
2650.00				2225.45			6463570.520		N58 18 20.9871	W1 45 56.4206	2.96	803.46	
2675.00				2238.72			6463566.140		N58 18 20.8428	W1 45 56.1341	3.08	824.64	
2700.00		132.49		2251.81	-621.90		6463561.750		N58 18 20.6980	W1 45 55.8457	0.91	845.92	
2725.00				2264.87	-636.29		6463557.360	572352.420		W1 45 55.5563	0.38	867.22	
2750.00		132.51		2277.89			6463552.970	572357.220		W1 45 55.2667	0.42	888.54	
2775.00		132.50		2290.89			6463548.580	572362.010		W1 45 54.9771	0.20	909.88	
2800.00				2303.85			6463544.180		N58 18 20.1186	W1 45 54.6870	0.76	931.24	
2825.00		132.44		2316.78			6463539.780		N58 18 19.9735	W1 45 54.3966	0.31	952.62	
3_3.30								e 2 of 6				<b>-</b>	

							Grid Coordinates Geographic Coordinates						
MD	Inc	Azi	TVD	TVD(SS)	N/-S	E/-W	Northing	Easting	Latitude	Longitude	DLS	/S	Comment
(ft)	(deg)	(deg)	(ft)	(ft)	(ft)	(ft)	(m)	(m)			(deg/100ft)	ft)	
2850.00	58.92	132.42	2484.71	2329.71	-708.45	685.96	6463535.380	572376.440	N58 18 19.8285	W1 45 54.1060	0.45	974.00	
2875.00	58.97	132.42	2497.61	2342.61	-722.90		6463530.970		N58 18 19.6833	W1 45 53.8152	0.20	995.40	
2900.00	59.10	132.45	2510.47	2355.47	-737.37		6463526.570	572386.080		W1 45 53.5241	0.53	1016.82	
2925.00	59.35	132.54	2523.26	2368.26			6463522.150	572390.900		W1 45 53.2327	1.05	1038.28	
2950.00	59.35	132.57	2536.01	2381.01	-766.42		6463517.710	572395.730		W1 45 52.9413	0.10	1059.77	
2975.00	59.41	132.53	2548.74	2393.74	-780.97		6463513.280	572400.560		W1 45 52.6497	0.28	1081.27	
3000.00	59.50	132.57	2561.45	2406.45			6463508.840		N58 18 18.9537	W1 45 52.3579	0.39	1102.78	
3025.00	59.59	132.70	2574.12	2419.12			6463504.400		N58 18 18.8070	W1 45 52.0662	0.57	1124.32	
3050.00	59.74	132.75	2586.74	2431.74			6463499.940		N58 18 18.6600	W1 45 51.7747	0.62	1145.88	
3075.00	59.65	132.70	2599.36	2444.36			6463495.470		N58 18 18.5129	W1 45 51.4830	0.40	1167.45	
3100.00	59.59	132.61	2612.00	2457.00			6463491.020		N58 18 18.3661	W1 45 51.1912	0.39	1189.01	
3125.00	59.60	132.57	2624.66	2469.65			6463486.580		N58 18 18.2195	W1 45 50.8992	0.14	1210.55	
3150.00	59.67	132.51	2637.29	2482.29			6463482.130		N58 18 18.0730	W1 45 50.6068	0.35	1232.11	
3175.00	59.92	132.63	2649.87	2494.87	-897.82		6463477.680		N58 18 17.9261	W1 45 50.3141	1.08	1253.70	
3200.00	59.89	132.60	2662.41	2507.41	-912.46		6463473.220	572444.100		W1 45 50.0213	0.16	1275.31	
3225.00	59.80	132.51	2674.96	2519.96			6463468.760	572448.950		W1 45 49.7284	0.48	1296.91	
3250.00	59.85	132.56	2687.53	2532.53			6463464.310		N58 18 17.4853	W1 45 49.4354	0.26	1318.51	
3275.00	60.72	132.61	2699.92	2544.92			6463459.830	572458.670		W1 45 49.1413	3.48	1340.21	
3300.00	62.39	132.72	2711.83	2556.83			6463455.290		N58 18 17.1881	W1 45 48.8440	6.69	1362.17	
3325.00	63.95	132.63	2723.11	2568.11	-986.40		6463450.690		N58 18 17.0362	W1 45 48.5423	6.25	1384.47	
3350.00	65.34	132.65	2733.82	2578.82			6463446.020		N58 18 16.8825	W1 45 48.2366	5.56	1407.04	
3375.00	66.89	132.60	2743.94	2588.94			6463441.310		N58 18 16.7270	W1 45 47.9272	6.20	1429.88	
3400.00	68.52	132.50	2753.42	2598.42			6463436.540		N58 18 16.5698	W1 45 47.6138	6.53	1453.00	
3425.00	69.82	132.50	2762.31	2607.31	-1048.61		6463431.730	572489.220		W1 45 47.2969	5.20	1476.34	
3450.00	70.13	132.32	2770.88	2615.87			6463426.900	572494.510		W1 45 46.9778	1.41	1499.81	
3475.00	71.27	132.19	2779.14	2624.14			6463422.070	572499.830		W1 45 46.6565	4.59	1523.39	
3500.00	72.81	132.07	2786.85	2631.85			6463417.210	572505.200		W1 45 46.3320	6.18	1547.14	
3525.00	73.73	132.09	2794.04	2639.04			6463412.320	572510.620		W1 45 46.0050	3.68	1571.06	
3550.00	74.40	131.96	2800.91	2645.91			6463407.420	572516.060		W1 45 45.6764	2.73	1595.07	
3575.00	75.80	131.90	2807.34	2652.33			6463402.500	572521.530		W1 45 45.3457	5.60	1619.20	
3600.00	77.42	131.95	2813.12	2658.12			6463397.550	572527.050	N58 18 15.2838	W1 45 45.0127	6.48	1643.49	
3625.00	77.89	132.43	2818.47	2663.47			6463392.550	572532.560		W1 45 44.6798	2.66	1667.88	
3650.00	78.52	132.95	2823.58	2668.58			6463387.490	572538.040	N58 18 14.9523	W1 45 44.3489	3.24	1692.34	
3675.00	80.06	133.34	2828.22	2673.22			6463382.380		N58 18 14.7836	W1 45 44.0193	6.35	1716.89	
3700.00	81.57	133.56	2832.22	2677.22			6463377.200		N58 18 14.6132	W1 45 43.6899	6.10	1741.57	
3725.00	82.10	133.87	2835.77		-1244.67		6463371.990		N58 18 14.4415	W1 45 43.3612	2.45	1766.31	
3750.00	82.64	134.17	2839.09	2684.09			6463366.750	572559.840		W1 45 43.0337	2.47	1791.09	
3775.00	83.54	134.72	2842.09	2687.09			6463361.450		N58 18 14.0943	W1 45 42.7081	4.21	1815.90	
3800.00	84.11	135.38	2844.78	2689.78			6463356.090		N58 18 13.9178	W1 45 42.3856	3.48	1840.76	
3825.00	84.25	135.54	2847.32	2692.32			6463350.690	572575.900		W1 45 42.0653	0.85	1865.63	
3850.00	84.20	135.34	2849.83	2694.83			6463345.290	572581.220		W1 45 41.7449	0.82	1890.50	
3875.00	84.35	135.10	2852.33	2697.33			6463339.910	572586.560		W1 45 41.4231	1.13	1915.37	
3900.00	84.50	135.06	2854.76	2699.76			6463334.540	572591.910	N58 18 13.2086	W1 45 41.1004	0.62	1940.25	
3925.00	84.74	135.08	2857.10	2702.10			6463329.170			W1 45 40.7776	0.96	1965.14	
2220.00	J 1	. 50.00		070		• • •		e 3 of 6			3.33		

							Grid Coordinates Geographic Coordinates						
MD	Inc	Azi	TVD	TVD(SS)	N/-S	E/-W	Northing	Easting	Latitude	Longitude	DLS	/S	Comment
(ft)	(deg)	(deg)		(ft)	(ft)	(ft)	(m)	(m)			(deg/100ft)	ft)	
3950.00	85.53	135.16	2859.22	2704.22	-1402.85	1428.29	6463323.790	572602.630	N58 18 12.8548	W1 45 40.4548	3.18	1990.05	
3975.00	85.87	135.28	2861.09	2706.09			6463318.400		N58 18 12.6773	W1 45 40.1323	1.44	2014.98	
4000.00	85.95	135.31	2862.88	2707.88			6463313.000	572613.320		W1 45 39.8102	0.34	2039.92	
4025.00	86.18	135.40	2864.59	2709.59			6463307.600	572618.660		W1 45 39.4884	0.99	2064.86	
4050.00	86.38	135.21	2866.22	2711.21	-1473.75		6463302.190	572624.010		W1 45 39.1662	1.10	2089.80	
4075.00	86.26	135.10	2867.82	2712.82			6463296.800	572629.370		W1 45 38.8431	0.65	2114.75	
4100.00	85.95	134.87	2869.52	2714.52			6463291.430		N58 18 11.7895	W1 45 38.5191	1.54	2139.69	
4125.00	85.39	135.25	2871.41	2716.41			6463286.050		N58 18 11.6125	W1 45 38.1957	2.70	2164.62	
4150.00	84.82	136.00		2718.54			6463280.630		N58 18 11.4340	W1 45 37.8759	3.76	2189.53	
4175.00	84.53	136.32		2720.86			6463275.160		N58 18 11.2540	W1 45 37.5595	1.72	2214.41	
4200.00	84.49	136.27	2878.25	2723.25			6463269.680		N58 18 11.0737	W1 45 37.2440	0.26	2239.29	
4225.00	84.79	136.30		2725.59			6463264.200		N58 18 10.8934	W1 45 36.9283	1.21	2264.17	
4250.00	85.29	136.40		2727.75			6463258.700		N58 18 10.7128	W1 45 36.6129	2.04	2289.07	
4275.00	85.80	136.44	2884.69	2729.69			6463253.200	572671.620		W1 45 36.2976	2.05	2313.98	
4300.00	85.88	136.45	2886.50	2731.50			6463247.700	572676.860		W1 45 35.9824	0.32	2338.90	
4325.00	86.01	136.51	2888.27	2733.27			6463242.190	572682.090		W1 45 35.6673	0.57	2363.83	
4350.00	86.11	136.40	2889.99	2734.99			6463236.680	572687.330	N58 18 9.9884	W1 45 35.3521	0.59	2388.76	
4375.00	86.18	136.28	2891.67	2736.67			6463231.180	572692.570	N58 18 9.8075	W1 45 35.0361	0.55	2413.69	
4400.00	86.23	136.13	2893.32	2738.32			6463225.690	572697.830	N58 18 9.6270	W1 45 34.7193	0.63	2438.63	
4425.00	86.24	136.09	2894.97	2739.97			6463220.220	572703.100	N58 18 9.4468	W1 45 34.4019	0.16	2463.57	
4450.00	86.40	135.95	2896.57	2741.57			6463214.750	572708.380	N58 18 9.2669	W1 45 34.0839	0.85	2488.51	
4475.00	86.44	136.06	2898.13	2743.13			6463209.280	572713.660	N58 18 9.0869	W1 45 33.7659	0.47	2513.46	
4500.00	86.02	136.47	2899.78	2744.77			6463203.780	572718.920	N58 18 8.9063	W1 45 33.4494	2.35	2538.39	
4525.00	85.62	136.74	2901.60	2746.60			6463198.260	572724.140	N58 18 8.7247	W1 45 33.1352	1.93	2563.32	
4550.00	85.58	136.71	2903.51	2748.51	-1832.98		6463192.730	572729.340	N58 18 8.5429	W1 45 32.8217	0.20	2588.23	
4575.00	85.55	136.79	2905.45	2750.45			6463187.200	572734.550	N58 18 8.3609	W1 45 32.5084	0.34	2613.14	
4600.00	85.74	136.75	2907.35	2752.35			6463181.670	572739.750	N58 18 8.1790	W1 45 32.1952	0.78	2638.05	
4625.00	86.06	136.66	2909.13	2754.13			6463176.140	572744.960	N58 18 7.9971	W1 45 31.8816	1.33	2662.97	
4681.00	86.08	136.31	2912.97	2757.97			6463163.790	572756.680	N58 18 7.5911	W1 45 31.1758	0.62	2718.81	
4759.00	85.79	136.46	2918.50	2763.50			6463146.630	572773.030	N58 18 7.0265	W1 45 30.1911	0.42	2796.59	
4853.00	85.19	136.46	2925.89	2770.89			6463125.930	572792.700	N58 18 6.3457	W1 45 29.0068	0.64	2890.25	
4944.00	85.74	136.18	2933.09	2778.09			6463105.940	572811.790	N58 18 5.6882	W1 45 27.8572	0.68	2980.93	
5035.00	86.05	136.30	2939.60	2784.60			6463085.970	572830.920	N58 18 5.0311	W1 45 26.7053	0.37	3071.67	
5045.00	85.96	136.15	2940.30	2785.30			6463083.770	572833.020	N58 18 4.9589	W1 45 26.5787	1.75	3081.64	
5068.00	85.77	135.84	2941.96	2786.96			6463078.750	572837.880	N58 18 4.7935	W1 45 26.2862	1.58	3104.58	
5128.00	85.25	135.03	2946.66	2791.65			6463065.760	572850.670	N58 18 4.3661	W1 45 25.5156	1.60	3164.39	
5219.00	85.40	135.09		2799.07			6463046.200	572870.190	N58 18 3.7221	W1 45 24.3392	0.18	3255.09	
5285.00	87.58	134.30		2803.11			6463032.080	572884.460	N58 18 3.2573	W1 45 23.4791	3.51	3320.96	
5309.00	88.37	134.02		2803.96			6463026.990	572889.700	N58 18 3.0896	W1 45 23.1630	3.49	3344.94	
5396.00	88.63	134.19		2806.24			6463008.550	572908.730	N58 18 2.4821	W1 45 22.0155	0.36	3431.90	
5491.00	88.14	134.51	2963.92	2808.91			6462988.320	572929.420	N58 18 1.8159	W1 45 20.7680	0.62	3526.86	
5583.00	88.83	134.25	2966.35	2811.35			6462968.720	572949.450	N58 18 1.1704	W1 45 19.5605	0.80	3618.83	
5674.00	87.60	134.84	2969.18	2814.18			6462949.280	572969.200	N58 18 0.5302	W1 45 18.3698	1.50	3709.78	
5762.00	87.85	136.14		2817.68			6462930.180			W1 45 17.2382	1.50	3797.70	
21.02.00	500			00				e 4 of 6				2. 2 0	

							Grid Coordinates Geographic Coordinates						
MD	Inc	Azi	TVD	TVD(SS)	N/-S	E/-W	Northing	Easting	Latitude	Longitude	DLS	/S	Comment
(ft)	(deg)	(deg)	(ft)	(ft)	(ft)	(ft)	(m)	(m)			(deg/100ft)	ft)	
5854.00	88.14	136.34	2975.89	2820.89	-2761.09	2756.59	6462909.940	573007.360	N58 17 59.2357	W1 45 16.0715	0.38	3889.62	
5950.00	89.80	136.25	2977.62	2822.62	-2830.47	2822.91	6462888.800	573027.560		W1 45 14.8548	1.73	3985.56	
6041.00	90.63	136.03	2977.28	2822.28	-2896.09	2885.96	6462868.810	573046.780	N58 17 57.8825	W1 45 13.6979	0.94	4076.54	
6133.00	90.09	135.39	2976.70	2821.70			6462848.740	573066.350		W1 45 12.5189	0.91	4168.52	
6225.00	90.80	135.43	2975.99	2820.99	-3027.45	3014.79	6462828.780	573086.030	N58 17 56.5651	W1 45 11.3333	0.77	4260.51	
6315.00	90.60	135.44	2974.89	2819.89	-3091.57	3077.94	6462809.250	573105.270	N58 17 55.9221	W1 45 10.1741	0.22	4350.50	
6407.00	90.54	137.33	2973.97	2818.97	-3158.17	3141.39	6462788.950	573124.600	N58 17 55.2546	W1 45 9.0100	2.06	4442.45	
6499.00	90.37	137.77	2973.24	2818.24	-3226.05	3203.49	6462768.270	573143.520	N58 17 54.5747	W1 45 7.8719	0.51	4534.34	
6550.00	88.83	138.03	2973.60	2818.60	-3263.89	3237.68	6462756.740	573153.940	N58 17 54.1957	W1 45 7.2454	3.06	4585.26	
6591.00	87.60	138.30	2974.87	2819.87	-3294.42	3265.01	6462747.440	573162.270	N58 17 53.8900	W1 45 6.7446	3.07	4626.17	
6684.00	91.23	138.13	2975.82	2820.82	-3363.75	3326.97	6462726.310	573181.150	N58 17 53.1959	W1 45 5.6096	3.91	4718.98	
6772.00	91.29	137.68	2973.89	2818.89	-3429.04	3385.94	6462706.420	573199.120	N58 17 52.5421	W1 45 4.5290	0.52	4806.82	
6864.00	90.29	136.81	2972.62	2817.62	-3496.58	3448.39	6462685.840	573218.150	N58 17 51.8654	W1 45 3.3841	1.44	4898.73	
6928.00	90.27	136.80	2972.31	2817.31	-3543.24	3492.20	6462671.620	573231.490	N58 17 51.3979	W1 45 2.5808	0.03	4962.69	
6958.00	90.26	136.80	2972.17	2817.17	-3565.11	3512.73	6462664.960	573237.750	N58 17 51.1787	W1 45 2.2042	0.03	4992.67	
7046.00	89.57	135.73	2972.30	2817.30	-3628.69	3573.57	6462645.590	573256.290	N58 17 50.5414	W1 45 1.0882	1.45	5080.63	
7166.00	90.14	137.72	2972.60	2817.60	-3716.05	3655.82	6462618.970	573281.350	N58 17 49.6659	W1 44 59.5798	1.73	5200.56	
7255.00	87.43	137.99	2974.49	2819.49	-3782.02	3715.52	6462598.870	573299.540	N58 17 49.0052	W1 44 58.4859	3.06	5289.40	
7346.00	87.57	139.01	2978.46	2823.46	-3850.11	3775.76	6462578.120	573317.900	N58 17 48.3235	W1 44 57.3826	1.13	5380.12	
7437.00	88.34	140.79	2981.71	2826.71	-3919.67	3834.34	6462556.930	573335.740	N58 17 47.6277	W1 44 56.3110	2.13	5470.69	
7529.00	88.06	144.10	2984.60	2829.60	-3992.56	3890.38	6462534.720	573352.820	N58 17 46.8996	W1 44 55.2880	3.61	5561.80	
7622.00	87.97	147.41	2987.82	2832.82	-4069.38	3942.68	6462511.310	573368.750	N58 17 46.1334	W1 44 54.3364	3.56	5653.03	
7714.00	88.63	149.15	2990.55	2835.55	-4147.60	3991.02	6462487.480	573383.480	N58 17 45.3541	W1 44 53.4592	2.02	5742.44	
7805.00	89.86	149.74	2991.75	2836.75	-4225.95	4037.28	6462463.600	573397.580	N58 17 44.5739	W1 44 52.6212	1.50	5830.45	
7897.00	89.86	150.38	2991.97	2836.97	-4305.68	4083.20	6462439.310	573411.570	N58 17 43.7803	W1 44 51.7900	0.70	5919.19	
7987.00	90.94	151.02	2991.34	2836.34	-4384.16	4127.24	6462415.400	573424.990	N58 17 42.9992	W1 44 50.9934	1.39	6005.73	
8077.00	90.51	151.30	2990.20	2835.20	-4462.99	4170.65	6462391.380	573438.220	N58 17 42.2148	W1 44 50.2088	0.57	6092.06	
8167.00	90.63	152.38	2989.31	2834.31	-4542.33	4213.12	6462367.200	573451.160	N58 17 41.4256	W1 44 49.4420	1.21	6178.09	
8259.00	90.40	153.18	2988.48	2833.48	-4624.14	4255.20	6462342.280	573463.980	N58 17 40.6121	W1 44 48.6833	0.90	6265.57	
8350.00	91.14	153.72	2987.26	2832.26	-4705.53	4295.87	6462317.480	573476.370	N58 17 39.8030	W1 44 47.9509	1.01	6351.76	
8441.00	92.23	153.92	2984.58	2829.58	-4787.16	4336.00	6462292.600	573488.600	N58 17 38.9916	W1 44 47.2286	1.22	6437.73	
8531.00	91.89	154.14	2981.35	2826.35	-4868.02	4375.39	6462267.970	573500.600	N58 17 38.1880	W1 44 46.5201	0.45	6522.64	
8622.00	91.92	154.23	2978.32	2823.32	-4949.90	4414.99	6462243.020	573512.670	N58 17 37.3743	W1 44 45.8077	0.10	6608.41	
8718.00	89.80	154.08	2976.88	2821.88	-5036.28	4456.83	6462216.700	573525.420	N58 17 36.5159	W1 44 45.0551	2.21	6698.95	
8819.00	90.66	155.60	2976.48	2821.48	-5127.69	4499.77	6462188.840	573538.500	N58 17 35.6076	W1 44 44.2838	1.73	6793.80	
8911.00	90.74	156.20	2975.35	2820.35	-5211.67	4537.33	6462163.260	573549.940	N58 17 34.7736	W1 44 43.6105	0.66	6879.60	
9002.00	91.09	154.70	2973.90	2818.90	-5294.43	4575.14	6462138.040	573561.460	N58 17 33.9516	W1 44 42.9322	1.69	6964.72	
9093.00	90.29	152.40	2972.80	2817.80	-5375.89	4615.67	6462113.220	573573.810	N58 17 33.1418	W1 44 42.2025	2.68	7050.86	
9187.00	90.66	152.60	2972.03	2817.02	-5459.27	4659.07	6462087.820	573587.040	N58 17 32.3126	W1 44 41.4198	0.45	7140.39	
9279.00	88.68	152.20	2972.55	2817.55		4701.69	6462062.970	573600.020	N58 17 31.5018	W1 44 40.6510	2.20	7228.05	
9370.00	89.14	152.50	2974.29	2819.29			6462038.420	573612.890	N58 17 30.7003	W1 44 39.8894	0.60	7314.78	
9459.00	89.37	152.30	2975.44	2820.44		4785.14	6462014.390	573625.450	N58 17 29.9160	W1 44 39.1457	0.34	7399.59	
9552.00	89.71	152.02	2976.19	2821.19	-5782.48	4828.57	6461989.330	573638.680	N58 17 29.0981	W1 44 38.3620	0.47	7488.33	
9644.00	89.66	152.01	2976.70	2821.70	-5863.72	4871.74	6461964.580	573651.840	N58 17 28.2900	W1 44 37.5829	0.06	7576.19	
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							Grid Coordinates Geographic Coordinates						
MD	Inc	Azi	TVD	TVD(SS)	N/-S	E/-W	Northing	Easting	Latitude	Longitude	DLS	VS	Comment
(ft)	(deg)	(deg)	(ft)	(ft)	(ft)	(ft)	(m)	(m)			(deg/100ft)	(ft)	
9734.00	89.63	151.69	2977.25	2822.25	-5943.07	4914.20	6461940.400	573664.770	N58 17 27.5006	W1 44 36.8165	0.36	7662.21	_
9827.00	88.77	151.48	2978.55	2823.55	-6024.86	4958.45	6461915.480	573678.260	N58 17 26.6869	W1 44 36.0174	0.95	7751.22	
9918.00	88.08	151.93	2981.05	2826.05	-6104.96	5001.57	6461891.070	573691.400	N58 17 25.8901	W1 44 35.2389	0.91	7838.24	
10007.00	88.03	153.30	2984.07	2829.07	-6183.94	5042.48	6461867.010	573703.860	N58 17 25.1047	W1 44 34.5012	1.54	7922.90	
10101.00	88.60	153.59	2986.84	2831.84	-6267.98	5084.48	6461841.400	573716.660	N58 17 24.2692	W1 44 33.7449	0.68	8011.91	
10193.00	88.91	153.32	2988.84	2833.84	-6350.27	5125.59	6461816.330	573729.180	N58 17 23.4512	W1 44 33.0049	0.45	8099.03	
10284.00	88.34	153.40	2991.02	2836.02	-6431.58	5166.38	6461791.550	573741.610	N58 17 22.6428	W1 44 32.2703	0.63	8185.25	
10375.00	89.06	153.30	2993.09	2838.08	-6512.89	5207.19	6461766.780	573754.050	N58 17 21.8344	W1 44 31.5355	0.80	8271.48	
10468.00	89.34	153.40	2994.38	2839.38	-6596.01	5248.90	6461741.450	573766.760	N58 17 21.0081	W1 44 30.7845	0.32	8359.62	
10561.00	90.09	153.20	2994.85	2839.85	-6679.09	5290.68	6461716.140	573779.490	N58 17 20.1822	W1 44 30.0320	0.83	8447.79	
10653.00	88.86	153.30	2995.69	2840.69	-6761.23	5332.09	6461691.110	573792.100	N58 17 19.3654	W1 44 29.2863	1.34	8535.04	
10743.00	88.77	153.43	2997.55	2842.55	-6841.67	5372.43	6461666.600	573804.400	N58 17 18.5658	W1 44 28.5600	0.18	8620.32	
10835.00	88.43	153.38	2999.80	2844.80	-6923.91	5413.60	6461641.540	573816.940	N58 17 17.7482	W1 44 27.8186	0.37	8707.46	
10898.00	89.14	153.20	3001.13	2846.13	-6980.17	5441.91	6461624.400	573825.570	N58 17 17.1888	W1 44 27.3088	1.16	8767.18	
10972.00	88.80	153.20	3002.46	2847.46	-7046.21	5475.27	6461604.280	573835.730	N58 17 16.5322	W1 44 26.7080	0.46	8837.37	