

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 #9	Vertical Section Azimuth:	85.00 deg
Well Name:	13/22a-C15z	Vertical Section Origin:	2.74N, 8.75E
Wellbore Name:	13/22a-C15z (AWB)	TVD Reference Datum:	RKB
Wellpath Name:	13/22a-C15z Definitive 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 26.9554, W1 46 6.5344	North Reference:	Grid
Slot Location Grid N/E Y/X:	6463752.0750 m, 572170.0960 m	Local Coordinates Referenced To:	Installation

							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)	
0.00	0.00	0.00	0.00	-155.00	2.74	8.75	6463752.080	572170.100	N58 18 26.9554	W1 46 6.5344	0.00	0.00	
500.50	0.00	0.00	500.50	345.50	2.74	8.75	6463752.080	572170.100	N58 18 26.9554	W1 46 6.5344	0.00	0.00	
550.00	0.69	325.21	550.00	395.00	2.98	8.58	6463752.150	572170.040	N58 18 26.9579	W1 46 6.5375	1.39	-0.15	
600.00	0.57	308.63	600.00	445.00	3.39	8.21	6463752.270	572169.930	N58 18 26.9619	W1 46 6.5442	0.43	-0.48	
650.00	0.44	256.49	649.99	494.99	3.50	7.83	6463752.310	572169.820	N58 18 26.9631	W1 46 6.5513	0.92	-0.85	
676.00	0.52	174.37	675.99	520.99	3.36	7.75	6463752.260	572169.790	N58 18 26.9617	W1 46 6.5530	2.43	-0.95	26.000in Casing
700.00	1.02	151.14	699.99	544.99	3.06	7.86	6463752.170	572169.830	N58 18 26.9588	W1 46 6.5509	2.43	-0.86	
750.00	0.93	154.41	749.98	594.98	2.31	8.25	6463751.940	572169.940	N58 18 26.9513	W1 46 6.5439	0.21	-0.53	
800.00	1.20	93.46	799.98	644.98	1.91	8.95	6463751.820	572170.160	N58 18 26.9472	W1 46 6.5310	2.21	0.13	
850.00	3.11	74.58	849.94	694.94	2.24	10.78	6463751.920	572170.710	N58 18 26.9501	W1 46 6.4966	4.02	1.98	
900.00	4.29	69.05	899.84	744.83	3.27	13.83	6463752.240	572171.640	N58 18 26.9597	W1 46 6.4391	2.46	5.11	
950.00	4.93	64.27	949.67	794.67	4.87	17.52	6463752.720	572172.770	N58 18 26.9748	W1 46 6.3697	1.49	8.92	
1000.00	5.76	58.73	999.46	844.46	7.11	21.59	6463753.400	572174.010	N58 18 26.9961	W1 46 6.2926	1.95	13.18	
1050.00	7.04	53.54	1049.14	894.14	10.23	26.20	6463754.360	572175.410	N58 18 27.0260	W1 46 6.2052	2.81	18.04	
1100.00	8.57	50.01	1098.68	943.68	14.44	31.52	6463755.640	572177.040	N58 18 27.0666	W1 46 6.1043	3.21	23.71	
1150.00	10.26	49.46	1148.00	993.00	19.73	37.76	6463757.250	572178.940	N58 18 27.1176	W1 46 5.9857	3.38	30.38	
1200.00	12.20	51.24	1197.04	1042.04	25.93	45.27	6463759.140	572181.220	N58 18 27.1773	W1 46 5.8432	3.94	38.40	
1250.00	14.13	56.96	1245.73	1090.73	32.57	54.50	6463761.160	572184.040	N58 18 27.2410	W1 46 5.6680	4.65	48.18	
1300.00	14.93	64.93	1294.14	1139.13	38.63	65.45	6463763.010	572187.370	N58 18 27.2987	W1 46 5.4610	4.30	59.62	
1350.00	16.17	68.77	1342.31	1187.31	43.88	77.78	6463764.610	572191.130	N58 18 27.3482	W1 46 5.2286	3.22	72.35	
1400.00	17.40	70.55	1390.17	1235.17	48.89	91.32	6463766.140	572195.250	N58 18 27.3951	W1 46 4.9735	2.67	86.28	
1450.00	18.04	70.08	1437.80	1282.80	54.02	105.65	6463767.700	572199.620	N58 18 27.4430	W1 46 4.7036	1.31	101.00	
1500.00	18.55	69.34	1485.27	1330.27	59.46	120.37	6463769.360	572204.110	N58 18 27.4940	W1 46 4.4263	1.12	116.14	
1550.00	19.43	70.04	1532.55	1377.55	65.11	135.63	6463771.080	572208.760	N58 18 27.5468	W1 46 4.1388	1.82	131.83	
1600.00	19.82	68.49	1579.65	1424.65	71.05	151.33	6463772.890	572213.540	N58 18 27.6026	W1 46 3.8429	1.30	147.99	
1650.00	20.95	67.30	1626.52	1471.52	77.61	167.46	6463774.890	572218.460	N58 18 27.6643	W1 46 3.5388	2.41	164.64	
1675.00	21.56	67.65	1649.82	1494.82	81.08	175.84	6463775.950	572221.010	N58 18 27.6969	W1 46 3.3809	2.49	173.28	
1700.00	21.85	67.27	1673.04	1518.04	84.63	184.38	6463777.030	572223.610	N58 18 27.7303	W1 46 3.2199	1.29	182.09	

MD (ft)	Inc (deg)	Azi (deg)	TVD (ft)	TVD(SS) (ft)	N-S (ft)	E-W (ft)	Grid Coordinates		Geographic Coordinates		DLS (deg/100ft)	VS (ft)	Comment
							Northing (m)	Easting (m)	Latitude	Longitude			
1725.00	22.66	67.52	1696.18	1541.18	88.27	193.12	6463778.130	572226.270	N58 18 27.7646	W1 46 3.0551	3.26	191.12	13 3/8in Casing
1745.00	23.24	67.58	1714.60	1559.60	91.24	200.32	6463779.040	572228.470	N58 18 27.7926	W1 46 2.9192	2.88	198.56	
1750.00	23.38	67.60	1719.19	1564.19	92.00	202.15	6463779.270	572229.030	N58 18 27.7997	W1 46 2.8847	2.88	200.45	
1775.00	24.02	67.39	1742.08	1587.08	95.84	211.44	6463780.440	572231.850	N58 18 27.8359	W1 46 2.7097	2.58	210.03	
1800.00	24.74	67.31	1764.85	1609.85	99.82	220.96	6463781.650	572234.760	N58 18 27.8733	W1 46 2.5301	2.88	219.86	
1825.00	25.54	66.94	1787.48	1632.48	103.95	230.74	6463782.910	572237.740	N58 18 27.9122	W1 46 2.3456	3.26	229.97	
1850.00	26.58	66.87	1809.94	1654.94	108.26	240.85	6463784.230	572240.820	N58 18 27.9529	W1 46 2.1551	4.16	240.41	
1875.00	27.62	66.59	1832.20	1677.20	112.76	251.31	6463785.600	572244.000	N58 18 27.9953	W1 46 1.9578	4.19	251.22	
1900.00	28.45	66.72	1854.26	1699.26	117.41	262.10	6463787.010	572247.290	N58 18 28.0392	W1 46 1.7543	3.33	262.38	
1925.00	29.27	66.65	1876.16	1721.16	122.19	273.18	6463788.470	572250.670	N58 18 28.0842	W1 46 1.5453	3.28	273.83	
1950.00	30.09	66.71	1897.88	1742.88	127.09	284.55	6463789.960	572254.130	N58 18 28.1305	W1 46 1.3309	3.28	285.58	
1975.00	30.91	66.81	1919.42	1764.42	132.09	296.20	6463791.490	572257.680	N58 18 28.1777	W1 46 1.1110	3.29	297.63	
2000.00	31.55	66.67	1940.80	1785.80	137.21	308.11	6463793.050	572261.310	N58 18 28.2259	W1 46 0.8864	2.58	309.94	
2025.00	32.31	66.41	1962.01	1807.01	142.48	320.24	6463794.650	572265.010	N58 18 28.2756	W1 46 0.6576	3.09	322.49	
2050.00	33.06	66.31	1983.05	1828.05	147.89	332.61	6463796.300	572268.780	N58 18 28.3267	W1 46 0.4244	3.01	335.28	
2075.00	33.81	66.04	2003.92	1848.92	153.46	345.21	6463798.000	572272.610	N58 18 28.3792	W1 46 0.1866	3.06	348.32	
2100.00	34.59	66.03	2024.59	1869.59	159.16	358.05	6463799.740	572276.530	N58 18 28.4331	W1 45 59.9444	3.12	361.60	
2125.00	35.34	65.86	2045.08	1890.08	165.00	371.13	6463801.520	572280.510	N58 18 28.4883	W1 45 59.6976	3.03	375.15	
2150.00	36.04	65.72	2065.39	1910.39	170.98	384.44	6463803.340	572284.570	N58 18 28.5448	W1 45 59.4466	2.82	388.92	
2175.00	36.72	65.66	2085.51	1930.51	177.09	397.95	6463805.200	572288.680	N58 18 28.6025	W1 45 59.1916	2.72	402.91	
2200.00	37.57	65.47	2105.44	1950.44	183.33	411.69	6463807.100	572292.870	N58 18 28.6615	W1 45 58.9323	3.43	417.15	
2225.00	38.40	65.17	2125.15	1970.14	189.76	425.67	6463809.060	572297.130	N58 18 28.7223	W1 45 58.6685	3.40	431.64	
2250.00	39.07	64.91	2144.65	1989.65	196.36	439.85	6463811.070	572301.450	N58 18 28.7847	W1 45 58.4008	2.76	446.34	
2275.00	39.70	64.90	2163.97	2008.97	203.09	454.22	6463813.120	572305.830	N58 18 28.8484	W1 45 58.1297	2.52	461.24	
2300.00	40.43	64.95	2183.10	2028.10	209.91	468.80	6463815.200	572310.270	N58 18 28.9129	W1 45 57.8546	2.92	476.35	
2325.00	41.36	64.88	2202.00	2047.00	216.85	483.62	6463817.310	572314.790	N58 18 28.9786	W1 45 57.5749	3.72	491.72	
2350.00	42.22	64.91	2220.64	2065.64	223.91	498.70	6463819.470	572319.380	N58 18 29.0455	W1 45 57.2901	3.44	507.37	
2375.00	43.03	64.95	2239.03	2084.03	231.09	514.04	6463821.650	572324.060	N58 18 29.1134	W1 45 57.0007	3.24	523.27	
2400.00	43.92	64.91	2257.18	2102.17	238.38	529.62	6463823.870	572328.800	N58 18 29.1823	W1 45 56.7067	3.56	539.42	
2425.00	44.85	64.85	2275.04	2120.04	245.80	545.45	6463826.130	572333.630	N58 18 29.2526	W1 45 56.4078	3.72	555.84	
2450.00	45.65	64.93	2292.64	2137.64	253.33	561.53	6463828.430	572338.530	N58 18 29.3239	W1 45 56.1044	3.21	572.52	
2475.00	46.24	64.72	2310.03	2155.02	260.98	577.79	6463830.760	572343.480	N58 18 29.3962	W1 45 55.7975	2.44	589.38	
2500.00	46.86	64.54	2327.22	2172.22	268.75	594.19	6463833.130	572348.480	N58 18 29.4699	W1 45 55.4880	2.53	606.39	
2525.00	47.47	64.37	2344.22	2189.21	276.66	610.73	6463835.540	572353.520	N58 18 29.5448	W1 45 55.1757	2.49	623.56	
2550.00	48.14	64.39	2361.01	2206.01	284.67	627.43	6463837.980	572358.610	N58 18 29.6206	W1 45 54.8605	2.68	640.90	
2575.00	48.88	64.10	2377.57	2222.57	292.80	644.29	6463840.460	572363.740	N58 18 29.6977	W1 45 54.5420	3.08	658.41	
2600.00	49.58	63.72	2393.89	2238.89	301.13	661.30	6463842.990	572368.930	N58 18 29.7767	W1 45 54.2210	3.03	676.07	
2625.00	50.27	63.36	2409.99	2254.99	309.65	678.42	6463845.590	572374.140	N58 18 29.8575	W1 45 53.8976	2.97	693.88	
2650.00	50.89	63.33	2425.86	2270.86	318.32	695.68	6463848.230	572379.400	N58 18 29.9397	W1 45 53.5716	2.48	711.83	
2675.00	51.82	63.24	2441.47	2286.48	327.10	713.13	6463850.910	572384.720	N58 18 30.0230	W1 45 53.2422	3.73	729.97	
2700.00	52.73	63.18	2456.77	2301.77	336.01	730.78	6463853.620	572390.100	N58 18 30.1076	W1 45 52.9088	3.64	748.33	
2725.00	53.49	63.13	2471.78	2316.78	345.04	748.62	6463856.370	572395.530	N58 18 30.1933	W1 45 52.5719	3.04	766.88	
2750.00	54.16	63.07	2486.53	2331.54	354.17	766.61	6463859.150	572401.020	N58 18 30.2800	W1 45 52.2320	2.69	785.61	
2775.00	54.93	62.98	2501.04	2346.04	363.41	784.76	6463861.970	572406.550	N58 18 30.3677	W1 45 51.8892	3.09	804.49	

MD (ft)	Inc (deg)	Azi (deg)	TVD (ft)	TVD(SS) (ft)	N-S (ft)	E-W (ft)	Grid Coordinates		Geographic Coordinates		DLS (deg/100ft)	VS (ft)	Comment
							Northing (m)	Easting (m)	Latitude	Longitude			
2800.00	55.96	62.99	2515.22	2360.22	372.76	803.11	6463864.820	572412.130	N58 18 30.4565	W1 45 51.5427	4.12	823.58	
2825.00	56.88	62.75	2529.04	2374.04	382.26	821.64	6463867.710	572417.780	N58 18 30.5467	W1 45 51.1926	3.77	842.87	
2850.00	57.60	62.66	2542.57	2387.57	391.90	840.32	6463870.650	572423.470	N58 18 30.6383	W1 45 50.8397	2.90	862.33	
2875.00	58.04	62.61	2555.89	2400.89	401.62	859.12	6463873.610	572429.200	N58 18 30.7307	W1 45 50.4847	1.77	881.89	
2900.00	58.36	62.56	2569.06	2414.06	411.41	877.98	6463876.590	572434.950	N58 18 30.8236	W1 45 50.1284	1.29	901.54	
2925.00	58.53	62.49	2582.14	2427.14	421.23	896.88	6463879.590	572440.710	N58 18 30.9170	W1 45 49.7713	0.72	921.22	
2950.00	58.48	62.48	2595.20	2440.20	431.08	915.78	6463882.590	572446.470	N58 18 31.0106	W1 45 49.4141	0.20	940.91	
2975.00	58.44	62.50	2608.28	2453.28	440.92	934.68	6463885.590	572452.220	N58 18 31.1041	W1 45 49.0571	0.17	960.60	
3000.00	58.41	62.43	2621.37	2466.37	450.77	953.57	6463888.590	572457.980	N58 18 31.1977	W1 45 48.7003	0.27	980.27	
3025.00	58.61	62.43	2634.43	2479.43	460.64	972.46	6463891.600	572463.740	N58 18 31.2914	W1 45 48.3432	0.80	999.96	
3050.00	58.65	62.40	2647.44	2492.44	470.52	991.38	6463894.610	572469.500	N58 18 31.3854	W1 45 47.9858	0.19	1019.66	
3075.00	58.63	62.39	2660.45	2505.45	480.41	1010.30	6463897.620	572475.270	N58 18 31.4794	W1 45 47.6284	0.09	1039.37	
3100.00	58.63	62.45	2673.47	2518.47	490.30	1029.22	6463900.630	572481.030	N58 18 31.5733	W1 45 47.2709	0.20	1059.08	
3125.00	58.79	62.52	2686.45	2531.45	500.17	1048.17	6463903.640	572486.800	N58 18 31.6671	W1 45 46.9130	0.68	1078.82	
3150.00	59.38	62.38	2699.30	2544.30	510.09	1067.18	6463906.660	572492.600	N58 18 31.7613	W1 45 46.5537	2.41	1098.62	
3175.00	60.09	62.54	2711.90	2556.90	520.07	1086.33	6463909.700	572498.430	N58 18 31.8562	W1 45 46.1920	2.89	1118.57	
3200.00	60.94	62.48	2724.20	2569.20	530.12	1105.64	6463912.760	572504.310	N58 18 31.9516	W1 45 45.8273	3.41	1138.67	
3225.00	61.75	62.48	2736.19	2581.19	540.25	1125.09	6463915.850	572510.240	N58 18 32.0480	W1 45 45.4597	3.24	1158.94	
3250.00	62.63	62.27	2747.85	2592.85	550.51	1144.68	6463918.980	572516.210	N58 18 32.1454	W1 45 45.0895	3.60	1179.35	
3275.00	63.59	62.18	2759.16	2604.16	560.89	1164.41	6463922.140	572522.220	N58 18 32.2442	W1 45 44.7168	3.85	1199.91	
3300.00	64.34	62.24	2770.13	2615.13	571.37	1184.28	6463925.330	572528.280	N58 18 32.3437	W1 45 44.3413	3.01	1220.62	
3325.00	64.96	62.30	2780.84	2625.84	581.88	1204.28	6463928.540	572534.370	N58 18 32.4436	W1 45 43.9635	2.49	1241.46	
3350.00	65.59	62.27	2791.29	2636.29	592.44	1224.38	6463931.760	572540.500	N58 18 32.5440	W1 45 43.5836	2.52	1262.40	
3375.00	66.48	62.21	2801.45	2646.45	603.08	1244.60	6463935.000	572546.660	N58 18 32.6452	W1 45 43.2017	3.57	1283.47	
3400.00	67.20	62.23	2811.28	2656.28	613.79	1264.93	6463938.260	572552.850	N58 18 32.7470	W1 45 42.8174	2.88	1304.66	
3425.00	67.65	62.17	2820.88	2665.88	624.56	1285.35	6463941.540	572559.070	N58 18 32.8493	W1 45 42.4316	1.81	1325.94	
3450.00	68.19	62.22	2830.28	2675.27	635.37	1305.85	6463944.830	572565.320	N58 18 32.9521	W1 45 42.0444	2.17	1347.30	
3475.00	68.80	62.52	2839.44	2684.44	646.15	1326.45	6463948.120	572571.600	N58 18 33.0546	W1 45 41.6551	2.68	1368.77	
3500.00	69.53	62.56	2848.33	2693.33	656.93	1347.18	6463951.400	572577.910	N58 18 33.1569	W1 45 41.2634	2.92	1390.36	
3525.00	70.05	62.83	2856.97	2701.97	667.69	1368.03	6463954.680	572584.270	N58 18 33.2592	W1 45 40.8695	2.31	1412.06	
3550.00	70.60	63.13	2865.39	2710.38	678.38	1389.00	6463957.940	572590.660	N58 18 33.3607	W1 45 40.4734	2.47	1433.89	
3575.00	71.19	63.44	2873.57	2718.57	689.00	1410.10	6463961.180	572597.090	N58 18 33.4615	W1 45 40.0749	2.63	1455.83	
3600.00	71.79	63.70	2881.50	2726.50	699.56	1431.33	6463964.390	572603.550	N58 18 33.5615	W1 45 39.6740	2.59	1477.90	
3625.00	72.46	63.77	2889.18	2734.18	710.09	1452.67	6463967.600	572610.050	N58 18 33.6614	W1 45 39.2711	2.69	1500.07	
3650.00	72.91	64.24	2896.62	2741.62	720.55	1474.12	6463970.790	572616.590	N58 18 33.7605	W1 45 38.8660	2.54	1522.36	
3675.00	73.25	64.53	2903.89	2748.89	730.89	1495.69	6463973.940	572623.160	N58 18 33.8584	W1 45 38.4588	1.76	1544.74	
3700.00	73.40	64.57	2911.07	2756.07	741.18	1517.31	6463977.070	572629.750	N58 18 33.9559	W1 45 38.0506	0.62	1567.18	
3725.00	73.62	64.88	2918.16	2763.16	751.41	1538.99	6463980.190	572636.360	N58 18 34.0528	W1 45 37.6414	1.48	1589.67	
3750.00	73.89	65.52	2925.16	2770.16	761.48	1560.78	6463983.260	572643.000	N58 18 34.1480	W1 45 37.2302	2.68	1612.25	
3775.00	74.19	66.39	2932.03	2777.03	771.27	1582.73	6463986.240	572649.680	N58 18 34.2404	W1 45 36.8161	3.55	1634.97	
3800.00	74.69	66.94	2938.74	2783.74	780.81	1604.84	6463989.150	572656.420	N58 18 34.3304	W1 45 36.3989	2.91	1657.83	
3825.00	75.52	67.19	2945.16	2790.16	790.23	1627.09	6463992.020	572663.200	N58 18 34.4191	W1 45 35.9793	3.46	1680.82	
3850.00	76.59	67.30	2951.19	2796.19	799.61	1649.47	6463994.880	572670.020	N58 18 34.5075	W1 45 35.5574	4.30	1703.93	
3875.00	77.62	67.46	2956.77	2801.77	808.98	1671.96	6463997.740	572676.870	N58 18 34.5957	W1 45 35.1332	4.17	1727.15	

MD (ft)	Inc (deg)	Azi (deg)	TVD (ft)	TVD(SS) (ft)	N/S (ft)	E/W (ft)	Grid Coordinates		Geographic Coordinates		DLS (deg/100ft)	VS (ft)	Comment
							Northing (m)	Easting (m)	Latitude	Longitude			
3900.00	78.56	67.54	2961.93	2806.93	818.35	1694.56	6464000.590	572683.760	N58 18 34.6838	W1 45 34.7070	3.77	1750.48	
3925.00	79.55	67.94	2966.67	2811.67	827.64	1717.28	6464003.420	572690.680	N58 18 34.7712	W1 45 34.2787	4.26	1773.92	
3950.00	80.50	68.43	2971.00	2816.00	836.79	1740.14	6464006.210	572697.640	N58 18 34.8572	W1 45 33.8478	4.26	1797.49	
3975.00	81.46	68.82	2974.92	2819.92	845.79	1763.13	6464008.950	572704.650	N58 18 34.9417	W1 45 33.4144	4.14	1821.18	
4000.00	81.55	69.01	2978.62	2823.62	854.69	1786.20	6464011.660	572711.680	N58 18 35.0251	W1 45 32.9796	0.83	1844.94	
4251.43	83.45	72.97	3011.46	2856.46	935.85	2021.83	6464036.390	572783.480	N58 18 35.7817	W1 45 28.5420	1.73	2086.74	9 5/8in Casing
4298.00	83.80	73.70	3016.63	2861.63	949.12	2066.17	6464040.430	572796.990	N58 18 35.9043	W1 45 27.7077	1.73	2132.07	
4345.00	84.40	75.70	3021.46	2866.46	961.45	2111.26	6464044.190	572810.720	N58 18 36.0176	W1 45 26.8596	4.42	2178.06	
4408.00	86.60	79.00	3026.41	2871.41	975.20	2172.53	6464048.380	572829.390	N58 18 36.1419	W1 45 25.7082	6.28	2240.30	
4503.00	87.90	84.10	3030.97	2875.97	989.14	2266.35	6464052.630	572857.980	N58 18 36.2621	W1 45 23.9475	5.53	2334.98	
4562.00	90.70	87.10	3031.69	2876.69	993.66	2325.16	6464054.010	572875.900	N58 18 36.2960	W1 45 22.8454	6.95	2393.96	
4658.00	90.70	86.30	3030.51	2875.51	999.19	2421.00	6464055.690	572905.100	N58 18 36.3330	W1 45 21.0501	0.83	2489.91	
4752.00	90.90	86.50	3029.20	2874.20	1005.09	2514.80	6464057.490	572933.680	N58 18 36.3740	W1 45 19.2925	0.30	2583.88	
4848.00	90.00	87.10	3028.45	2873.45	1010.45	2610.65	6464059.120	572962.890	N58 18 36.4093	W1 45 17.4970	1.13	2679.82	
4944.00	89.00	86.20	3029.28	2874.29	1016.06	2706.48	6464060.830	572992.090	N58 18 36.4471	W1 45 15.7017	1.40	2775.78	
5038.00	89.20	85.10	3030.76	2875.76	1023.19	2800.19	6464063.000	573020.640	N58 18 36.5003	W1 45 13.9454	1.19	2869.76	
5134.00	89.30	87.20	3032.02	2877.02	1029.63	2895.96	6464064.970	573049.820	N58 18 36.5463	W1 45 12.1509	2.19	2965.73	
5227.00	89.70	84.40	3032.83	2877.83	1036.44	2988.70	6464067.040	573078.080	N58 18 36.5964	W1 45 10.4131	3.04	3058.70	
5322.00	89.90	89.20	3033.16	2878.16	1041.74	3083.52	6464068.660	573106.970	N58 18 36.6313	W1 45 8.6367	5.06	3153.63	
5418.00	87.70	86.60	3035.17	2880.17	1045.26	3179.42	6464069.730	573136.190	N58 18 36.6485	W1 45 6.8408	3.55	3249.47	
5513.00	88.30	84.00	3038.49	2883.49	1053.04	3274.04	6464072.100	573165.020	N58 18 36.7078	W1 45 5.0675	2.81	3344.40	
5610.00	89.20	82.20	3040.61	2885.61	1064.69	3370.31	6464075.650	573194.350	N58 18 36.8050	W1 45 3.2618	2.07	3441.32	
5704.00	89.30	82.10	3041.84	2886.84	1077.53	3463.42	6464079.560	573222.730	N58 18 36.9144	W1 45 1.5148	0.15	3535.20	
5800.00	89.90	82.50	3042.51	2887.51	1090.39	3558.55	6464083.480	573251.710	N58 18 37.0237	W1 44 59.7301	0.75	3631.09	
5898.00	89.10	82.60	3043.36	2888.36	1103.10	3655.72	6464087.350	573281.320	N58 18 37.1310	W1 44 57.9072	0.82	3728.99	
5991.00	88.70	83.10	3045.15	2890.15	1114.67	3747.98	6464090.880	573309.430	N58 18 37.2281	W1 44 56.1766	0.69	3821.91	
6086.00	90.30	83.60	3045.97	2890.98	1125.67	3842.33	6464094.230	573338.180	N58 18 37.3192	W1 44 54.4071	1.76	3916.86	
6183.00	91.80	83.80	3044.20	2889.20	1136.31	3938.73	6464097.470	573367.550	N58 18 37.4064	W1 44 52.5994	1.56	4013.82	
6279.00	91.10	85.20	3041.77	2886.77	1145.51	4034.25	6464100.270	573396.660	N58 18 37.4795	W1 44 50.8085	1.63	4109.78	
6376.00	90.70	86.50	3040.24	2885.24	1152.53	4130.98	6464102.410	573426.130	N58 18 37.5309	W1 44 48.9958	1.40	4206.76	
6459.00	91.90	85.90	3038.36	2883.36	1158.03	4213.78	6464104.090	573451.360	N58 18 37.5699	W1 44 47.4445	1.62	4289.72	
6566.00	92.40	85.40	3034.35	2879.35	1166.14	4320.39	6464106.560	573483.840	N58 18 37.6302	W1 44 45.4464	0.66	4396.63	
6660.00	89.30	85.40	3032.95	2877.95	1173.67	4414.07	6464108.860	573512.390	N58 18 37.6872	W1 44 43.6907	3.30	4490.61	
6754.00	91.20	85.40	3032.54	2877.54	1181.21	4507.76	6464111.150	573540.930	N58 18 37.7443	W1 44 41.9347	2.02	4584.60	
6851.00	91.10	84.20	3030.60	2875.60	1190.00	4604.34	6464113.830	573570.360	N58 18 37.8131	W1 44 40.1242	1.24	4681.58	
6949.00	90.10	83.80	3029.57	2874.57	1200.24	4701.80	6464116.950	573600.060	N58 18 37.8961	W1 44 38.2968	1.10	4779.56	
7042.00	89.10	84.40	3030.22	2875.22	1209.80	4794.30	6464119.860	573628.240	N58 18 37.9732	W1 44 36.5624	1.25	4872.54	
7138.00	88.60	85.20	3032.15	2877.15	1218.50	4889.89	6464122.510	573657.370	N58 18 38.0413	W1 44 34.7705	0.98	4968.52	
7232.00	90.20	85.50	3033.13	2878.13	1226.12	4983.57	6464124.840	573685.910	N58 18 38.0992	W1 44 33.0147	1.73	5062.51	
7327.00	91.80	85.10	3031.47	2876.47	1233.91	5078.23	6464127.210	573714.750	N58 18 38.1584	W1 44 31.2404	1.74	5157.49	
7422.00	91.50	84.90	3028.74	2873.74	1242.18	5172.83	6464129.730	573743.580	N58 18 38.2225	W1 44 29.4671	0.38	5252.45	
7519.00	92.30	84.50	3025.52	2870.52	1251.14	5269.36	6464132.460	573772.990	N58 18 38.2929	W1 44 27.6575	0.92	5349.40	
7616.00	92.94	83.90	3021.09	2866.09	1260.93	5365.76	6464135.440	573802.360	N58 18 38.3716	W1 44 25.8500	0.90	5446.29	
7710.00	92.20	84.30	3016.87	2861.87	1270.58	5459.17	6464138.380	573830.830	N58 18 38.4495	W1 44 24.0986	0.89	5540.18	

MD	Inc	Azi	TVD	TVD(SS)	N/S	E/W	Grid Coordinates		Geographic Coordinates		DLS	VS	Comment
							Northing	Easting	Latitude	Longitude			
(ft)	(deg)	(deg)	(ft)	(ft)	(ft)	(ft)	(m)	(m)			(deg/100ft)	(ft)	
7806.00	90.50	85.10	3014.61	2859.61	1279.45	5554.73	6464141.080	573859.940	N58 18 38.5192	W1 44 22.3071	1.96	5636.15	
7901.00	88.90	85.30	3015.11	2860.11	1287.40	5649.39	6464143.510	573888.790	N58 18 38.5800	W1 44 20.5328	1.70	5731.14	
7996.00	88.60	85.70	3017.18	2862.18	1294.85	5744.07	6464145.780	573917.640	N58 18 38.6359	W1 44 18.7582	0.53	5826.11	
8087.00	89.40	86.70	3018.77	2863.77	1300.88	5834.86	6464147.610	573945.300	N58 18 38.6785	W1 44 17.0572	1.41	5917.08	
8176.00	90.20	86.40	3019.08	2864.08	1306.23	5923.70	6464149.250	573972.370	N58 18 38.7149	W1 44 15.3927	0.96	6006.05	
8264.00	90.70	86.00	3018.39	2863.39	1312.06	6011.50	6464151.020	573999.120	N58 18 38.7561	W1 44 13.7475	0.73	6094.02	
8355.00	92.30	85.10	3016.01	2861.01	1319.12	6102.19	6464153.170	574026.750	N58 18 38.8089	W1 44 12.0478	2.02	6184.98	
8442.00	91.50	85.10	3013.12	2858.12	1326.55	6188.82	6464155.440	574053.150	N58 18 38.8660	W1 44 10.4239	0.92	6271.93	
8529.00	91.90	84.50	3010.54	2855.54	1334.43	6275.43	6464157.840	574079.540	N58 18 38.9276	W1 44 8.8004	0.83	6358.90	
8618.00	93.80	84.70	3006.11	2851.12	1342.80	6363.92	6464160.390	574106.500	N58 18 38.9936	W1 44 7.1414	2.15	6447.78	
8705.00	91.10	83.80	3002.40	2847.40	1351.50	6450.39	6464163.040	574132.850	N58 18 39.0634	W1 44 5.5200	3.27	6534.68	
8793.00	89.00	83.90	3002.32	2847.32	1360.93	6537.88	6464165.910	574159.510	N58 18 39.1400	W1 44 3.8794	2.39	6622.66	
8880.00	88.90	84.10	3003.91	2848.91	1370.02	6624.39	6464168.680	574185.870	N58 18 39.2136	W1 44 2.2573	0.26	6709.63	
8967.00	89.20	84.00	3005.36	2850.36	1379.04	6710.91	6464171.430	574212.230	N58 18 39.2864	W1 44 0.6349	0.36	6796.61	
9057.00	89.30	83.40	3006.53	2851.53	1388.92	6800.36	6464174.440	574239.480	N58 18 39.3671	W1 43 58.9575	0.68	6886.58	
9147.00	90.30	83.00	3006.85	2851.85	1399.57	6889.72	6464177.690	574266.710	N58 18 39.4554	W1 43 57.2813	1.20	6976.53	
9238.00	90.40	82.70	3006.29	2851.29	1410.90	6980.01	6464181.140	574294.220	N58 18 39.5503	W1 43 55.5876	0.35	7067.47	
9328.00	89.50	82.90	3006.37	2851.37	1422.18	7069.30	6464184.570	574321.430	N58 18 39.6448	W1 43 53.9126	1.02	7157.40	
9417.00	89.50	83.10	3007.15	2852.15	1433.02	7157.64	6464187.880	574348.340	N58 18 39.7352	W1 43 52.2557	0.22	7246.34	
9508.00	90.20	83.00	3007.39	2852.39	1444.04	7247.97	6464191.230	574375.870	N58 18 39.8269	W1 43 50.5613	0.78	7337.29	
9596.00	88.80	83.10	3008.15	2853.15	1454.68	7335.31	6464194.480	574402.480	N58 18 39.9155	W1 43 48.9229	1.59	7425.23	
9670.00	91.30	83.80	3008.09	2853.09	1463.12	7408.82	6464197.050	574424.880	N58 18 39.9850	W1 43 47.5442	3.51	7499.20	
9740.00	90.00	83.80	3007.30	2852.30	1470.68	7478.41	6464199.350	574446.080	N58 18 40.0465	W1 43 46.2393	1.86	7569.18	