

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 #7	Vertical Section Azimuth:	162.40 deg
Well Name:	13/22a-C11	Vertical Section Origin:	31.62S, 15.08W
Wellbore Name:	13/22a-C11 (AWB)	TVD Reference Datum:	RKB
Wellpath Name:	13/22a-C11 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 26.6213, W1 46 6.9921	North Reference:	Grid
Slot Location Grid N/E Y/X:	6463741.6050 m, 572162.8350 m	Local Coordinates Referenced To:	Installation

							Grid Cod	ordinates	Geographic	1			
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	-31.62	-15.08	6463741.610	572162.830	N58 18 26.6213	W1 46 6.9921	0.00	0.00	
500.50	0.00	0.00	500.50	345.50	-31.62	-15.08	6463741.610	572162.830	N58 18 26.6213	W1 46 6.9921	0.00	0.00	
510.00		181.12	510.00	355.00	-31.64		6463741.600	572162.830	N58 18 26.6211	W1 46 6.9921	2.21	0.02	
540.00			540.00	385.00	-31.72		6463741.570	572162.850	N58 18 26.6203	W1 46 6.9911	0.81	0.11	
570.00			570.00	415.00	-31.83		6463741.540	572162.870	N58 18 26.6192			0.23	
600.00	0.35	199.91	600.00	445.00	-32.00	-15.02	6463741.490	572162.850	N58 18 26.6175	W1 46 6.9912	0.25	0.38	
630.00	0.38	212.57	630.00	475.00	-32.17	-15.11	6463741.440	572162.830	N58 18 26.6159	W1 46 6.9928	0.29	0.51	
650.00		180.28	650.00	495.00	-32.34		6463741.390	572162.820	N58 18 26.6142	W1 46 6.9936	1.89	0.66	
700.00		175.59	699.99	544.99	-33.00	-15.12	6463741.190	572162.820	N58 18 26.6078	W1 46 6.9933	0.48	1.30	
750.00		199.64	749.99	594.99	-33.79		6463740.940	572162.790	N58 18 26.6000	W1 46 6.9958	0.83	2.02	
800.00			799.97	644.97	-35.05		6463740.560	572162.760	N58 18 26.5875	W1 46 6.9979	_	3.20	
850.00			849.93	694.93	-37.10		6463739.940	572162.840	N58 18 26.5673	W1 46 6.9937	1.75	5.23	
900.00		173.06	899.85	744.85	-39.91	-14.66	6463739.080	572162.960	N58 18 26.5396	W1 46 6.9871	1.89	8.03	
950.00			949.69	794.69	-43.82	-13.98	6463737.890	572163.170	N58 18 26.5009	W1 46 6.9757	3.45	11.96	
1000.00	6.31	164.83	999.42	844.42	-48.78	-12.77	6463736.380	572163.540	N58 18 26.4519	W1 46 6.9547	1.93	17.05	
1050.00	7.47	164.18	1049.06	894.06	-54.56	-11.16	6463734.620	572164.030	N58 18 26.3947	W1 46 6.9267	2.33	23.04	
1100.00			1098.53	943.53	-61.57		6463732.480	572164.570	N58 18 26.3253	W1 46 6.8959		30.27	
1150.00	10.66	162.81	1147.79	992.79	-69.88	-7.13	6463729.950	572165.260	N58 18 26.2431	W1 46 6.8565	3.31	38.87	
1200.00	12.78	159.95	1196.74	1041.74	-79.49	-3.87	6463727.020	572166.250	N58 18 26.1478	W1 46 6.7988	4.40	49.02	
1250.00	15.41	158.42	1245.23	1090.23	-90.87	0.47	6463723.550	572167.570	N58 18 26.0350	W1 46 6.7214	5.31	61.17	
1275.00	16.43	158.24	1269.27	1114.27	-97.24	3.00	6463721.610	572168.340	N58 18 25.9717	W1 46 6.6762	4.08	68.01	
1300.00	17.18	157.92	1293.20	1138.20	-103.94	5.70	6463719.570	572169.170	N58 18 25.9052	W1 46 6.6280	3.02	75.22	
1325.00	17.82	157.65	1317.05	1162.05	-110.90	8.54	6463717.450	572170.030	N58 18 25.8362	W1 46 6.5772	2.58	82.71	
1350.00	18.82	157.34	1340.78	1185.78	-118.16	11.55	6463715.240	572170.950	N58 18 25.7641	W1 46 6.5234	4.02	90.54	
1375.00	19.81	157.20	1364.37	1209.37	-125.79	14.74	6463712.910	572171.920	N58 18 25.6884	W1 46 6.4662	3.96	98.78	
1400.00	20.31	158.28	1387.86	1232.86	-133.73	17.99	6463710.490	572172.910	N58 18 25.6097	W1 46 6.4082	2.49	107.33	
1425.00	20.69	158.18	1411.27	1256.27	-141.86	21.24	6463708.020	572173.900	N58 18 25.5290	W1 46 6.3502	1.53	116.06	
1450.00	21.05	158.17	1434.63	1279.63	-150.12	24.55	6463705.500	572174.910	N58 18 25.4470	W1 46 6.2911	1.44	124.94	
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							Grid Cod	ordinates	Geographic				
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)	
1475.00	21.29	158.11	1457.94	1302.95	-158.50	27.91	6463702.940	572175.930	N58 18 25.3638	W1 46 6.2310	0.96	133.94	
1500.00	21.60	157.87	1481.21	1326.21	-166.98		6463700.360		N58 18 25.2798	W1 46 6.1698	1.29	143.06	
1525.00	21.95	157.76	1504.43	1349.43			6463697.750	572178.050		W1 46 6.1072		152.30	
1550.00	22.30	157.61	1527.59	1372.59			6463695.090		N58 18 25.1081	W1 46 6.0433	1.42	161.68	
1575.00	22.84	157.72		1395.67	-193.15		6463692.390	572180.250		W1 46 5.9781	2.17	171.25	
1600.00	23.15	157.59	1573.69	1418.69			6463689.640	572181.380		W1 46 5.9117	1.26	180.98	
1625.00	23.75	157.73	1596.62	1441.62			6463686.830		N58 18 24.8391	W1 46 5.8441	2.41	190.89	
1650.00	24.11	157.52		1464.47			6463683.970		N58 18 24.7460	W1 46 5.7751	1.48	201.00	
1675.00	24.66	157.39	1642.24	1487.24			6463681.070		N58 18 24.6514	W1 46 5.7043	2.21	211.28	
1700.00	25.51	157.50		1509.89			6463678.090		N58 18 24.5543	W1 46 5.6316	3.41	221.84	
1725.00	26.52	157.44	1687.35	1532.35			6463675.000		N58 18 24.4538	W1 46 5.5564	4.04	232.77	
1750.00	27.06	157.49	1709.67	1554.67	-260.62		6463671.830		N58 18 24.3505	W1 46 5.4792	2.16	243.99	
1775.00	27.57	158.46	1731.88	1576.88			6463668.590		N58 18 24.2450	W1 46 5.4023	2.71	255.43	
1800.00	28.00	158.62		1599.00			6463665.280		N58 18 24.1374	W1 46 5.3263	1.75	267.06	
1825.00	29.02	159.61	1775.97	1620.97	-293.25		6463661.890	572192.650		W1 46 5.2505	4.50	278.97	
1850.00	30.11	160.98	1797.71	1642.71	-304.86		6463658.350	572193.920		W1 46 5.1767	5.13	291.30	
1875.00	31.08	161.88	1819.23	1664.23			6463654.670		N58 18 23.7921	W1 46 5.1051	4.29	304.02	
1900.00	32.01	162.59	1840.54	1685.54			6463650.880	572196.370		W1 46 5.0347	4.01	317.10	
1925.00	32.95	163.62	1861.63	1706.63			6463646.960	572197.560		W1 46 4.9661	4.36	330.52	
1950.00	34.04	164.40	1882.47	1727.47			6463642.920		N58 18 23.4102	W1 46 4.8995	4.69	344.31	
1975.00	35.04	164.98	1903.07	1748.07	-369.16		6463638.760		N58 18 23.2749	W1 46 4.8342		358.47	
2000.00	35.91	165.24	1923.43	1768.43			6463634.490		N58 18 23.1361	W1 46 4.7692		372.97	
2025.00	36.99	164.98	1943.54	1788.54			6463630.110		N58 18 22.9940	W1 46 4.7027	4.36	387.80	
2050.00	38.28	165.12	1963.33	1808.33			6463625.620		N58 18 22.8481	W1 46 4.6341	5.17	403.05	
2075.00	39.35	164.99	1982.81	1827.81	-427.42		6463621.010	572204.580		W1 46 4.5637	4.29	418.70	
2100.00	40.26	165.01	2002.02	1847.02			6463616.290	572205.850		W1 46 4.4914	3.64	434.69	
2125.00	41.46	165.18	2020.93	1865.93			6463611.480	572207.130		W1 46 4.4181	4.82	451.03	
2150.00	42.52	165.41	2039.51	1884.51	-474.86		6463606.550	572208.420		W1 46 4.3443	4.28	467.73	
2175.00	43.55	165.38	2057.78	1902.78			6463601.520	572209.730		W1 46 4.2694	4.12	484.77	
2200.00	44.60	165.33	2075.74	1920.74			6463596.390	572211.070		W1 46 4.1929	4.20	502.14	
2225.00	45.74	165.41	2093.36	1938.37	-525.35		6463591.170	572212.440		W1 46 4.1150	4.57	519.84	
2250.00	46.88	165.34	2110.63	1955.63			6463585.840	572213.830		W1 46 4.0356	4.56	537.90	
2275.00	47.99	165.28	2127.54	1972.54			6463580.410	572215.250		W1 46 3.9543	4.44	556.28	
2300.00	48.92	165.01	2144.12	1989.12			6463574.900		N58 18 21.2007	W1 46 3.8707	3.81	574.97	
2325.00	50.05	164.73	2160.36	2005.37			6463569.310		N58 18 21.0191	W1 46 3.7842	4.60	593.96	
2350.00	51.41	164.69		2021.19			6463563.620		N58 18 20.8343	W1 46 3.6951	5.44	613.30	
2375.00	52.28	164.83		2036.63			6463557.840		N58 18 20.6465	W1 46 3.6049	3.51	632.94	
2400.00	52.67	164.65		2051.86			6463552.010		N58 18 20.4572	W1 46 3.5138	1.66	652.75	
2425.00	53.52	164.36		2066.87			6463546.140		N58 18 20.2665	W1 46 3.4204	3.52	672.73	
2450.00	54.55	164.15		2081.56			6463540.210		N58 18 20.0737	W1 46 3.3244	4.18	692.95	
2475.00	55.05	163.96		2095.97			6463534.220		N58 18 19.8792	W1 46 3.2261	2.09	713.37	
2500.00	55.98	163.77	2265.12	2110.12			6463528.190	572229.700		W1 46 3.1257	3.77	733.97	
2525.00	57.06	163.74		2123.91	-752.05		6463522.090	572231.480		W1 46 3.0234	4.32	754.82	
2550.00	58.03	163.86		2137.33			6463515.920			W1 46 2.9202	3.90	775.91	
_555.56	30.00				50	0.50		e 2 of 6			0.00		

							Grid Cod	ordinates	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)	(m)	(m)			(deg/100ft)	(ft)	
2575.00	58.69	164.10	2305.44	2150.44	-792.76	221.95	6463509.690	572235.060	N58 18 19.0818	W1 46 2.8173	2.76	797.18	
2600.00	58.83	164.25	2318.41	2163.41	-813.33		6463503.420	572236.830	N58 18 18.8782	W1 46 2.7153	0.76	818.55	
2625.00	58.99	164.27	2331.32	2176.32	-833.93		6463497.140	572238.600	N58 18 18.6742	W1 46 2.6137	0.64	839.94	
2650.00		164.35	2344.15	2189.15	-854.59		6463490.850	572240.370		W1 46 2.5122	1.11	861.39	
2675.00		164.44	2356.87	2201.87	-875.32		6463484.530	572242.140	N58 18 18.2645	W1 46 2.4110		882.90	
2700.00	59.71	164.43	2369.51	2214.51	-896.09	250.97	6463478.200	572243.900	N58 18 18.0589	W1 46 2.3098	0.68	904.45	
2725.00		164.54	2382.10	2227.10	-916.91	256.75	6463471.860	572245.660	N58 18 17.8528	W1 46 2.2088	0.64	926.04	
2750.00	60.08	164.67	2394.61	2239.61	-937.77	262.49	6463465.500	572247.410	N58 18 17.6463	W1 46 2.1084	1.06	947.66	
2775.00		164.83	2407.06	2252.06	-958.69	268.19	6463459.130	572249.150	N58 18 17.4392	W1 46 2.0089	0.82	969.33	
2800.00		164.76	2419.51	2264.50	-979.61	273.88	6463452.750	572250.880	N58 18 17.2321	W1 46 1.9097	0.80	990.99	
2825.00	59.98	164.42	2432.00	2277.00	-1000.49	279.63	6463446.390	572252.630	N58 18 17.0255	W1 46 1.8092	1.20	1012.63	
2850.00	60.26	164.21	2444.45	2289.46	-1021.36	285.50	6463440.030	572254.420	N58 18 16.8189	W1 46 1.7067	1.34	1034.29	
2875.00	60.33	164.06	2456.84	2301.84	-1042.24	291.43	6463433.670	572256.230	N58 18 16.6121	W1 46 1.6027	0.59	1056.00	
2900.00	60.34	163.88	2469.22	2314.22	-1063.12	297.43	6463427.310	572258.060	N58 18 16.4053	W1 46 1.4976	0.63	1077.71	
2925.00	60.19	163.67	2481.62	2326.62	-1083.97	303.50	6463420.960	572259.900	N58 18 16.1989	W1 46 1.3913	0.94	1099.41	
2950.00	60.15	163.30	2494.05	2339.05	-1104.76	309.66	6463414.620	572261.780	N58 18 15.9930	W1 46 1.2831	1.29	1121.10	
2975.00	60.21	162.97	2506.48	2351.48	-1125.52	315.95	6463408.300	572263.700	N58 18 15.7875	W1 46 1.1724	1.17	1142.79	
3000.00	60.37	162.98	2518.88	2363.87	-1146.28	322.31	6463401.970	572265.640	N58 18 15.5818	W1 46 1.0606	0.64	1164.50	
3025.00	60.38	163.12	2531.23	2376.23	-1167.07	328.65	6463395.640	572267.570	N58 18 15.3759	W1 46 0.9492	0.49	1186.23	
3050.00	60.34	163.15	2543.60	2388.60	-1187.86	334.95	6463389.300	572269.490	N58 18 15.1700	W1 46 0.8383	0.19	1207.96	
3075.00	60.44	163.06	2555.95	2400.95	-1208.66	341.27	6463382.960	572271.410	N58 18 14.9640	W1 46 0.7273	0.51	1229.69	
3100.00	60.65	162.79	2568.24	2413.24	-1229.47	347.66	6463376.620	572273.360	N58 18 14.7579	W1 46 0.6148	1.26	1251.46	
3125.00	60.87	162.84	2580.45	2425.45	-1250.31	354.10	6463370.270	572275.320	N58 18 14.5515	W1 46 0.5014	0.90	1273.27	
3150.00	61.01	163.02	2592.60	2437.60	-1271.20	360.52	6463363.910	572277.280	N58 18 14.3446	W1 46 0.3885	0.84	1295.12	
3175.00	60.88	163.29	2604.74	2449.74	-1292.11	366.85	6463357.540	572279.210	N58 18 14.1374	W1 46 0.2772	1.08	1316.97	
3200.00	60.40	163.32	2617.00	2462.00	-1312.98	373.11	6463351.180	572281.120	N58 18 13.9307	W1 46 0.1672	1.92	1338.76	
3225.00	60.40	163.13	2629.34	2474.34	-1333.80	379.38	6463344.840	572283.030	N58 18 13.7246	W1 46 0.0569	0.66	1360.50	
3250.00	60.70	163.31	2641.64	2486.64	-1354.64	385.67	6463338.480	572284.940	N58 18 13.5182	W1 45 59.9465	1.35	1382.26	
3275.00	60.92	163.42	2653.83	2498.83	-1375.55	391.92	6463332.110	572286.850	N58 18 13.3111	W1 45 59.8368	0.96	1404.09	
3300.00	61.02	163.65	2665.96	2510.96	-1396.51	398.11	6463325.730	572288.730	N58 18 13.1035	W1 45 59.7280	0.90	1425.94	
3325.00	60.95	163.79	2678.09	2523.09	-1417.50	404.24	6463319.330	572290.600	N58 18 12.8957	W1 45 59.6205	0.56	1447.80	
3350.00	60.85	163.76	2690.24	2535.24	-1438.47	410.35	6463312.940	572292.460	N58 18 12.6880	W1 45 59.5135	0.41	1469.63	
3375.00	60.65	163.83	2702.46	2547.46	-1459.42	416.43	6463306.560	572294.320	N58 18 12.4806	W1 45 59.4068	0.84	1491.44	
3400.00	60.57	163.96	2714.73	2559.73	-1480.35	422.47	6463300.180	572296.160	N58 18 12.2734	W1 45 59.3009	0.55	1513.22	
3425.00	60.68	163.81	2726.99	2571.99	-1501.28	428.52	6463293.800	572298.000	N58 18 12.0662	W1 45 59.1950	0.68	1534.99	
3450.00	60.97	163.55	2739.18	2584.18	-1522.23	434.65	6463287.420	572299.870	N58 18 11.8587	W1 45 59.0874	1.47	1556.82	
3475.00	61.34	163.76	2751.24	2596.24	-1543.24	440.82	6463281.020	572301.750	N58 18 11.6506	W1 45 58.9793	1.65	1578.71	
3500.00	61.51	163.95	2763.20	2608.20	-1564.33	446.92	6463274.590	572303.610	N58 18 11.4418	W1 45 58.8723	0.95	1600.66	
3525.00	61.25	163.81	2775.17	2620.17	-1585.41	453.02	6463268.170	572305.460	N58 18 11.2331	W1 45 58.7655	1.15	1622.60	
3550.00		163.68	2787.24	2632.25	-1606.43	459.14	6463261.770	572307.330	N58 18 11.0250	W1 45 58.6580	1.10	1644.48	
3575.00		163.49	2799.28	2644.28		465.34	6463255.360	572309.220		W1 45 58.5494	1.88	1666.39	
3600.00		163.17	2811.10	2656.10	-1648.55	471.66	6463248.930	572311.140	N58 18 10.6078	W1 45 58.4384	3.06	1688.42	
3625.00	63.08	162.87	2822.60	2667.60	-1669.78	478.14	6463242.460	572313.120	N58 18 10.3975	W1 45 58.3244	3.87	1710.61	
3650.00	64.02	162.62	2833.73	2678.73	-1691.16	484.78	6463235.950	572315.140	N58 18 10.1858	W1 45 58.2075	3.87	1733.00	
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							Grid Cod	ordinates	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)	
3675.00	64.99	162.57	2844.49	2689.49	-1712.69	491.53	6463229.390	572317.200	N58 18 9.9725	W1 45 58.0886	3.88	1755.56	
3700.00	65.88	162.57	2854.89	2699.89	-1734.38	498.34	6463222.780	572319.270	N58 18 9.7576	W1 45 57.9686	3.56	1778.30	
3725.00	66.62	162.53	2864.95	2709.95	-1756.21	505.20	6463216.130	572321.360	N58 18 9.5414	W1 45 57.8477	2.96	1801.18	
3750.00	67.45	162.50	2874.71	2719.71	-1778.17	512.12	6463209.440	572323.470	N58 18 9.3239	W1 45 57.7258	3.32	1824.20	
3775.00	68.13	162.46	2884.16	2729.16	-1800.24	519.08	6463202.710	572325.590	N58 18 9.1052	W1 45 57.6030	2.72	1847.34	
3800.00	68.60	162.55	2893.38	2738.38	-1822.40	526.07	6463195.960	572327.720	N58 18 8.8857	W1 45 57.4799	1.91	1870.58	
3825.00	69.00	162.57	2902.42	2747.42	-1844.64	533.06	6463189.180	572329.850	N58 18 8.6654	W1 45 57.3568	1.60	1893.89	
3850.00	69.84	162.35	2911.20	2756.20	-1866.95	540.11	6463182.380	572332.000	N58 18 8.4443	W1 45 57.2325	3.46	1917.29	
3875.00	70.99	162.15	2919.58	2764.58	-1889.39	547.29	6463175.550	572334.190	N58 18 8.2221	W1 45 57.1058	4.66	1940.85	
3900.00	71.87	162.06	2927.55	2772.55	-1911.94	554.57	6463168.680	572336.410	N58 18 7.9987	W1 45 56.9773	3.54	1964.55	
3925.00	72.38	161.93	2935.22	2780.22	-1934.57	561.93	6463161.780	572338.650	N58 18 7.7745	W1 45 56.8475	2.10	1988.34	
3950.00	72.96	161.83	2942.67	2787.67	-1957.25	569.35	6463154.870	572340.910	N58 18 7.5497	W1 45 56.7164	2.35	2012.20	
3975.00	73.86	161.85	2949.80	2794.80			6463147.930	572343.180	N58 18 7.3242	W1 45 56.5845	3.60	2036.16	
4000.00	74.61	161.92	2956.60	2801.60			6463140.970	572345.460	N58 18 7.0976	W1 45 56.4524	3.01	2060.22	
4025.00	75.53	161.88	2963.04	2808.04			6463133.970	572347.750	N58 18 6.8701	W1 45 56.3198	3.68	2084.37	
4050.00	76.90	161.65	2968.99	2813.99			6463126.950	572350.070	N58 18 6.6416	W1 45 56.1856	5.55	2108.65	
4075.00	77.98	161.41	2974.43	2819.43			6463119.890	572352.420	N58 18 6.4122	W1 45 56.0489	4.42	2133.05	
4100.00	78.67	161.28	2979.49	2824.49			6463112.830	572354.810	N58 18 6.1823	W1 45 55.9103	2.81	2157.53	
4125.00	79.55	160.96	2984.21	2829.21	-2118.47		6463105.750	572357.230	N58 18 5.9521	W1 45 55.7697	3.74	2182.07	
4150.00	80.89	160.42	2988.46	2833.46			6463098.660	572359.710	N58 18 5.7217	W1 45 55.6252	5.77	2206.70	
4175.00	82.14	159.87	2992.15	2837.15			6463091.580	572362.270	N58 18 5.4911	W1 45 55.4761	5.45	2231.40	
4200.00	82.85	159.58	2995.41	2840.41	-2188.23		6463084.490	572364.890	N58 18 5.2605	W1 45 55.3233	3.06	2256.16	
4225.00	83.21	159.44	2998.45	2843.45			6463077.410	572367.530	N58 18 5.0300	W1 45 55.1688	1.54	2280.95	
4250.00	83.11	159.38	3001.42	2846.42			6463070.330	572370.190	N58 18 4.7996	W1 45 55.0134	0.47	2305.73	
4275.00	82.79	159.18	3004.49	2849.49			6463063.260	572372.870	N58 18 4.5694	W1 45 54.8572	1.51	2330.51	
4300.00	82.86	158.76	3007.61	2852.61	-2281.07		6463056.200	572375.580	N58 18 4.3398	W1 45 54.6986	1.69	2355.27	
4325.00	83.35	158.46	3010.62	2855.62			6463049.160	572378.340	N58 18 4.1105	W1 45 54.5372	2.29	2380.03	
4350.00	83.68	158.36	3013.44	2858.44			6463042.130	572381.120	N58 18 3.8814	W1 45 54.3741	1.38	2404.81	
4375.00	84.23	158.32	3016.07	2861.07			6463035.090	572383.920	N58 18 3.6522	W1 45 54.2103	2.21	2429.61	
4400.00	85.20	158.08	3018.38	2863.37			6463028.040	572386.730	N58 18 3.4228	W1 45 54.0453	4.00	2454.44	
4425.00	85.88	157.62	3020.32	2865.32			6463021.010	572389.600	N58 18 3.1938	W1 45 53.8774	3.28	2479.28	
4450.00	85.64	157.26	3022.17	2867.17			6463013.990	572392.510	N58 18 2.9653	W1 45 53.7063	1.73	2504.12	
4475.00	85.31	157.13	3024.14	2869.14			6463006.990	572395.460	N58 18 2.7373	W1 45 53.5335	1.42	2528.94	
4490.00	85.37	157.06	3025.36	2870.36			6463002.800	572397.230	N58 18 2.6006	W1 45 53.4294	0.61	2543.83	
4587.00	87.50	160.10	3031.39	2876.39			6462975.340	572408.000	N58 18 1.7066	W1 45 52.7990	3.82	2640.41	
4649.00	90.30	161.80	3032.58	2877.58			6462957.490	572414.160	N58 18 1.1260	W1 45 52.4406	5.28	2702.37	
4684.00	92.20	161.50	3031.82	2876.82			6462947.370	572417.520	N58 18 0.7969	W1 45 52.2459	5.50	2737.35	
4780.00	92.30	159.80	3028.05	2873.05			6462919.790	572427.200		W1 45 51.6824	1.77	2833.23	
4876.00	94.10	154.90	3022.69	2867.69			6462892.850		N58 17 59.0221	W1 45 51.0024 W1 45 51.0225	5.43	2928.68	
4971.00	92.40	152.00	3017.30	2862.30			6462867.000	572451.360		W1 45 51.0225 W1 45 50.2585	3.53	3022.36	
5066.00	91.90	150.80	3017.30	2858.74			6462841.610			W1 45 49.4370	1.37	3115.54	
5163.00	92.20	152.00	3013.74	2855.27			6462815.670	572479.350	N58 17 57.5497 N58 17 56.5031	W1 45 48.5981	1.37	3210.70	
5258.00	92.20	152.40	3010.27	2851.29			6462790.090	572479.330	N58 17 55.6681	W1 45 47.7988	0.60	3304.11	
5353.00	92.50	152.40	3002.06	2847.06			6462764.450			W1 45 47.7988 W1 45 47.0065	0.00	3397.59	
5555.00	32.30	132.30	3002.00	2041.00	-3230.30	1111.00		e 4 of 6	1400 17 04.0014	VV 1 40 47.0005	0.13	331.38	

							Grid Cod	ordinates	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)	
5448.00	92.70	152.20	2997.75	2842.75	-3322.64	1155.90	6462738.840	572519.630	N58 17 53.9955	W1 45 46.2115	0.38	3491.04	
5542.00	92.50	150.40	2993.49	2838.49			6462713.740	572533.370		W1 45 45.3962	1.92	3583.18	
5638.00	91.30	150.70	2990.30	2835.30	-3488.55	1248.16	6462688.290	572547.740	N58 17 52.3446	W1 45 44.5424	1.29	3677.08	
5733.00	92.10	151.30	2987.49	2832.49			6462662.980	572561.770		W1 45 43.7097	1.05	3770.17	
5829.00	90.70	152.40	2985.14	2830.14	-3656.22	1339.48	6462637.200	572575.560	N58 17 50.6767	W1 45 42.8918	1.85	3864.51	
5924.00	91.70	152.60	2983.15	2828.15	-3740.47	1383.33	6462611.530	572588.930	N58 17 49.8390	W1 45 42.1004	1.07	3958.07	
6020.00		152.30	2980.72	2825.72	-3825.55	1427.72	6462585.600	572602.450	N58 17 48.9929	W1 45 41.2993	0.61	4052.60	
6116.00	90.00	152.70	2979.72	2824.72	-3910.70	1472.04	6462559.660	572615.960	N58 17 48.1462	W1 45 40.4994	1.32	4147.16	
6210.00	89.90	152.90	2979.80	2824.80	-3994.30	1515.01	6462534.190	572629.050	N58 17 47.3150	W1 45 39.7244	0.24	4239.85	
6306.00	87.30	153.00	2982.14	2827.14	-4079.77	1558.65	6462508.140	572642.350	N58 17 46.4653	W1 45 38.9374	2.71	4334.51	
6402.00	87.90	152.90	2986.16	2831.16	-4165.19	1602.27	6462482.120	572655.640	N58 17 45.6160	W1 45 38.1509	0.63	4429.12	
6495.00	89.40	153.50	2988.35	2833.35	-4248.18	1644.19	6462456.830	572668.410	N58 17 44.7911	W1 45 37.3953	1.74	4520.90	
6591.00	88.30	153.10	2990.28	2835.28	-4333.92	1687.32	6462430.700	572681.550	N58 17 43.9387	W1 45 36.6181	1.22	4615.67	
6683.00	87.60	152.50	2993.57	2838.57	-4415.70	1729.34	6462405.790	572694.360	N58 17 43.1257	W1 45 35.8601	1.00	4706.32	
6779.00	87.10	152.30	2998.01	2843.01	-4500.68	1773.77	6462379.890	572707.890	N58 17 42.2806	W1 45 35.0583	0.56	4800.76	
6876.00	87.30	151.50	3002.75	2847.75	-4586.14	1819.40	6462353.850	572721.800	N58 17 41.4306	W1 45 34.2341	0.85	4896.02	
6974.00	86.80	150.90	3007.79	2852.79	-4671.91	1866.55	6462327.720	572736.160	N58 17 40.5773	W1 45 33.3817	0.80	4992.03	
7070.00	85.70	150.30	3014.07	2859.07	-4755.36	1913.58	6462302.290	572750.490	N58 17 39.7468	W1 45 32.5309	1.30	5085.79	
7167.00	82.30	150.10	3024.21	2869.21	-4839.06	1961.51	6462276.790	572765.100	N58 17 38.9137	W1 45 31.6630	3.51	5180.07	
7260.00	83.80	151.60	3035.46	2880.46	-4919.69	2006.47	6462252.220	572778.800	N58 17 38.1115	W1 45 30.8498	2.27	5270.51	
7357.00	85.90	152.10	3044.17	2889.17	-5004.86	2052.05	6462226.270	572792.680	N58 17 37.2642	W1 45 30.0267	2.22	5365.48	
7451.00	89.00	151.80	3048.35	2893.35	-5087.73	2096.20	6462201.020	572806.140	N58 17 36.4401	W1 45 29.2293	3.31	5457.82	
7545.00	90.70	151.80	3048.60	2893.60	-5170.57	2140.62	6462175.780	572819.670	N58 17 35.6161	W1 45 28.4271	1.81	5550.21	
7639.00	89.70	151.40	3048.27	2893.27	-5253.25	2185.33	6462150.590	572833.290	N58 17 34.7936	W1 45 27.6193	1.15	5642.55	
7736.00	90.10	151.40	3048.44	2893.44	-5338.42	2231.76	6462124.640	572847.440	N58 17 33.9463	W1 45 26.7802	0.41	5737.76	
7833.00	89.50	151.80	3048.78	2893.78	-5423.74	2277.90	6462098.640	572861.500	N58 17 33.0975	W1 45 25.9467	0.74	5833.04	
7928.00	92.20	151.40	3047.37	2892.37	-5507.29	2323.07	6462073.180	572875.260	N58 17 32.2664	W1 45 25.1305	2.87	5926.34	
8023.00	92.90	151.50	3043.14	2888.14	-5590.65	2368.43	6462047.780	572889.080	N58 17 31.4371	W1 45 24.3109	0.74	6019.52	
8117.00	92.10	150.90	3039.04	2884.04	-5672.95	2413.67	6462022.710	572902.870	N58 17 30.6183	W1 45 23.4931	1.06	6111.64	
8204.00	90.40	151.40	3037.14	2882.14	-5749.13	2455.64	6461999.490	572915.660	N58 17 29.8603	W1 45 22.7345	2.04	6196.95	
8380.00	89.20	150.90	3037.76	2882.76	-5903.28	2540.56	6461952.520	572941.530	N58 17 28.3266	W1 45 21.1994	0.74	6369.56	
8466.00	89.70	150.50	3038.58	2883.58	-5978.27	2582.64	6461929.670	572954.350	N58 17 27.5803	W1 45 20.4381	0.74	6453.77	
8556.00	90.20	149.50	3038.66	2883.66	-6056.22	2627.64	6461905.930	572968.070	N58 17 26.8044	W1 45 19.6234	1.24	6541.67	
8646.00	88.80	150.00	3039.45	2884.45	-6133.96	2672.98	6461882.240	572981.880	N58 17 26.0305	W1 45 18.8023	1.65	6629.48	
8738.00	87.90	151.90	3042.10	2887.10	-6214.34	2717.63	6461857.740	572995.490	N58 17 25.2306	W1 45 17.9949	2.28	6719.60	
8826.00	90.10	152.60	3043.63	2888.63	-6292.21	2758.60	6461834.020	573007.970	N58 17 24.4563	W1 45 17.2557	2.62	6806.21	
8917.00	90.60	152.40	3043.08	2888.08	-6372.92	2800.61	6461809.430	573020.770	N58 17 23.6536	W1 45 16.4977	0.59	6895.85	
9005.00	89.50	152.60	3043.00	2888.00	-6450.98	2841.25	6461785.640	573033.150	N58 17 22.8774	W1 45 15.7647	1.27	6982.54	
9107.00	89.00	153.60	3044.33	2889.33	-6541.93	2887.39	6461757.930	573047.210	N58 17 21.9732	W1 45 14.9332	1.10	7083.19	
9182.00		154.50		2889.86		2920.21	6461737.380	573057.210	N58 17 21.3030	W1 45 14.3427	2.00	7157.39	
9270.00		154.30	3044.86	2889.86		2958.23	6461713.200	573068.800		W1 45 13.6590	0.51	7244.53	
9356.00	89.40	154.20	3045.46	2890.46		2995.59	6461689.600	573080.180	N58 17 19.7447	W1 45 12.9871	0.48	7329.66	
9445.00	90.90	154.30	3045.22	2890.23	-6846.35	3034.26	6461665.180	573091.960	N58 17 18.9481	W1 45 12.2917	1.69	7417.76	
9533.00	92.10	154.60	3042.92	2887.92	-6925.71	3072.20	6461640.990	573103.520	N58 17 18.1595	W1 45 11.6096	1.41	7504.88	
							Page	e 5 of 6					

							Grid Cod	id 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)	
9622.00	93.60	154.10	3038.50	2883.50	-7005.84	3110.67	6461616.580	573115.240	N58 17 17.3633	W1 45 10.9177	1.78	7592.89	
9713.00	96.00	153.20	3030.88	2875.88	-7087.09	3150.92	6461591.820	573127.510	N58 17 16.5557	W1 45 10.1932	2.82	7682.51	
9782.00	96.00	153.20	3023.67	2868.67	-7148.34	3181.86	6461573.160	573136.930	N58 17 15.9467	W1 45 9.6357	0.00	7750.25	