

## **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 #8	Vertical Section Azimuth:	90.00 deg
Well Name:	13/22a-C19z	Vertical Section Origin:	9.00N, 15.25E
Wellbore Name:	13/22a-C19z (AWB)	TVD Reference Datum:	RKB
Wellpath Name:	13/22a-C19z 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 27.0159, W1 46 6.4106	North Reference:	Grid
Slot Location Grid N/E Y/X:	6463753.9820 m, 572172.0770 m	Local Coordinates Referenced To:	Installation

							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)	(ft)	(m)	(m)			(deg/100ft)	(ft)	
0.00	0.00	0.00	0.00	-155.00	9.00	15.25	6463753.980	572172.080	N58 18 27.0159	W1 46 6.4106	0.00	0.00	
500.50	0.00	0.00	500.50	345.50	9.00	15.25	6463753.980	572172.080	N58 18 27.0159	W1 46 6.4106	0.00	0.00	
550.00	1.06	350.21	550.00	395.00	9.45	15.17	6463754.120	572172.050	N58 18 27.0204	W1 46 6.4119	2.14	-0.08	
600.00	1.47	325.45	599.99	444.99	10.43		6463754.420			W1 46 6.4199	1.35	-0.52	
650.00	1.19	345.30	649.97	494.97	11.47	14.23	6463754.730	572171.770	N58 18 27.0404	W1 46 6.4288	1.07	-1.02	
700.00	1.14		699.97	544.96			6463754.940			W1 46 6.4223	3.10	-0.68	
750.00	1.44	85.13	749.95	594.95	12.38		6463755.010			W1 46 6.4019	0.94	0.41	
800.00	3.09	77.13	799.91	644.91	12.73		6463755.120	572172.790	N58 18 27.0523	W1 46 6.3654	3.35	2.35	
850.00	5.80		849.76	694.76			6463755.070			W1 46 6.2944	6.41	6.15	
900.00	7.57	98.22	899.42	744.42	11.65	27.14	6463754.790			W1 46 6.1872	3.58	11.89	
950.00	8.63	97.87	948.92	793.92		34.12	6463754.490	572177.830		W1 46 6.0570	2.12	18.87	
1000.00	9.08	104.34	998.32	843.32	9.17	41.66	6463754.040			W1 46 5.9165	2.18	26.40	
1050.00	9.72		1047.66	892.66			6463753.660			W1 46 5.7665	3.81	34.44	
1100.00	10.34		1096.89	941.89			6463753.500	572185.220		W1 46 5.6040	1.25	43.13	
1150.00	11.51	83.57	1145.99	990.99			6463753.580			W1 46 5.4274	4.52	52.57	
1200.00	12.01	86.92	1194.94	1039.94			6463753.830			W1 46 5.2371	1.69	62.72	
1250.00	12.66	74.93	1243.79	1088.79	10.21	88.46	6463754.350	572194.380	N58 18 27.0147	W1 46 5.0403	5.27	73.21	
1300.00	13.15	77.79	1292.53	1137.53	12.84	99.31	6463755.150	572197.690	N58 18 27.0386	W1 46 4.8364	1.61	84.06	
1350.00	13.81	73.71	1341.16	1186.15	15.72		6463756.030			W1 46 4.6242	2.31	95.34	
1400.00	14.58	69.60	1389.63	1234.63	19.58	122.22	6463757.210	572204.670	N58 18 27.1009	W1 46 4.4053	2.54	106.97	
1450.00	14.36	68.44	1438.04	1283.04	24.06	133.89	6463758.570	572208.230	N58 18 27.1428	W1 46 4.1854	0.73	118.64	
1500.00	14.09	67.35	1486.51	1331.51	28.68		6463759.980	572211.690		W1 46 3.9708	0.76	130.02	
1550.00	14.09	68.56	1535.01	1380.01	33.25	156.55	6463761.370	572215.130	N58 18 27.2293	W1 46 3.7582	0.59	141.30	
1600.00	14.48	66.56	1583.46	1428.46	37.96	167.95	6463762.810	572218.600	N58 18 27.2736	W1 46 3.5432	1.26	152.70	
1650.00	14.88	64.56	1631.83	1476.83	43.20	179.49	6463764.400	572222.120	N58 18 27.3232	W1 46 3.3256	1.29	164.23	
1680.00	15.46	67.64	1660.78	1505.78	46.38	186.66	6463765.370	572224.310	N58 18 27.3532	W1 46 3.1902	3.31	171.41	
1705.00	15.55	67.85	1684.87	1529.87	48.91	192.85	6463766.140	572226.190	N58 18 27.3770	W1 46 3.0736	0.42	177.60	
1730.00	15.30	69.27	1708.97	1553.97	51.34	199.04	6463766.880		N58 18 27.3998	W1 46 2.9570	1.81	183.78	
							Pag	e 1 of 3					

Page 1 of 3

							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)	
1755.00	15.06	72.70	1733.10	1578.10	53.47	205.22	6463767.530	572229.960	N58 18 27.4197	W1 46 2.8405	3.72	189.97	
1780.00		74.83		1602.27			6463768.080		N58 18 27.4362	W1 46 2.7249	2.83	196.12	
1805.00		76.21	1781.46	1626.46			6463768.560		N58 18 27.4507	W1 46 2.6100	1.40	202.23	
1830.00				1650.63			6463769.010		N58 18 27.4642	W1 46 2.4930	1.69	208.45	
1855.00		77.30		1674.73			6463769.460		N58 18 27.4776	W1 46 2.3717	2.75	214.91	
1880.00				1698.75			6463769.920		N58 18 27.4911	W1 46 2.2444	3.36	221.68	
1905.00				1722.67			6463770.390		N58 18 27.5050	W1 46 2.1108	3.16	228.79	
1930.00				1746.48			6463770.890		N58 18 27.5197	W1 46 1.9709	3.44	236.24	
1955.00		77.88		1770.11	66.20	259.45	6463771.410	572246.480	N58 18 27.5353	W1 46 1.8213	6.77	244.20	
1980.00		77.78		1793.53			6463771.970		N58 18 27.5519	W1 46 1.6607	4.80	252.75	
2005.00	22.31	78.13	1971.76	1816.76	69.97	277.04	6463772.560	572251.840	N58 18 27.5693	W1 46 1.4910	4.99	261.78	
2030.00	23.56	78.75	1994.78	1839.78	71.92	286.58	6463773.160	572254.750	N58 18 27.5868	W1 46 1.3117	5.09	271.33	
2055.00	24.69	79.13	2017.60	1862.60	73.89	296.61	6463773.750	572257.810	N58 18 27.6043	W1 46 1.1234	4.56	281.36	
2080.00		79.76	2040.22	1885.23	75.83	307.06	6463774.350	572260.990	N58 18 27.6216	W1 46 0.9271	3.99	291.81	
2105.00	27.11	80.58	2062.62	1907.62	77.72	318.01	6463774.920	572264.330	N58 18 27.6382	W1 46 0.7217	6.02	302.76	
2130.00	28.14	80.86	2084.77	1929.77	79.59	329.45	6463775.490	572267.810	N58 18 27.6546	W1 46 0.5069	4.15	314.20	
2155.00	29.38	80.87	2106.69	1951.69	81.50	341.32	6463776.070	572271.430	N58 18 27.6712	W1 46 0.2841	4.96	326.07	
2180.00	30.82	80.74	2128.32	1973.32	83.51	353.70	6463776.680	572275.200	N58 18 27.6887	W1 46 0.0518	5.77	338.45	
2205.00	31.76	79.77	2149.68	1994.68	85.71	366.50	6463777.350	572279.100	N58 18 27.7081	W1 45 59.8116	4.27	351.24	
2230.00	32.70	80.19	2170.83	2015.83	88.03	379.62	6463778.060	572283.100	N58 18 27.7286	W1 45 59.5651	3.87	364.37	
2255.00	34.07	79.60	2191.70	2036.70	90.44	393.17	6463778.800	572287.230	N58 18 27.7499	W1 45 59.3108	5.63	377.92	
2258.00	34.25	79.51	2194.18	2039.18	90.75	394.82	6463778.890	572287.730	N58 18 27.7526	W1 45 59.2797	6.23	379.57	
2330.00	37.36	77.83	2252.57	2097.57	99.04	436.11	6463781.420	572300.310	N58 18 27.8269	W1 45 58.5043	4.53	420.86	
2425.00	41.40	77.60	2325.99	2170.99	111.87	494.99	6463785.330	572318.250	N58 18 27.9426	W1 45 57.3980	4.26	479.74	
2521.00	45.06	77.15	2395.92	2240.92	126.25	559.14	6463789.710	572337.800	N58 18 28.0726	W1 45 56.1927	3.83	543.89	
2616.00	49.12	75.25	2460.59	2305.59	142.88	626.68	6463794.770	572358.380	N58 18 28.2242	W1 45 54.9230	4.52	611.43	
2710.00	53.19	75.57	2519.54	2364.54	161.31	697.52	6463800.390	572379.960	N58 18 28.3930	W1 45 53.5911	4.34	682.27	
2807.00	57.03	77.18	2575.01	2420.01	180.02	774.83	6463806.090	572403.520	N58 18 28.5633	W1 45 52.1379	4.19	759.58	
2903.00	58.43	76.43	2626.27	2471.27	198.55	853.86	6463811.740	572427.600	N58 18 28.7315	W1 45 50.6528	1.60	838.61	
2998.00	58.74	75.95	2675.78	2520.79	217.91	932.59	6463817.640	572451.590	N58 18 28.9079	W1 45 49.1728	0.54	917.34	
3061.00		76.05		2553.44		984.86	6463821.610	572467.520		W1 45 48.1902	0.18	969.61	
3156.00	56.70	78.24	2759.13	2604.13		1063.18	6463827.060	572491.380		W1 45 46.7184	2.96	1047.93	
3251.00				2653.46			6463831.690	572515.670		W1 45 45.2212	4.57	1127.66	
3347.00				2696.86		1227.44	6463835.790		N58 18 29.4414	W1 45 43.6348	5.19	1212.19	
3443.00				2733.63	289.46		6463839.440		N58 18 29.5434	W1 45 41.9868	4.22	1300.03	
3537.00				2764.71	299.37		6463842.460		N58 18 29.6250	W1 45 40.3339	3.14	1388.18	
3632.00				2793.43			6463844.640		N58 18 29.6794	W1 45 38.6423	2.28	1478.44	
3727.00		88.30		2819.55			6463845.910		N58 18 29.7038	W1 45 36.9336	3.07	1569.68	
3822.00		91.11		2842.92			6463846.050		N58 18 29.6917	W1 45 35.2105	3.09	1661.75	
3918.00				2863.64			6463845.250		N58 18 29.6486	W1 45 33.4582	2.75	1755.44	
4014.00				2880.20			6463844.320		N58 18 29.6015	W1 45 31.6908	2.78	1849.94	
4109.00				2890.98			6463843.630	572764.490		W1 45 29.9262	4.47	1944.28	
4154.00				2893.59	302.40		6463843.380	572778.180		W1 45 29.0860	4.80	1989.19	
4243.00	91.20	89.80	3049.41	2894.41	301.86	2093.42	6463843.220	572805.290	N58 18 29.5243	W1 45 27.4211	4.08	2078.17	
							Page	e 2 of 3					

							Grid Coordinates Geogra			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)	
4337.00	91.83	88.50	3046.93	2891.93	303.25	2187.38	6463843.640	572833.920	N58 18 29.5210	W1 45 25.6624	1.54	2172.13	
4433.00	92.75	87.20	3043.09	2888.09	306.85	2283.23	6463844.740	572863.120	N58 18 29.5390	W1 45 23.8675	1.66	2267.98	
4528.00	92.00	86.30	3039.16	2884.16	312.23		6463846.380	572892.000		W1 45 22.0923	1.23	2362.74	
4624.00	90.26	85.20	3037.26	2882.26	319.34		6463848.540	572921.160	N58 18 29.6274	W1 45 20.2988	2.14	2458.46	
4719.00	88.83	85.00	3038.02	2883.02	327.46		6463851.020	572950.000	N58 18 29.6900	W1 45 18.5248	1.52	2553.10	
4814.00	88.43	86.60	3040.29	2885.29	334.41	2663.07	6463853.140	572978.860	N58 18 29.7413	W1 45 16.7500	1.74	2647.82	
4909.00	90.57	86.80	3041.12	2886.12	339.88		6463854.800	573007.760	N58 18 29.7779	W1 45 14.9735	2.26	2742.65	
5004.00	93.26	86.90	3037.94	2882.94	345.10		6463856.390	573036.640	N58 18 29.8120	W1 45 13.1978	2.83	2837.45	
5099.00	91.74	86.90	3033.80	2878.80	350.23		6463857.950	573065.520	N58 18 29.8452	W1 45 11.4226	1.60	2932.21	
5195.00	90.46	87.10	3031.96	2876.96	355.25		6463859.490	573094.720	N58 18 29.8772	W1 45 9.6272	1.35	3028.06	
5291.00	89.46	87.70	3032.02	2877.02	359.61		6463860.810	573123.940	N58 18 29.9026	W1 45 7.8311	1.21	3123.96	
5387.00	90.60	86.60	3031.97	2876.97	364.38		6463862.270	573153.150	N58 18 29.9321	W1 45 6.0353	1.65	3219.84	
5482.00	91.29	86.80	3030.41	2875.41	369.85		6463863.930	573182.050	N58 18 29.9687	W1 45 4.2588	0.76	3314.67	
5576.00	89.37	87.80	3029.86	2874.87	374.28		6463865.280	573210.660	N58 18 29.9951	W1 45 2.5003	2.30	3408.56	
5672.00	89.51	88.60	3030.80	2875.80	377.29		6463866.200	573239.890	N58 18 30.0073	W1 45 0.7038	0.85	3504.51	
5767.00	89.69	90.30	3031.47	2876.47	378.20		6463866.480	573268.830	N58 18 29.9989	W1 44 58.9259	1.80	3599.49	
5861.00	90.31	89.90	3031.47	2876.47	378.04		6463866.430	573297.480	N58 18 29.9801	W1 44 57.1670	0.78	3693.49	
5958.00	90.77	90.20	3030.55	2875.55	377.96		6463866.400	573327.030	N58 18 29.9615	W1 44 55.3519	0.57	3790.49	
6053.00	90.09	90.20	3029.84	2874.84	377.62		6463866.300	573355.970	N58 18 29.9408	W1 44 53.5744	0.72	3885.49	
6148.00	89.49	90.70	3030.19	2875.19	376.88		6463866.070	573384.920	N58 18 29.9161	W1 44 51.7969	0.82	3980.48	
6254.00	89.91	91.70	3030.74	2875.74	374.66		6463865.400	573417.210		W1 44 49.8146	1.02	4086.45	
6433.00	91.69	88.90	3028.24	2873.24	373.72		6463865.110	573471.740	N58 18 29.8327	W1 44 46.4661	1.85	4265.41	
6526.00	91.09	88.90	3025.99	2870.99	375.51		6463865.660	573500.060	N58 18 29.8333	W1 44 44.7260	0.65	4358.37	
6618.00	91.43	89.30	3023.96	2868.96	376.95		6463866.100	573528.080	N58 18 29.8306	W1 44 43.0046	0.57	4450.33	
6710.00	91.06	90.40	3021.97	2866.97	377.19		6463866.170	573556.110	N58 18 29.8161	W1 44 41.2833	1.26	4542.31	
6803.00	92.60	89.90	3019.00	2864.00	376.95		6463866.090	573584.430	N58 18 29.7966	W1 44 39.5440	1.74	4635.26	
6894.00	92.52	89.30	3014.93	2859.93	377.58		6463866.290	573612.130	N58 18 29.7862	W1 44 37.8427	0.66	4726.16	
6986.00	92.83	89.30	3010.64	2855.64	378.70		6463866.630	573640.130	N58 18 29.7804	W1 44 36.1227	0.34	4818.06	
7079.00	90.80	89.70	3007.69	2852.69	379.52		6463866.880	573668.450	N58 18 29.7713	W1 44 34.3831	2.22	4911.00	
7172.00	88.86	87.90	3007.97	2852.97	381.46		6463867.470	573696.770	N58 18 29.7733	W1 44 32.6427	2.85	5003.97	
7264.00	88.60	87.70	3010.01	2855.01	384.99		6463868.550	573724.780	N58 18 29.7912	W1 44 30.9215	0.36	5095.88	
7358.00	87.28	88.20	3013.39	2858.39	388.35		6463869.570	573753.380	N58 18 29.8070	W1 44 29.1636	1.50	5189.76	
7450.00	88.51	88.50	3016.76	2861.76	391.00	5296.91	6463870.380	573781.380	N58 18 29.8162	W1 44 27.4430	1.38	5281.66	
7542.00	90.34	89.20	3017.69	2862.69	392.85		6463870.940	573809.410	N58 18 29.8174	W1 44 25.7213	2.13	5373.63	
7615.00	91.00	90.00	3016.84	2861.83	393.36	5461.87	6463871.090	573831.650	N58 18 29.8090	W1 44 24.3552	1.42	5446.62	