

## **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 #17	Vertical Section Azimuth:	69.85 deg
Well Name:	13/22a-C22	Vertical Section Origin:	2.95N, 2.85W
Wellbore Name:	13/22a-C22 (AWB)	TVD Reference Datum:	RKB
Wellpath Name:	13/22a-C22 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 26.9596, W1 46 6.7514	North Reference:	Grid
Slot Location Grid N/E Y/X:	6463752.1390 m, 572166.5620 m	Local Coordinates Referenced To:	Installation

							Grid Cod	ordinates	Geographic	Coordinates	1		
	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			6463752.140	572166.560	N58 18 26.9596	W1 46 6.7514		0.00	
500.50	0.00	0.00	500.50	345.50	2.95	-2.85	6463752.140	572166.560	N58 18 26.9596	W1 46 6.7514	0.00	0.00	
525.00	0.18	156.03	525.00	370.00	2.92	-2.83	6463752.130	572166.570	N58 18 26.9592	W1 46 6.7511	0.73	0.00	
550.00	0.32	126.12	550.00	395.00	2.84	-2.76	6463752.100	572166.590	N58 18 26.9585	W1 46 6.7498	0.75	0.04	
575.00	0.38	134.16	575.00	420.00	2.74	-2.65	6463752.070	572166.620	N58 18 26.9575	W1 46 6.7476	0.31	0.12	
600.00	0.37	165.29	600.00	445.00	2.60	-2.56	6463752.030	572166.650	N58 18 26.9561	W1 46 6.7462	0.81	0.15	
625.00	0.39	175.11	625.00	470.00	2.44	-2.54	6463751.980	572166.660	N58 18 26.9545	W1 46 6.7457	0.27	0.12	
650.00	0.29	161.08	650.00	495.00	2.30	-2.51	6463751.940	572166.670	N58 18 26.9531	W1 46 6.7453	0.52	0.09	
675.00	0.34	175.92	675.00	520.00	2.16	-2.48	6463751.900	572166.670	N58 18 26.9518	W1 46 6.7448	0.38	0.07	
679.00	0.33	175.25	679.00	524.00	2.14	-2.48	6463751.890	572166.670	N58 18 26.9515	W1 46 6.7448	0.36	0.06	26.000in Casing
686.50	0.30	173.82	686.50	531.50	2.10	-2.48	6463751.880	572166.670	N58 18 26.9511	W1 46 6.7447	0.36	0.05	
700.00	0.49	137.77	700.00	545.00	2.02	-2.44	6463751.860	572166.690	N58 18 26.9504	W1 46 6.7440	2.25	0.07	
732.00	0.86	113.32	732.00	576.99	1.82	-2.12	6463751.800	572166.780	N58 18 26.9484	W1 46 6.7382	1.44	0.29	
762.00	0.98	105.43	761.99	606.99	1.67	-1.67	6463751.750	572166.920	N58 18 26.9467	W1 46 6.7298	0.58	0.67	
793.00	1.88	78.92	792.98	637.98	1.69	-0.91	6463751.760	572167.150	N58 18 26.9469	W1 46 6.7156	3.53	1.38	
825.00	2.59	73.96	824.96	669.96	1.99	0.30	6463751.850	572167.520	N58 18 26.9496	W1 46 6.6929	2.30	2.62	
854.00	3.28	69.39	853.92	698.92	2.47	1.70	6463751.990	572167.950	N58 18 26.9540	W1 46 6.6664	2.51	4.11	
883.00	4.11	67.06	882.86	727.86	3.17	3.44	6463752.200	572168.480	N58 18 26.9606	W1 46 6.6337	2.91	5.97	
914.00	4.29	69.52	913.77	758.77	4.00	5.54	6463752.460	572169.120	N58 18 26.9685	W1 46 6.5940	0.82	8.24	
945.00	4.87	64.97	944.68	789.68	4.97	7.82	6463752.750	572169.810	N58 18 26.9775	W1 46 6.5510	2.21	10.71	
975.00	5.08	61.63	974.56	819.56	6.14	10.15	6463753.110	572170.520	N58 18 26.9886	W1 46 6.5071	1.19	13.30	
1007.00	5.76	63.73	1006.42	851.42	7.52	12.83	6463753.530	572171.340	N58 18 27.0018	W1 46 6.4564	2.21	16.30	
1037.00	5.86	63.02	1036.27	881.27	8.88	15.55	6463753.950	572172.170	N58 18 27.0147	W1 46 6.4051	0.41	19.31	
1069.00	6.72	65.72	1068.07	913.07	10.39	18.71	6463754.410	572173.130	N58 18 27.0290	W1 46 6.3454	2.84	22.80	
1098.00	6.89	65.55	1096.87	941.87	11.81	21.84	6463754.840	572174.080	N58 18 27.0424	W1 46 6.2864	0.59	26.23	
1130.00	7.29	65.85	1128.62	973.62	13.43	25.44	6463755.330	572175.180	N58 18 27.0578	W1 46 6.2184	1.26	30.17	
1223.00	8.28	66.45	1220.77	1065.77	18.52	36.96	6463756.880	572178.690	N58 18 27.1058	W1 46 6.0011	1.07	42.74	
1285.00	9.57	62.95	1282.01	1127.01	22.65	45.65	6463758.140	572181.340	N58 18 27.1449	W1 46 5.8372	2.26	52.31	
							Page	e 1 of 4					

Page 1 of 4

							Grid Cod	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)			(deg/100ft)	ft)	
1377.00	11.17	56.85	1372.51	1217.51	31.00	59.92	6463760.690	572185.690	N58 18 27.2246	W1 46 5.5672	2.11	68.59	
1408.00			1402.88	1247.88	34.32		6463761.700	572187.290		W1 46 5.4680		74.66	
1436.00			1430.24	1275.24	37.39		6463762.630	572188.840		W1 46 5.3716		80.49	
1497.00			1489.65	1334.65	44.52		6463764.800	572192.450		W1 46 5.1471	1.74	94.09	
1558.00			1548.86	1393.86			6463767.080	572196.300		W1 46 4.9082		108.51	
1587.00				1421.95	55.55		6463768.170	572198.210		W1 46 4.7900		115.62	
1682.00				1513.40	68.28		6463772.040	572205.010		W1 46 4.3675		140.98	
1744.00				1572.36			6463774.930	572210.090		W1 46 4.0528		159.87	
1775.00			1756.66	1601.65			6463776.460	572212.770		W1 46 3.8860		169.88	
1776.00				1602.60			6463776.510	572212.860		W1 46 3.8806			13 3/8in Casing
1835.00				1657.92			6463779.540	572218.330		W1 46 3.5416		190.46	· ·
1925.00				1740.69	109.39		6463784.570	572227.840		W1 46 2.9519		225.45	
2021.00			1981.68	1826.68			6463790.640	572239.320		W1 46 2.2394	3.61	267.71	
2150.00			2092.84	1937.84	160.78		6463800.230	572256.790		W1 46 1.1561	3.70	332.36	
2243.00			2169.37	2014.37	187.06		6463808.240	572270.740		W1 46 0.2900		384.42	
2336.00		55.89	2242.43	2087.43	217.78		6463817.600	572285.560		W1 45 59.3696		440.64	
2430.00		53.95	2312.28	2157.28	253.95		6463828.620	572301.230		W1 45 58.3948		501.38	
2523.00			2377.52	2222.52			6463840.630	572317.460		W1 45 57.3846		564.96	
2618.00			2439.66	2284.66			6463853.840	572334.910		W1 45 56.2982		633.66	
2710.00			2494.79	2339.79			6463867.370	572352.800		W1 45 55.1840		704.09	
2834.00			2561.19	2406.19	443.40		6463886.340	572378.440		W1 45 53.5879		804.54	
2896.00			2591.76	2436.76	475.38		6463896.090	572391.670		W1 45 52.7641	1.12	856.33	
2987.00			2635.87	2480.87	523.15		6463910.640	572391.070		W1 45 51.5563		932.56	
3079.00			2679.96	2524.96			6463925.490	572411.070		W1 45 51.3363 W1 45 50.3344	0.81	1009.80	
3121.00			2699.99	2544.99	594.17		6463932.280	572439.660		W1 45 49.7763		1009.00	
3170.00			2722.98	2567.98	619.90		6463940.120	572450.260		W1 45 49.7765 W1 45 49.1164	3.49	1045.09	
3260.00			2762.96	2607.96	666.00		6463954.170	572470.570				1165.09	
										W1 45 47.8528			
3351.00			2796.43	2641.43	711.58		6463968.060	572492.160		W1 45 46.5116		1247.29	
3444.00			2826.18	2671.18	756.65		6463981.790	572515.220		W1 45 45.0797		1333.88	
3536.00		63.06	2850.43	2695.43	798.72		6463994.610	572539.020	N58 18 34.5766	W1 45 43.6033		1421.70	
3628.00		65.79	2869.97	2714.97	837.51		6464006.430	572563.730		W1 45 42.0726		1511.19	
3720.00			2885.01	2730.01	873.55		6464017.410	572589.100		W1 45 40.5016		1601.79	
3811.00			2896.09	2741.10	907.45		6464027.740	572614.610		W1 45 38.9233	2.57	1692.06	
3903.00		69.00		2749.89	940.64		6464037.850	572640.620		W1 45 37.3146		1783.62	
3994.00				2757.16	972.55		6464047.570	572666.490		W1 45 35.7146	1.29	1874.32	
4084.00				2763.17			6464056.670	572692.290		W1 45 34.1195	1.86	1964.11	
4175.00				2768.64			6464065.510	572718.520		W1 45 32.4986		2054.91	
4266.00		72.62					6464074.060	572744.830		W1 45 30.8729		2145.64	
4356.00		73.42		2781.61	1085.68		6464082.040	572770.980		W1 45 29.2577	0.91	2235.24	
4450.00				2788.73			6464090.350	572798.310		W1 45 27.5701	0.77	2328.82	
4541.00			2950.83	2795.83			6464098.490	572824.720	N58 18 37.7646	W1 45 25.9384	0.65	2419.42	
4630.00		72.86		2802.54			6464106.440	572850.570		W1 45 24.3418		2508.04	
4724.00				2809.08			6464114.610	572877.950	N58 18 38.2538	W1 45 22.6510		2601.63	
4814.00	86.20	73.76	2970.27	2815.27	1217.57	2418.11	6464122.230		N58 18 38.4843	W1 45 21.0285	0.36	2691.20	
							Page	e 2 of 4					

							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)	
4908.00	86.23	74.27	2976.48	2821.48	1243.40	2508.28	6464130.100	572931.700	N58 18 38.7223	W1 45 19.3322	0.54	2784.75	
4997.00		73.85	2981.95	2826.96		2593.69	6464137.530	572957.720	N58 18 38.9471	W1 45 17.7252	0.72	2873.34	
5089.00	84.99	74.20	2988.61	2833.61	1293.04	2681.91	6464145.230	572984.600	N58 18 39.1797	W1 45 16.0656	1.91	2964.85	
5182.00		73.90	2995.79	2840.79	1318.52		6464152.990	573011.760	N58 18 39.4144	W1 45 14.3884	1.30	3057.32	
5277.00		73.60	2999.56	2844.56	1345.08	2862.18	6464161.080	573039.530	N58 18 39.6594	W1 45 12.6739	3.31	3152.01	
5370.00		72.60	3001.67	2846.67	1372.11		6464169.320	573066.630		W1 45 10.9997	1.66	3244.84	
5462.00		72.70	3007.04	2852.04	1399.50		6464177.660	573093.340		W1 45 9.3498	3.18	3336.56	
5554.00		72.50		2859.57	1426.92		6464186.020	573120.000		W1 45 7.7028	0.33	3428.15	
5644.00		72.79	3020.68	2865.68			6464194.180	573146.120		W1 45 6.0896	1.57	3517.83	
5737.00		72.13		2870.43			6464202.710	573173.100		W1 45 4.4225	0.92	3610.61	
5828.00		71.47	3029.95	2874.95			6464211.360	573199.410		W1 45 2.7969	0.83	3701.44	
5924.00		72.09		2879.52			6464220.490	573227.160		W1 45 1.0818	0.90	3797.28	
5968.11	87.98	72.24		2881.24	1553.56		6464224.610	573239.940		W1 45 0.2919	0.99		9 5/8in Casing
6068.00		72.58	3038.95	2883.95			6464233.800	573268.950		W1 44 58.5001	0.99	3941.07	•
6163.00		72.12		2885.13			6464242.580	573296.530		W1 44 56.7960	0.93	4035.97	
6258.00		71.88	3040.41	2885.41	1641.89		6464251.520	573324.060		W1 44 55.0949	0.44	4130.91	
6350.00		71.19	3040.23	2885.23	1671.03		6464260.400	573350.650		W1 44 53.4516	0.79	4222.87	
6444.00		70.23	3041.61	2886.61	1702.08		6464269.860	573377.670		W1 44 51.7807	2.50	4316.84	
6538.00		70.67	3043.78	2888.78			6464279.440	573404.660		W1 44 50.1124	1.36	4410.81	
6630.00		72.75	3044.36	2889.36			6464288.240	573431.270		W1 44 48.4677	2.39	4502.75	
6724.00		74.48	3044.12	2889.12			6464296.320	573458.750		W1 44 46.7707	1.87	4596.54	
6818.00		70.71	3043.04	2888.04	1817.02		6464304.880	573486.070		W1 44 45.0827	4.09	4690.41	
6913.00		75.28	3041.28	2886.28	1844.79	4418.51		573513.740		W1 44 43.3735	4.81	4785.23	
7007.00		71.72	3039.35	2884.35	1871.48	4508.61		573541.190		W1 44 41.6781	3.79	4879.00	
7101.00		74.03	3037.59	2882.59	1899.15		6464329.910	573568.560		W1 44 39.9876	2.49	4972.85	
7195.00		73.54	3036.55	2881.55	1925.40	4688.67		573596.060		W1 44 38.2893	0.76	5066.62	
7288.00		73.99	3035.63	2880.63	1951.40		6464345.830	573623.260	N58 18 45.2804	W1 44 36.6092	0.75	5159.40	
7382.00		74.28	3033.45	2878.45	1977.09		6464353.650	573650.810		W1 44 34.9084	1.23	5253.11	
7477.00		74.29	3030.91	2875.91	2002.81	4959.77		573678.660		W1 44 33.1886	0.76	5347.79	
7568.00		73.02	3029.55	2874.55	2028.41		6464369.290	573705.260	N58 18 45.9894	W1 44 31.5456	1.56	5438.58	
7658.00		73.42	3028.16	2873.16			6464377.210	573731.510		W1 44 29.9240	0.89	5528.41	
7749.00		73.42	3025.68	2870.68	2080.62		6464385.200	573758.050		W1 44 28.2847	0.83	5619.21	
7842.00		73.00		2868.45			6464393.240	573785.220		W1 44 26.2047 W1 44 26.6070	1.48	5711.99	
7934.00		74.61	3023.45 3022.01	2867.01	2131.91		6464400.830	573765.220		W1 44 24.9410	0.70	5803.71	
8026.00			3022.01	2865.54	2156.18		6464408.220	573839.230			0.70	5895.36	
		74.80								W1 44 23.2718			
8118.00		75.18		2863.81	2180.00		6464415.480	573866.310		W1 44 21.6007	0.58	5986.98	
8209.00		75.42		2862.15			6464422.520	573893.120		W1 44 19.9455	0.54	6077.55	
8299.00		75.02		2861.50			6464429.510	573919.640		W1 44 18.3088	1.02	6167.15	
8389.00		75.06		2860.45			6464436.590	573946.130		W1 44 16.6735	1.49	6256.78	
8480.00		73.91	3013.65	2858.65			6464444.010	573972.840		W1 44 15.0242	1.35	6347.46	
8574.00		73.70		2858.67			6464451.990	574000.340		W1 44 13.3256	1.99	6441.23	
8667.00		73.57	3015.55	2860.54			6464459.980	574027.520		W1 44 11.6467	0.48	6534.01	
8758.00		73.57	3017.72	2862.72			6464467.820	574054.110		W1 44 10.0046	0.00	6624.79	
8848.00	88.43	73.81	3020.03	2865.03	2377.03	6278.33	6464475.510		N58 18 49.1958	W1 44 8.3796	0.35	6714.56	
							ray	e 3 of 4					

							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)	
8939.00	88.20	73.81	3022.70	2867.71	2402.39	6365.69	6464483.240	574107.040	N58 18 49.4295	W1 44 6.7358	0.25	6805.30	
9030.00	88.80	73.61	3025.09	2870.09	2427.91	6453.00	6464491.020	574133.640	N58 18 49.6646	W1 44 5.0926	0.69	6896.06	
9121.00	89.43	73.32	3026.49	2871.49	2453.80	6540.23	6464498.910	574160.220	N58 18 49.9035	W1 44 3.4510	0.76	6986.87	
9213.00	88.05	72.78	3028.52	2873.52	2480.62	6628.21	6464507.080	574187.030	N58 18 50.1513	W1 44 1.7949	1.61	7078.70	
9305.00	87.37	73.30	3032.19	2877.19	2507.43	6716.14	6464515.250	574213.820	N58 18 50.3992	W1 44 0.1398	0.93	7170.49	
9396.00	88.48	74.53	3035.49	2880.49	2532.63	6803.51	6464522.920	574240.440	N58 18 50.6311	W1 43 58.4956	1.82	7261.19	
9490.00	88.51	74.11	3037.96	2882.96	2558.02	6893.98	6464530.660	574268.010	N58 18 50.8645	W1 43 56.7934	0.45	7354.88	
9583.00	87.91	73.76	3040.86	2885.86	2583.74	6983.31	6464538.500	574295.230	N58 18 51.1013	W1 43 55.1125	0.75	7447.59	
9675.00	88.28	72.53	3043.92	2888.92	2610.41	7071.31	6464546.620	574322.040	N58 18 51.3475	W1 43 53.4561	1.40	7539.39	
9767.00	87.48	72.58	3047.32	2892.32	2637.97	7159.01	6464555.020	574348.760	N58 18 51.6027	W1 43 51.8049	0.87	7631.22	
9858.00	87.91	71.24	3050.98	2895.98	2666.20	7245.44	6464563.620	574375.100	N58 18 51.8647	W1 43 50.1773	1.55	7722.09	
9925.00	85.79	71.10	3054.66	2899.66	2687.79	7308.76	6464570.200	574394.390	N58 18 52.0656	W1 43 48.9846	3.17	7788.96	
10000.00	83.42	71.10	3061.72	2906.71	2711.97	7379.40	6464577.570	574415.910	N58 18 52.2907	W1 43 47.6540	3.16	7863.61	