

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 #2	Vertical Section Azimuth:	58.63 deg
Well Name:	13/22a-C17z	Vertical Section Origin:	3.17S, 14.44E
Wellbore Name:	13/22a-C17z (AWB)	TVD Reference Datum:	RKB
Wellpath Name:	13/22a-C17z 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 26.8962, W1 46 6.4300	North Reference:	Grid
Slot Location Grid N/E Y/X:	6463750.2740 m, 572171.8300 m	Local Coordinates Referenced To:	Installation

							Grid Cod	ordinates	Geographic	Coordinates	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	-3.17	14.44	6463750.270	572171.830	N58 18 26.8962	W1 46 6.4300	0.00	0.00	
500.50	0.00	0.00	500.50	345.50	-3.17	14.44	6463750.270	572171.830	N58 18 26.8962	W1 46 6.4300	0.00	0.00	
550.00	0.37	97.10	550.00	395.00	-3.19	14.60	6463750.270	572171.880	N58 18 26.8960	W1 46 6.4270	0.75	0.13	
600.00	0.33		600.00	445.00		14.86	6463750.290	572171.960		W1 46 6.4221	0.62	0.39	
650.00	0.41	55.39	650.00	495.00	-2.90	15.11	6463750.350	572172.030	N58 18 26.8987	W1 46 6.4173	0.21	0.71	
700.00	0.55	81.27	700.00	545.00	-2.77	15.49	6463750.400	572172.150	N58 18 26.9000	W1 46 6.4101	0.51	1.11	
750.00	0.32	86.52	750.00	594.99	-2.72	15.87	6463750.410	572172.270	N58 18 26.9004	W1 46 6.4030	0.47	1.46	
800.00	0.36	72.70	799.99	644.99	-2.67	16.16	6463750.430	572172.350		W1 46 6.3976	0.18	1.73	
850.00	0.33	76.34	849.99	694.99	-2.59	16.45	6463750.450	572172.440	N58 18 26.9016	W1 46 6.3921	0.07	2.02	
900.00	0.30		899.99	744.99	-2.49		6463750.480	572172.520	N58 18 26.9025	W1 46 6.3873		2.29	
950.00	0.34		949.99	794.99			6463750.520	572172.600	N58 18 26.9037	W1 46 6.3827		2.57	
1000.00	0.37	53.36	999.99	844.99	-2.20	17.22	6463750.570	572172.680	N58 18 26.9053	W1 46 6.3777	0.14	2.88	
1050.00	0.82	38.51	1049.99	894.99	-1.82	17.57	6463750.680	572172.780	N58 18 26.9089	W1 46 6.3710	0.94	3.37	
1100.00	1.79	37.48	1099.97	944.97	-0.92	18.27	6463750.960	572173.000	N58 18 26.9176	W1 46 6.3576	1.94	4.44	
1150.00	3.33	34.11	1149.92	994.92	0.90	19.56	6463751.510	572173.390	N58 18 26.9353	W1 46 6.3328	3.09	6.49	
1200.00	4.72	38.73	1199.80	1044.80	3.71	21.66	6463752.370	572174.030	N58 18 26.9626	W1 46 6.2926	2.85	9.74	
1250.00	6.84	32.81	1249.54	1094.54	7.81	24.56	6463753.620	572174.910	N58 18 27.0026	W1 46 6.2369	4.40	14.36	
1300.00	8.35	33.56	1299.10	1144.10	13.34	28.18	6463755.310	572176.020	N58 18 27.0564	W1 46 6.1672	3.03	20.33	
1350.00	10.31	33.47	1348.44	1193.44	20.10	32.65	6463757.360	572177.380	N58 18 27.1221	W1 46 6.0812	3.92	27.66	
1400.00	11.48	34.02	1397.54	1242.54	27.96	37.91	6463759.760	572178.980	N58 18 27.1985	W1 46 5.9802	2.35	36.24	
1450.00	11.90	35.82	1446.50	1291.50	36.26	43.71	6463762.290	572180.750	N58 18 27.2793	W1 46 5.8688	1.11	45.51	
1500.00	13.33	36.61	1495.29	1340.29	45.07	50.16	6463764.970	572182.710	N58 18 27.3649	W1 46 5.7450	2.88	55.61	
1550.00	14.89	35.80	1543.78	1388.78	54.91	57.36	6463767.970	572184.910	N58 18 27.4605	W1 46 5.6070	3.14	66.87	
1600.00	16.00	34.98	1591.97	1436.97	65.76	65.06	6463771.280	572187.260	N58 18 27.5660	W1 46 5.4590	2.26	79.11	
1641.00	16.69	34.95	1631.32	1476.32	75.22	71.68	6463774.160	572189.270	N58 18 27.6580	W1 46 5.3321	1.68	89.68	
1691.00	17.60	34.90	1679.09	1524.09	87.30	80.12	6463777.840	572191.840	N58 18 27.7755	W1 46 5.1700	1.82	103.17	
1748.00	17.70	35.00	1733.41	1578.41	101.47	90.02	6463782.160	572194.860	N58 18 27.9132	W1 46 4.9799	0.18	119.00	
1844.00	21.40	37.20	1823.86	1668.86	127.38	108.98		572200.640	N58 18 28.1650	W1 46 4.6161	3.93	148.68	
							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	VS	Comment
(ft)	(deg)	(deg)	(ft)	(ft)	(ft)	(ft)	(m)	(m)	•		(deg/100ft)	ft)	
1940.00	25.60	38.80	1911.88	1756.88	157.51	132.58	6463799.230	572207.830	N58 18 28.4575	W1 46 4.1642	4.42	184.51	
2034.00	29.80		1995.09	1840.09	191.43		6463809.570	572216.220		W1 46 3.6374	4.47	225.68	
2131.00	33.80	39.00	2077.51	1922.51	231.06		6463821.640	572226.040		W1 46 3.0202	4.13	273.85	
2226.00	37.90			1999.50	274.39		6463834.850	572236.670		W1 46 2.3525	4.32	326.19	
2320.00	41.80	38.40		2071.65	321.49		6463849.200	572248.110		W1 46 1.6341	4.15	382.75	
2415.00		37.40		2140.32	373.28		6463864.980	572260.390		W1 46 0.8623	4.07	444.12	
2511.00	49.20	36.90		2205.29	429.60		6463882.140		N58 18 31.0986	W1 46 0.0447	3.77	509.86	
2607.00	53.60			2265.17	489.50		6463900.390		N58 18 31.6805	W1 45 59.1794	4.59	579.59	
2701.00	58.90			2317.37	551.99	439.78	6463919.430	572301.430	N58 18 32.2874	W1 45 58.2802	5.65	652.16	
2798.00				2367.98	618.46	489.06	6463939.680		N58 18 32.9333	W1 45 57.3352	0.77	728.84	
2893.00				2417.69	683.71	536.99	6463959.560		N58 18 33.5673	W1 45 56.4159	0.56	803.73	
2986.00				2466.08	747.68		6463979.060		N58 18 34.1888	W1 45 55.5130	0.30	877.22	
3061.00	58.60			2505.15	799.37	621.83	6463994.810		N58 18 34.6911	W1 45 54.7886	0.80	936.37	
3177.00	58.80			2565.42			6464019.360		N58 18 35.4745	W1 45 53.6812	0.34	1027.59	
3273.00				2612.02			6464040.190		N58 18 36.1389	W1 45 52.7470	4.48	1104.72	
3388.00	66.40			2661.07	1032.71	788.96	6464065.900	572407.820		W1 45 51.5808	2.90	1200.54	
3464.00	70.30	36.10	2844.10	2689.10		830.52	6464083.300	572420.490	N58 18 37.5140	W1 45 50.7834	5.13	1265.75	
3560.00	73.00	36.50	2874.32	2719.32	1163.23	884.46	6464105.670	572436.920	N58 18 38.2275	W1 45 49.7487	2.84	1350.02	
3654.00	76.80	37.70	2898.81	2743.81	1235.60	939.20	6464127.720	572453.600	N58 18 38.9303	W1 45 48.6994	4.23	1434.43	
3750.00	77.80	38.80	2919.91	2764.91	1309.14	997.18	6464150.130	572471.270	N58 18 39.6442	W1 45 47.5891	1.53	1522.22	
3846.00	78.90	41.50	2939.30	2784.30	1381.00	1057.80	6464172.030	572489.740	N58 18 40.3409	W1 45 46.4299	2.98	1611.38	
3941.00	78.80	44.70	2957.68	2802.68	1449.04	1121.48	6464192.760	572509.140	N58 18 40.9996	W1 45 45.2148	3.31	1701.18	
4037.00	80.80	48.30	2974.68	2819.68	1514.06	1190.00	6464212.570	572530.020	N58 18 41.6276	W1 45 43.9099	4.24	1793.53	
4131.00	82.40	50.90	2988.42	2833.42	1574.32	1260.81	6464230.930	572551.600	N58 18 42.2083	W1 45 42.5640	3.22	1885.36	
4225.00	83.80	53.20	2999.71	2844.71	1631.70	1334.39	6464248.420	572574.020	N58 18 42.7601	W1 45 41.1671	2.85	1978.05	
4322.00	84.20	56.60	3009.85	2854.85	1687.16	1413.31	6464265.310	572598.060	N58 18 43.2920	W1 45 39.6711	3.51	2074.30	
4417.00	84.20	59.10	3019.45	2864.45	1737.45	1493.32	6464280.640	572622.440	N58 18 43.7729	W1 45 38.1563	2.62	2168.80	
4568.00	86.65	62.10	3031.50	2876.50	1811.32	1624.43	6464303.150	572662.390	N58 18 44.4766	W1 45 35.6771	2.56	2319.20	
4662.00	92.63	62.20	3032.09	2877.09	1855.21	1707.51	6464316.520	572687.700	N58 18 44.8939	W1 45 34.1072	6.36	2412.98	
4758.00	89.83	63.10	3030.03	2875.03	1899.30	1792.75	6464329.950	572713.680	N58 18 45.3127	W1 45 32.4967	3.06	2508.71	
4854.00	89.91	64.60	3030.25	2875.25	1941.61	1878.92	6464342.840	572739.930	N58 18 45.7137	W1 45 30.8693	1.56	2604.31	
4948.00	92.40	67.60	3028.35	2873.35	1979.68	1964.83	6464354.440	572766.110	N58 18 46.0731	W1 45 29.2484	4.15	2697.48	
5043.00	91.89	67.40	3024.80	2869.80	2016.01	2052.53	6464365.510	572792.830	N58 18 46.4149	W1 45 27.5944	0.58	2791.27	
5140.00	88.43	67.00	3024.53	2869.53	2053.59	2141.94	6464376.960	572820.070	N58 18 46.7689	W1 45 25.9081	3.59	2887.18	
5236.00	82.72	66.90	3031.93	2876.93	2091.05	2229.97	6464388.380	572846.900	N58 18 47.1218	W1 45 24.2475	5.95	2981.84	
5329.00	86.65	67.40	3040.54	2885.54	2127.00	2315.29	6464399.330	572872.890	N58 18 47.4604	W1 45 22.6383	4.26	3073.40	
5333.00	86.75	67.39	3040.77	2885.77	2128.54	2318.98	6464399.800	572874.020	N58 18 47.4748	W1 45 22.5688	2.51	3077.35	
5360.00	87.40	67.30	3042.15	2887.15	2138.92	2343.86	6464402.960	572881.600	N58 18 47.5726	W1 45 22.0995	2.43	3104.00	
5426.00				2889.22			6464410.750	572900.130	N58 18 47.8133	W1 45 20.9525	2.44	3169.23	
5520.00				2889.31	2201.14		6464421.920	572926.500	N58 18 48.1585	W1 45 19.3199	2.01	3262.21	
5617.00				2888.73	2239.35		6464433.560	572953.670		W1 45 17.6381	1.20	3358.23	
5708.00		66.40		2888.48			6464444.620	572979.090		W1 45 16.0636	0.81	3448.37	
5806.00				2886.82			6464456.600	573006.440		W1 45 14.3702	0.94	3545.47	
5901.00				2885.17			6464468.300	573032.910		W1 45 12.7309	0.96	3639.63	
								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)	
5995.00	89.17	67.20	3040.38	2885.38	2390.68	2926.73	6464479.670	573059.200	N58 18 49.9460	W1 45 11.1035	1.96	3732.72	
6091.00	90.40	68.10	3040.74	2885.74	2427.18	3015.51	6464490.800	573086.250	N58 18 50.2893	W1 45 9.4291	1.59	3827.53	
6186.00	90.80	67.50		2884.75	2463.07	3103.46	6464501.730	573113.050	N58 18 50.6268	W1 45 7.7705	0.76	3921.31	
6283.00	88.94	67.20	3039.97	2884.97	2500.43	3192.98	6464513.110	573140.320		W1 45 6.0822	1.94	4017.19	
6378.00	89.77	68.60	3041.03	2886.03	2536.17	3280.99	6464524.000	573167.140	N58 18 51.3142	W1 45 4.4225	1.71	4110.94	
6471.00	90.94	68.40	3040.46	2885.46	2570.25	3367.52	6464534.390	573193.500	N58 18 51.6341	W1 45 2.7912	1.28	4202.56	
6568.00	91.12	67.90	3038.72	2883.71	2606.34	3457.53	6464545.390	573220.930	N58 18 51.9732	W1 45 1.0939	0.55	4298.20	
6663.00	89.09	67.40	3038.54	2883.54	2642.47	3545.39	6464556.390	573247.700	N58 18 52.3129	W1 44 59.4370	2.20	4392.02	
6761.00	90.17	66.60	3039.17	2884.17	2680.76	3635.60	6464568.060	573275.190	N58 18 52.6735	W1 44 57.7353	1.37	4488.98	
6856.00	89.89	65.20	3039.12	2884.12	2719.55	3722.31	6464579.880	573301.610	N58 18 53.0397	W1 44 56.0988	1.50	4583.21	
6951.00	89.14	65.20	3039.93	2884.93	2759.39	3808.55	6464592.020	573327.890	N58 18 53.4164	W1 44 54.4709	0.79	4677.58	
7047.00	89.83	64.80	3040.79	2885.79	2799.96	3895.55	6464604.380	573354.390	N58 18 53.8000	W1 44 52.8284	0.83	4772.99	
7142.00	91.11	64.50	3040.01	2885.01	2840.63	3981.40	6464616.770	573380.550	N58 18 54.1849	W1 44 51.2075	1.38	4867.46	
7237.00	90.11	65.10	3039.00	2884.00	2881.08	4067.35	6464629.100	573406.740	N58 18 54.5675	W1 44 49.5847	1.23	4961.90	
7334.00	88.37	65.00	3040.29	2885.29	2921.99	4155.29	6464641.560	573433.540	N58 18 54.9543	W1 44 47.9245	1.80	5058.28	
7429.00	89.89	63.20	3041.73	2886.73	2963.48	4240.73	6464654.210	573459.570	N58 18 55.3473	W1 44 46.3109	2.48	5152.83	
7524.00	91.74	62.80	3040.38	2885.38	3006.60	4325.36	6464667.340	573485.360	N58 18 55.7565	W1 44 44.7118	1.99	5247.54	
7619.00	92.66	61.90	3036.73	2881.73	3050.66	4409.45	6464680.770	573510.980	N58 18 56.1750	W1 44 43.1225	1.35	5342.27	
7714.00	91.17	63.20	3033.56	2878.56	3094.42	4493.70	6464694.100	573536.650	N58 18 56.5905	W1 44 41.5303	2.08	5436.99	
7809.00	88.88	64.00	3033.51	2878.52	3136.66	4578.79	6464706.970	573562.580	N58 18 56.9909	W1 44 39.9230	2.55	5531.62	
7903.00	89.06	64.80	3035.20	2880.20	3177.27	4663.55	6464719.350	573588.400	N58 18 57.3753	W1 44 38.3224	0.87	5625.13	
7990.00	89.00	65.10	3036.68	2881.68	3214.10	4742.35	6464730.570	573612.410	N58 18 57.7236	W1 44 36.8345	0.35	5711.59	
8076.00	90.37	65.10	3037.15	2882.15	3250.31	4820.35	6464741.600	573636.180	N58 18 58.0659	W1 44 35.3619	1.59	5797.04	
8168.00	90.03	65.00	3036.83	2881.83	3289.11	4903.77	6464753.430	573661.600	N58 18 58.4328	W1 44 33.7870	0.39	5888.46	
8257.00	89.77	64.60	3036.99	2881.98	3327.01	4984.30	6464764.970	573686.130	N58 18 58.7912	W1 44 32.2665	0.54	5976.94	
8346.00	88.54	65.00	3038.30	2883.30	3364.90	5064.82	6464776.520	573710.670	N58 18 59.1495	W1 44 30.7461	1.45	6065.42	
8435.00	88.77	65.10	3040.39	2885.39	3402.43	5145.49	6464787.950	573735.250	N58 18 59.5043	W1 44 29.2230	0.28	6153.84	
8524.00	90.77	64.10	3040.74	2885.74	3440.60	5225.88	6464799.580	573759.740	N58 18 59.8655	W1 44 27.7050	2.51	6242.35	
8613.00	90.69	63.60	3039.61	2884.61	3479.82	5305.76	6464811.530	573784.080	N58 19 0.2371	W1 44 26.1960	0.57	6330.97	
8702.00	90.14	64.50	3038.97	2883.96	3518.77	5385.79	6464823.400	573808.470	N58 19 0.6059	W1 44 24.6845	1.19	6419.57	
8791.00	89.94	65.00	3038.90	2883.90	3556.73	5466.28	6464834.970	573832.990	N58 19 0.9650	W1 44 23.1645	0.61	6508.06	
8877.00	89.49	65.30	3039.33	2884.33	3592.87	5544.32	6464845.980	573856.770	N58 19 1.3066	W1 44 21.6912	0.63	6593.50	
8963.00	89.69	65.30	3039.95	2884.95	3628.81	5622.45	6464856.930	573880.580	N58 19 1.6461	W1 44 20.2162	0.23	6678.92	
9051.00	89.37	65.40	3040.67	2885.67	3665.51	5702.43	6464868.110	573904.950	N58 19 1.9928	W1 44 18.7063	0.38	6766.31	
9140.00	89.23	65.30	3041.76	2886.76	3702.63	5783.31	6464879.420	573929.590	N58 19 2.3434	W1 44 17.1794	0.19	6854.69	
9229.00	88.74	65.40	3043.33	2888.33	3739.74	5864.19	6464890.730	573954.230	N58 19 2.6940	W1 44 15.6525	0.56	6943.07	
9320.00	89.26	65.40	3044.92	2889.92	3777.62	5946.91	6464902.270	573979.440	N58 19 3.0518	W1 44 14.0907	0.57	7033.42	
9411.00	88.23	65.30	3046.91	2891.91	3815.56	6029.60	6464913.830	574004.630	N58 19 3.4103	W1 44 12.5297	1.14	7123.77	
9499.00	89.14	65.20	3048.93	2893.93	3852.39	6109.49	6464925.050	574028.980	N58 19 3.7583	W1 44 11.0213	1.04	7211.16	
9588.98	89.26	65.00		2895.19		6191.10	6464936.600	574053.840	N58 19 4.1163	W1 44 9.4804	0.26	7300.56	
9679.87	88.91	65.00		2896.64		6273.47	6464948.300	574078.940	N58 19 4.4793	W1 44 7.9252	0.39	7390.88	
9769.35	89.03	65.40	3053.25	2898.25		6354.68	6464959.730	574103.690	N58 19 4.8339	W1 44 6.3918	0.47	7479.75	
9854.37	89.11	65.30	3054.63	2899.63	4001.66	6431.94	6464970.540	574127.230	N58 19 5.1688	W1 44 4.9332	0.15	7564.18	
9945.00	89.69	65.20	3055.58	2900.58	4039.60	6514.24	6464982.100		N58 19 5.5272	W1 44 3.3793	0.65	7654.20	
							Page	e 3 of 4					

							Grid Co	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)	
10034.62	89.40	65.10	3056.29	2901.29	4077.26	6595.56	6464993.570	574177.080	N58 19 5.8831	W1 44 1.8439	0.34	7743.24	_
10124.37	88.97	64.90	3057.57	2902.57	4115.19	6676.90	6465005.130	574201.860	N58 19 6.2416	W1 44 0.3081	0.53	7832.42	
10214.87	88.80	65.20	3059.33	2904.33	4153.36	6758.93	6465016.760	574226.860	N58 19 6.6023	W1 43 58.7590	0.38	7922.34	
10304.90	89.54	63.80	3060.63	2905.63	4192.11	6840.18	6465028.570	574251.620	N58 19 6.9689	W1 43 57.2245	1.76	8011.89	
10394.87	90.69	62.60	3060.45	2905.45	4232.68	6920.49	6465040.930	574276.080	N58 19 7.3536	W1 43 55.7071	1.85	8101.57	
10483.87	90.54	62.00	3059.49	2904.50	4274.04	6999.28	6465053.530	574300.090	N58 19 7.7464	W1 43 54.2176	0.69	8190.38	
10573.87	89.66	62.20	3059.34	2904.34	4316.16	7078.82	6465066.360	574324.330	N58 19 8.1464	W1 43 52.7139	1.00	8280.21	
10665.55	89.54	62.50	3059.98	2904.98	4358.70	7160.03	6465079.330	574349.070	N58 19 8.5504	W1 43 51.1788	0.35	8371.70	
10734.00	89.54	62.50	3060.53	2905.53	4390.31	7220.74	6465088.960	574367.570	N58 19 8.8504	W1 43 50.0311	0.00	8439.99	