

Wellpath Geographic Report

Report Date:	13-Sep-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 #1	Vertical Section Azimuth:	95.20 deg
Well Name:	13/22a-C1z	Vertical Section Origin:	3.10N, 20.93E
Wellbore Name:	13/22a-C1z (AWB)	TVD Reference Datum:	RKB
Wellpath Name:	13/22a-C1z 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 26.9568, W1 46 6.3064	North Reference:	Grid
Slot Location Grid N/E Y/X:	6463752.1850 m, 572173.8070 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	3.10	20.93	6463752.180	572173.810	N58 18 26.9568	W1 46 6.3064	0.00	0.00	
500.50	0.00	0.00	500.50	345.50	3.10	20.93	6463752.180	572173.810	N58 18 26.9568	W1 46 6.3064	0.00	0.00	
675.00	0.25	96.58	675.00	520.00		21.31		572173.920	N58 18 26.9563	W1 46 6.2993		0.38	
775.00	1.15	119.35	774.99	619.99			6463752.010	572174.250	N58 18 26.9510	W1 46 6.2791	0.92	1.51	
875.00	3.05	120.07	874.92	719.92	0.72		6463751.460	572175.220	N58 18 26.9325	W1 46 6.2203	1.90	4.84	
975.00	4.03	115.93	974.73	819.73	-2.15	31.04	6463750.580	572176.890	N58 18 26.9032	W1 46 6.1190	1.01	10.54	
1075.00	4.60	108.34	1074.44	919.44	-4.95	38.01	6463749.730	572179.010	N58 18 26.8744	W1 46 5.9896	0.81	17.74	
1175.00	4.97	97.16	1174.10	1019.10	-6.75	46.11	6463749.180	572181.480	N58 18 26.8552	W1 46 5.8386	1.00	25.97	
1275.00	6.27	87.61	1273.62	1118.62	-7.07	55.86	6463749.090	572184.450	N58 18 26.8504	W1 46 5.6561	1.60	35.71	
1375.00	7.48		1372.90	1217.90	-6.00		6463749.410	572188.080	N58 18 26.8587	W1 46 5.4329	1.35	47.48	
1475.00	9.12	80.03	1471.85	1316.85	-3.79		6463750.090	572192.430		W1 46 5.1653	1.68	61.48	
1575.00	10.46	87.45	1570.39	1415.39	-2.01	98.91	6463750.630	572197.570	N58 18 26.8924	W1 46 4.8489	1.84	78.12	
1675.00	10.68		1668.70	1513.70		117.24	6463750.640	572203.150				96.37	
1911.30	18.04	93.76	1897.46	1742.46	-5.22	175.71	6463749.650	572220.970	N58 18 26.8470	W1 46 3.4129	3.12	154.90	
2003.50	22.76	94.99	1983.85	1828.85	-7.71	207.74	6463748.890	572230.730	N58 18 26.8167	W1 46 2.8143	5.14	187.02	
2097.70	27.31	96.08	2069.18	1914.18	-11.58	247.40	6463747.710	572242.810	N58 18 26.7714	W1 46 2.0735	4.85	226.87	
2191.70	32.35	95.46	2150.70	1995.70	-16.26	293.91	6463746.290	572256.980			5.37	273.61	
2285.30	36.84	94.50	2227.73	2072.73	-20.85	346.84	6463744.890	572273.110	N58 18 26.6622	W1 46 0.2159	4.83	326.74	
2378.70	41.78	94.80	2299.97	2144.97	-25.65	405.80	6463743.420	572291.080	N58 18 26.6042	W1 45 59.1143	5.29	385.89	
2471.10	45.13	95.15	2367.04	2212.04	-31.17	469.10	6463741.740	572310.360	N58 18 26.5385	W1 45 57.9316	3.63	449.43	
2565.00	49.74	95.18	2430.54	2275.54	-37.39	537.96	6463739.850	572331.340	N58 18 26.4647	W1 45 56.6452	4.91	518.57	
2655.00	54.78	95.10	2485.61	2330.61	-43.77	608.82	6463737.910	572352.940	N58 18 26.3891	W1 45 55.3214	5.60	589.72	
2745.00	57.87	94.68	2535.51	2380.50	-50.14	683.44	6463735.960	572375.670	N58 18 26.3128	W1 45 53.9273	3.46	664.61	
2835.00	61.58	93.10	2580.87	2425.87	-55.40	760.97	6463734.360	572399.290	N58 18 26.2471	W1 45 52.4783	4.39	742.29	
2925.10	63.58	93.21	2622.36	2467.36	-59.80	840.82	6463733.020	572423.630	N58 18 26.1893	W1 45 50.9855	2.22	822.22	
3015.10	66.86	93.31	2660.08	2505.08	-64.44	922.39	6463731.600	572448.480	N58 18 26.1288	W1 45 49.4607	3.65	903.87	
3105.20	70.75	93.54	2692.65	2537.65	-69.46	1006.23	6463730.070	572474.030	N58 18 26.0642	W1 45 47.8936	4.32	987.82	
3195.20	74.19	93.41	2719.75	2564.75	-74.66	1091.88	6463728.490	572500.120	N58 18 25.9975	W1 45 46.2927	3.82	1073.59	

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							Grid Coordinates		Geographic Coordinates				
MD	Inc	Azi	TVD	TVD(SS)	N/-S	E/-W	Northing	Easting	Latitude	Longitude	DLS V	/S	Comment
(ft)	(deg)	(deg)	(ft)	(ft)	(ft)	(ft)	(m)	(m)			(deg/100ft) (t	ft)	
3285.20	76.94	93.39	2742.19	2587.19	-79.83	1178.88	6463726.920	572526.630	N58 18 25.9308	W1 45 44.6665	3.06	1160.70	_
3375.10	80.48	94.72	2759.78	2604.78	-86.07		6463725.010	572553.420	N58 18 25.8534	W1 45 43.0234	4.20	1248.82	
3464.50	83.08	95.18	2772.57	2617.56	-93.71		6463722.690		N58 18 25.7623	W1 45 41.3766	2.95	1337.30	
3553.10	83.65	95.17	2782.80	2627.80	-101.65	1442.59	6463720.270		N58 18 25.6682	W1 45 39.7392	0.64	1425.30	
3642.30	83.60	95.47	2792.71	2637.71	-109.86		6463717.760		N58 18 25.5712	W1 45 38.0904	0.34	1513.95	
3731.60	83.43	95.81	2802.79	2647.79	-118.58		6463715.110		N58 18 25.4693	W1 45 36.4411	0.42	1602.68	
3821.60	82.78	96.15	2813.60	2658.60	-127.89		6463712.270		N58 18 25.3615	W1 45 34.7814	0.81	1692.02	
3911.60	83.21	95.46	2824.57	2669.57	-136.93		6463709.520		N58 18 25.2564	W1 45 33.1216	0.90	1781.34	
4001.70	82.95	95.19	2835.43	2680.43	-145.23		6463706.990		N58 18 25.1585	W1 45 31.4580	0.41	1870.78	
4091.00	82.39	95.22	2846.82	2691.82	-153.26		6463704.540		N58 18 25.0634	W1 45 29.8102	0.63	1959.35	
4180.00	81.94	95.16	2858.95	2703.95	-161.24		6463702.110		N58 18 24.9688	W1 45 28.1699	0.51	2047.52	
4270.00	82.25	95.12	2871.33	2716.33	-169.22		6463699.680		N58 18 24.8740	W1 45 26.5112	0.35	2136.67	
4360.00	81.84	95.32	2883.79	2728.79	-177.34		6463697.210	572849.800		W1 45 24.8530	0.51	2225.80	
4449.90	81.63	95.81	2896.71	2741.71	-185.96		6463694.580		N58 18 24.6770	W1 45 23.1991	0.59	2314.76	
4539.40	81.65	96.21	2909.72	2754.72	-195.23		6463691.750		N58 18 24.5696	W1 45 21.5544	0.44	2403.30	
4629.50	81.67	96.24	2922.79	2767.79	-204.90		6463688.810		N58 18 24.4583	W1 45 19.8994	0.04	2492.44	
4720.90	81.63	95.88	2936.07	2781.07	-214.45		6463685.900		N58 18 24.3479	W1 45 18.2200	0.39	2582.86	
4811.20	81.63	95.90	2949.21	2794.21	-223.61		6463683.110		N58 18 24.2414	W1 45 16.5603	0.02	2672.19	
4901.20	81.88	95.99	2962.12	2807.12	-232.84		6463680.290		N58 18 24.1344	W1 45 14.9058	0.29	2761.25	
4992.00	81.49	96.06	2975.25	2820.25	-242.27		6463677.420		N58 18 24.0252	W1 45 13.2371	0.44	2851.09	
5081.40	81.64	97.08	2988.36	2833.36	-252.39		6463674.340		N58 18 23.9095	W1 45 11.5967	1.14	2939.49	
5170.40	83.93	100.65	2999.54	2844.54	-266.00		6463670.190		N58 18 23.7596	W1 45 9.9694	4.74	3027.59	
5250.40	87.84	101.90	3005.28	2850.28	-281.60		6463665.440		N58 18 23.5916	W1 45 8.5108	5.13	3106.92	
5330.40	87.76	102.68	3008.35	2853.35	-298.62		6463660.250		N58 18 23.4098	W1 45 7.0551	0.98	3186.24	
5407.00	87.30	100.60	3011.66	2856.65	-314.06		6463655.550		N58 18 23.2440	W1 45 5.6580	2.78	3262.29	
5508.00	89.50	98.90	3014.47	2859.47	-331.15		6463650.340		N58 18 23.0575	W1 45 3.8022	2.75	3362.92	
5590.00	90.70	97.10	3014.33	2859.33	-342.56		6463646.860		N58 18 22.9302	W1 45 2.2868	2.64	3444.82	
5680.00	90.90	95.10	3013.07	2858.07	-352.12		6463643.950		N58 18 22.8197	W1 45 0.6158	2.23	3534.79	
5769.00	90.30	95.40	3012.14	2857.14	-360.27		6463641.470		N58 18 22.7233	W1 44 58.9603	0.75	3623.79	
5856.00	89.90	96.30	3011.99	2856.99	-369.13		6463638.770	573327.880	N58 18 22.6201	W1 44 57.3440	1.13	3710.78	
5952.00 6041.00	89.50 88.10	97.00 97.20	3012.49 3014.36	2857.49 2859.36	-380.25 -391.25		6463635.380 6463632.030		N58 18 22.4932 N58 18 22.3687	W1 44 55.5636	0.84	3806.75 3895.68	
6135.00	88.50	97.20	3014.36	2862.15	-391.25 -402.94		6463628.460		N58 18 22.2364	W1 44 53.9152	1.59 0.44	3989.58	
6222.00	88.70	97.10	3017.13	2864.27	-402.94		6463625.140		N58 18 22.1133	W1 44 52.1748 W1 44 50.5640	0.44	4076.50	
6309.00	88.80	98.10	3019.27	2866.17	-425.50		6463621.590		N58 18 21.9827		0.33	4163.40	
6401.00	89.40	99.90	3022.61	2867.61	-439.89		6463617.210		N58 18 21.8243	W1 44 47.2602	2.06	4255.18	
6489.00	90.30	101.10	3022.84	2867.85	-455.92		6463612.320		N58 18 21.6505	W1 44 47.2002 W1 44 45.6467	1.70	4342.80	
6577.00	91.30	101.10	3021.62	2866.62	-473.17		6463607.070		N58 18 21.4648	W1 44 44.0382	1.70	4430.29	
6673.00	92.70	101.30	3018.27	2863.27	-473.17		6463601.110		N58 18 21.2552	W1 44 42.2874	1.55	4525.60	
6761.00	93.70	102.00	3013.35	2858.35	-511.94		6463595.250	573570.820				4612.72	
6853.00	93.70	103.30	3008.94	2853.94	-511.94		6463588.530	573598.000		W1 44 40.6900 W1 44 39.0287	1.86 2.44	4703.55	
6944.00	90.50	104.50	3006.94	2852.11	-554.02 -557.87		6463581.260		N58 18 20.5651	W1 44 39.0267 W1 44 37.3942	2.44 2.10	4703.55	
7034.00	90.00	103.90	3006.72	2851.72	-583.51		6463573.450		N58 18 20.2967	W1 44 37.3942 W1 44 35.7890	1.55	4881.39	
7122.00		107.20	3005.72	2850.11	-610.84		6463565.120		N58 18 20.2907	W1 44 35.7690 W1 44 34.2338		4967.14	
1 122.00	92.10	109.00	3003.11	2030.11	-010.04	4332.13		2 of 2	1100 10 20.0121	VV I 44 34.2330	3.14	4301.14	

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						j	Grid Cod	Grid Coordinates Geograph					
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)	
7213.00	92.70	107.80	3001.30	2846.30	-639.54	5038.99	6463556.370	573702.800	N58 18 19.7136	W1 44 32.6296	1.47	5055.66	
7304.00	91.20	106.10	2998.20	2843.20	-666.05	5125.99	6463548.300	573729.310	N58 18 19.4365	W1 44 31.0111	2.49	5144.69	
7396.00	91.00	104.20	2996.43	2841.43	-690.09	5214.77	6463540.970	573756.360	N58 18 19.1834	W1 44 29.3582	2.08	5235.29	
7487.00	89.20	101.40	2996.28	2841.28	-710.25	5303.49	6463534.830	573783.390	N58 18 18.9685	W1 44 27.7051	3.66	5325.48	
7578.00	87.70	99.80	2998.74	2843.74	-726.98	5392.90	6463529.730	573810.630	N58 18 18.7872	W1 44 26.0380	2.41	5416.03	
7668.00	86.60	98.60	3003.21	2848.21	-741.35	5481.63	6463525.350	573837.670	N58 18 18.6293	W1 44 24.3828	1.81	5505.70	
7761.00	87.00	98.40	3008.40	2853.40	-755.08		6463521.170	573865.650	N58 18 18.4772	W1 44 22.6692	0.48	5598.40	
7858.00	87.70	98.20	3012.89	2857.89	-769.06		6463516.910	573894.870	N58 18 18.3218	W1 44 20.8801	0.75	5695.16	
7950.00	87.30	98.00	3016.90	2861.90	-782.01	5760.34	6463512.960	573922.590	N58 18 18.1774	W1 44 19.1819	0.49	5786.95	
8040.00	86.80	97.90	3021.53	2866.53	-794.45		6463509.170	573949.720	N58 18 18.0386	W1 44 17.5207	0.57	5876.73	
8130.00	87.60	98.40	3025.93	2870.93	-807.19		6463505.290	573976.830	N58 18 17.8966	W1 44 15.8602	1.05	5966.50	
8219.00	85.60	98.70	3031.21	2876.21	-820.40		6463501.270	574003.600	N58 18 17.7503	W1 44 14.2210	2.27	6055.19	
8309.00	87.40	97.40	3036.70	2881.70	-832.97		6463497.430	574030.700	N58 18 17.6100	W1 44 12.5612	2.47	6144.90	
8398.00	90.10	96.40	3038.64	2883.64	-843.66		6463494.180	574057.610	N58 18 17.4884	W1 44 10.9123	3.23	6233.83	
8489.00	93.00	96.30	3036.18	2881.18	-853.72		6463491.110	574085.150	N58 18 17.3726	W1 44 9.2243	3.19	6324.77	
8581.00	93.90	96.40	3030.65	2875.65	-863.88		6463488.020	574112.960	N58 18 17.2557	W1 44 7.5201	0.98	6416.58	
8668.00	94.80	97.20	3024.05	2869.05	-874.15		6463484.890	574139.210	N58 18 17.1386	W1 44 5.9120	1.38	6503.30	
8762.00	92.80	98.50	3017.82	2862.82	-886.96		6463480.990	574167.520	N58 18 16.9952	W1 44 4.1781	2.54	6596.98	
8853.00	92.30	99.20	3013.77	2858.77	-900.95		6463476.720	574194.890	N58 18 16.8408	W1 44 2.5023	0.94	6687.71	
8943.00	93.90	98.60	3008.90	2853.90	-914.85	6742.78	6463472.490	574221.940	N58 18 16.6874	W1 44 0.8459	1.90	6777.39	
9036.00	92.50	99.20	3003.71	2848.71	-929.22		6463468.110	574249.890	N58 18 16.5290	W1 43 59.1346	1.64	6870.05	
9125.00	91.50		3000.60	2845.60	-943.44		6463463.780	574276.640	N58 18 16.3726	W1 43 57.4967	1.12	6958.77	
9215.00	90.20		2999.27	2844.27	-957.98		6463459.350	574303.700	N58 18 16.2129	W1 43 55.8402	1.46	7048.53	
9305.00	88.60		3000.21	2845.21	-972.75		6463454.840	574330.750	N58 18 16.0509	W1 43 54.1844	1.78	7138.28	
9387.00	89.90	99.30	3001.28	2846.28	-986.14		6463450.760	574355.400	N58 18 15.9040	W1 43 52.6756	1.60	7220.05	
9475.00	91.60	100.10	3000.13	2845.13	-1000.97		6463446.250	574381.820	N58 18 15.7419	W1 43 51.0580	2.13	7307.76	
9563.00	91.40	100.10	2997.83	2842.83	-1016.40		6463441.550	574408.210	N58 18 15.5739	W1 43 49.4430	0.23	7395.41	
9655.00	93.90	101.10	2993.58	2838.58	-1033.30		6463436.400	574435.730	N58 18 15.3906	W1 43 47.7589	2.93	7486.90	
9752.00	93.50	99.80	2987.32	2832.32	-1050.86		6463431.050	574464.740	N58 18 15.2000	W1 43 45.9840	1.40	7583.29	
9840.00	93.60	100.40	2981.87	2826.87	-1066.26		6463426.350	574491.090	N58 18 15.0322	W1 43 44.3715	0.69	7670.80	
9974.00	94.10	100.20	2972.87	2817.87	-1090.17		6463419.070	574531.170	N58 18 14.7723	W1 43 41.9187	0.40	7803.96	
10020.00	92.65	99.77	2970.16	2815.16	-1098.13		6463416.640	574544.950	N58 18 14.6855	W1 43 41.0754	3.28	7849.72	
10028.00	92.40	99.70	2969.81	2814.81	-1099.48		6463416.230	574547.350	N58 18 14.6707	W1 43 40.9284	3.26	7857.69	
10095.00	90.26	99.20	2968.25	2813.25	-1110.48	7876.82	6463412.880	574567.480	N58 18 14.5501	W1 43 39.6961	3.28	7924.48	