

# 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 #25	Vertical Section Azimuth:	313.44 deg
Well Name:	13/22a-C23	Vertical Section Origin:	3.17N, 14.44W
Wellbore Name:	13/22a-C23 (AWB)	TVD Reference Datum:	RKB
Wellpath Name:	13/22a-C23 Definitive Survey	TVD Reference Elevation:	Rig ( Datum #2 155.0ft 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 26.9638, W1 46 6.9682	North Reference:	Grid
Slot Location Grid N/E Y/X:	6463752.2060 m, 572163.0300 m	Local Coordinates Referenced To:	Installation

							Grid 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)	
0.00	0.00	0.00	0.00	-155.00	3.17	-14.44	6463752.210	572163.030	N58 18 26.9638	W1 46 6.9682	0.00	0.00	
500.50	0.00	0.00	500.50	345.50	3.17	-14.44	6463752.210	572163.030	N58 18 26.9638	W1 46 6.9682	0.00	0.00	
525.00	0.29	234.59	525.00	370.00	3.13	-14.49	6463752.200	572163.010	N58 18 26.9635	W1 46 6.9692	1.18	0.01	
550.00	0.41	271.10	550.00	395.00	3.10	-14.63	6463752.180	572162.970	N58 18 26.9632	W1 46 6.9718	0.99	0.09	
575.00	0.61	275.60	575.00	420.00	3.11	-14.85	6463752.190	572162.900	N58 18 26.9634	W1 46 6.9760	0.82	0.26	
600.00	0.91	263.92	600.00	445.00	3.11	-15.18	6463752.190	572162.800	N58 18 26.9634	W1 46 6.9822	1.34	0.50	
625.00	1.26	299.64	624.99	469.99	3.22	-15.62	6463752.220	572162.670	N58 18 26.9646	W1 46 6.9903	2.98	0.89	
650.00	1.63	296.37	649.98	494.98	3.52	-16.18	6463752.310	572162.500	N58 18 26.9676	W1 46 7.0006	1.52	1.50	
664.00	1.76	293.94	663.98	508.98	3.69	-16.55	6463752.360	572162.390	N58 18 26.9694	W1 46 7.0076	1.06	1.89	
685.00	1.94	302.71	684.97	529.97	4.01	-17.15	6463752.460	572162.210	N58 18 26.9726	W1 46 7.0186	1.60	2.54	
700.00	2.09	307.98	699.96	544.96	4.32	-17.58	6463752.560	572162.070	N58 18 26.9757	W1 46 7.0265	1.59	3.07	
766.00	2.90	323.64	765.89	610.90	6.40	-19.51	6463753.190	572161.480	N58 18 26.9966	W1 46 7.0621	1.59	5.91	
849.00	5.43	327.71	848.67	693.67	11.42	-22.86	6463754.720	572160.470	N58 18 27.0466	W1 46 7.1229	3.07	11.78	
941.00	7.74	321.20	940.06	785.06	19.93	-29.07	6463757.310	572158.570	N58 18 27.1315	W1 46 7.2362	2.63	22.14	
1034.00	9.60	318.15	1031.99	876.99	30.58	-38.16	6463760.560	572155.800	N58 18 27.2381	W1 46 7.4028	2.06	36.07	
1125.00	9.52	316.91	1121.73	966.73	41.73	-48.37	6463763.960	572152.690	N58 18 27.3498	W1 46 7.5899	0.24	51.15	
1153.00	9.42	316.86	1149.35	994.35	45.09	-51.52	6463764.980	572151.730	N58 18 27.3834	W1 46 7.6477	0.36	55.75	
1248.00	9.26	320.03	1243.09	1088.09	56.63	-61.74	6463768.490	572148.620	N58 18 27.4989	W1 46 7.8351	0.57	71.10	
1341.00	9.40	317.96	1334.86	1179.86	68.00	-71.64	6463771.960	572145.600	N58 18 27.6127	W1 46 8.0163	0.39	86.10	
1436.00	10.10	319.16	1428.48	1273.48	80.06	-82.28	6463775.640	572142.360	N58 18 27.7334	W1 46 8.2113	0.77	102.13	
1528.00	10.39	322.55	1519.02	1364.02	92.75	-92.60	6463779.500	572139.220	N58 18 27.8603	W1 46 8.4001	0.73	118.35	
1621.00	11.03	327.43	1610.40	1455.40	106.91	-102.49	6463783.810	572136.200	N58 18 28.0015	W1 46 8.5803	1.19	135.26	
1717.00	13.04	325.02	1704.29	1549.29	123.52	-113.64	6463788.880	572132.800	N58 18 28.1671	W1 46 8.7834	2.16	154.78	
1812.00	15.13	318.39	1796.43	1641.43	141.58	-128.02	6463794.380	572128.420	N58 18 28.3475	W1 46 9.0463	2.78	177.64	
1867.00	16.80	316.64	1849.31	1694.31	152.72	-138.24	6463797.770	572125.310	N58 18 28.4591	W1 46 9.2338	3.16	192.73	
1890.00	17.50	316.00	1871.29	1716.28	157.63	-142.93	6463799.270	572123.880	N58 18 28.5083	W1 46 9.3198	3.15	199.50	
2041.00	20.80	320.00	2013.92	1858.92	194.51	-175.94	6463810.510	572113.820	N58 18 28.8775	W1 46 9.9250	2.35	248.83	
2135.00	23.68	320.47	2100.91	1945.91	221.86	-198.69	6463818.840	572106.890	N58 18 29.1510	W1 46 10.3413	3.07	284.15	

MD (ft)	Inc (deg)	Azi (deg)	TVD (ft)	TVD(SS) (ft)	N/S (ft)	E/W (ft)	Grid Coordinates		Geographic Coordinates		DLS (deg/100ft)	VS (ft)	Comment
							Northing (m)	Easting (m)	Latitude	Longitude			
2228.00	27.07	319.11	2184.93	2029.93	252.27	-224.44	6463828.110	572099.040	N58 18 29.4551	W1 46 10.8127	3.70	323.76	
2321.00	30.25	319.41	2266.53	2111.52	286.07	-253.54	6463838.400	572090.180	N58 18 29.7932	W1 46 11.3457	3.42	368.13	
2416.00	34.38	318.46	2346.79	2191.79	324.33	-286.91	6463850.060	572080.010	N58 18 30.1761	W1 46 11.9571	4.38	418.67	
2509.00	38.63	316.70	2421.53	2266.53	365.13	-324.25	6463862.490	572068.630	N58 18 30.5847	W1 46 12.6419	4.71	473.83	
2603.00	42.81	315.67	2492.76	2337.76	409.35	-366.71	6463875.970	572055.690	N58 18 31.0279	W1 46 13.4214	4.50	535.07	
2695.00	47.07	315.13	2557.87	2402.87	455.60	-412.34	6463890.060	572041.790	N58 18 31.4916	W1 46 14.2595	4.65	600.00	
2783.00	50.25	315.24	2615.99	2460.99	502.47	-458.90	6463904.340	572027.600	N58 18 31.9616	W1 46 15.1148	3.61	666.03	
2876.00	53.53	314.88	2673.38	2518.38	554.25	-510.58	6463920.120	572011.860	N58 18 32.4810	W1 46 16.0643	3.54	739.17	
2972.00	56.91	314.34	2728.13	2573.13	609.62	-566.71	6463936.990	571994.750	N58 18 33.0363	W1 46 17.0958	3.55	817.99	
3064.00	59.55	314.44	2776.57	2621.56	664.33	-622.60	6463953.660	571977.720	N58 18 33.5852	W1 46 18.1229	2.87	896.19	
3154.00	61.32	314.17	2820.97	2665.97	719.00	-678.62	6463970.320	571960.660	N58 18 34.1338	W1 46 19.1526	1.98	974.46	
3243.00	62.65	311.85	2862.78	2707.78	772.58	-736.08	6463986.640	571943.150	N58 18 34.6719	W1 46 20.2095	2.74	1053.02	
3335.00	62.75	311.83	2904.97	2749.97	827.12	-796.98	6464003.260	571924.590	N58 18 35.2199	W1 46 21.3307	0.11	1134.74	
3427.00	62.64	311.45	2947.18	2792.18	881.43	-858.08	6464019.810	571905.980	N58 18 35.7659	W1 46 22.4555	0.39	1216.45	
3521.00	63.86	311.57	2989.48	2834.48	937.06	-920.93	6464036.760	571886.820	N58 18 36.3251	W1 46 23.6128	1.30	1300.34	
3613.00	65.70	312.68	3028.68	2873.68	992.89	-982.65	6464053.770	571868.020	N58 18 36.8860	W1 46 24.7489	2.28	1383.54	
3704.00	66.70	313.70	3065.41	2910.41	1049.88	-1043.36	6464071.140	571849.520	N58 18 37.4582	W1 46 25.8655	1.50	1466.80	
3795.00	65.90	314.08	3101.98	2946.98	1107.64	-1103.41	6464088.740	571831.230	N58 18 38.0379	W1 46 26.9696	0.96	1550.12	
3888.00	67.20	313.67	3138.99	2983.99	1166.78	-1164.91	6464106.750	571812.490	N58 18 38.6314	W1 46 28.1004	1.46	1635.44	
3978.00	70.12	313.49	3171.74	3016.74	1224.56	-1225.63	6464124.360	571793.980	N58 18 39.2114	W1 46 29.2171	3.25	1719.26	
4067.00	71.89	313.24	3200.71	3045.71	1282.34	-1286.81	6464141.960	571775.340	N58 18 39.7914	W1 46 30.3423	2.01	1803.41	
4160.00	71.44	314.11	3229.96	3074.96	1343.30	-1350.66	6464160.540	571755.890	N58 18 40.4033	W1 46 31.5165	1.01	1891.68	
4251.00	70.69	313.82	3259.49	3104.49	1403.05	-1412.61	6464178.750	571737.010	N58 18 41.0029	W1 46 32.6556	0.88	1977.75	
4345.00	71.61	314.09	3289.86	3134.86	1464.80	-1476.65	6464197.560	571717.500	N58 18 41.6226	W1 46 33.8331	1.02	2066.71	
4436.00	73.96	314.98	3316.79	3161.79	1525.76	-1538.60	6464216.140	571698.620	N58 18 42.2341	W1 46 34.9718	2.75	2153.61	
4526.00	73.50	315.79	3342.01	3187.01	1587.26	-1599.28	6464234.870	571680.130	N58 18 42.8507	W1 46 36.0865	1.00	2239.95	
4618.00	71.72	315.20	3369.50	3214.50	1649.87	-1660.82	6464253.950	571661.380	N58 18 43.4784	W1 46 37.2169	2.03	2327.69	
4710.00	70.99	315.56	3398.92	3243.92	1711.92	-1722.05	6464272.860	571642.730	N58 18 44.1005	W1 46 38.3418	0.88	2414.81	
4799.00	71.84	314.69	3427.28	3272.28	1771.70	-1781.57	6464291.070	571624.590	N58 18 44.6999	W1 46 39.4354	1.33	2499.13	
4899.00	73.19	312.49	3457.33	3302.33	1837.45	-1850.65	6464311.110	571603.540	N58 18 45.3599	W1 46 40.7059	2.50	2594.50	
4995.00	74.23	312.76	3484.26	3329.26	1899.85	-1918.45	6464330.120	571582.880	N58 18 45.9866	W1 46 41.9537	1.12	2686.63	
5090.00	74.73	312.79	3509.68	3354.68	1962.01	-1985.64	6464349.060	571562.410	N58 18 46.6109	W1 46 43.1900	0.53	2778.16	
5185.00	74.28	313.17	3535.06	3380.06	2024.42	-2052.61	6464368.080	571542.000	N58 18 47.2375	W1 46 44.4224	0.61	2869.71	
5280.00	73.07	312.55	3561.76	3406.76	2086.44	-2119.44	6464386.970	571521.640	N58 18 47.8603	W1 46 45.6520	1.42	2960.87	
5374.00	72.21	312.35	3589.81	3434.81	2146.99	-2185.64	6464405.420	571501.470	N58 18 48.4685	W1 46 46.8705	0.94	3050.58	
5470.00	70.59	312.24	3620.43	3465.43	2208.22	-2252.93	6464424.080	571480.970	N58 18 49.0836	W1 46 48.1093	1.69	3141.54	
5565.00	70.63	312.09	3651.97	3496.97	2268.37	-2319.36	6464442.410	571460.730	N58 18 49.6879	W1 46 49.3320	0.15	3231.13	
5660.00	70.45	311.67	3683.61	3528.62	2328.17	-2386.05	6464460.630	571440.410	N58 18 50.2888	W1 46 50.5600	0.46	3320.67	
5755.00	72.66	311.68	3713.67	3558.67	2388.09	-2453.36	6464478.880	571419.900	N58 18 50.8909	W1 46 51.7994	2.33	3410.74	
5855.00	73.95	310.26	3742.40	3587.40	2450.88	-2525.68	6464498.020	571397.860	N58 18 51.5223	W1 46 53.1318	1.87	3506.43	
5948.00	74.51	310.68	3767.67	3612.67	2508.97	-2593.76	6464515.720	571377.120	N58 18 52.1066	W1 46 54.3864	0.74	3595.81	
6044.00	73.91	310.43	3793.80	3638.80	2569.03	-2663.95	6464534.020	571355.730	N58 18 52.7107	W1 46 55.6797	0.67	3688.07	
6142.00	72.35	311.36	3822.24	3667.24	2630.43	-2734.84	6464552.720	571334.130	N58 18 53.3280	W1 46 56.9858	1.83	3781.76	
6200.00	72.83	311.65	3839.59	3684.59	2667.10	-2776.29	6464563.900	571321.500	N58 18 53.6966	W1 46 57.7491	0.96	3837.07	

MD (ft)	Inc (deg)	Azi (deg)	TVD (ft)	TVD(SS) (ft)	N/S (ft)	E/W (ft)	Grid Coordinates		Geographic Coordinates		DLS (deg/100ft)	VS (ft)	Comment
							Northing (m)	Easting (m)	Latitude	Longitude			
6214.00	72.95	311.73	3843.71	3688.71	2676.00	-2786.28	6464566.610	571318.460	N58 18 53.7860	W1 46 57.9331	1.02	3850.44	
6268.00	73.40	312.00	3859.34	3704.34	2710.50	-2824.77	6464577.120	571306.730	N58 18 54.1326	W1 46 58.6419	0.96	3902.11	
6362.00	74.37	312.52	3885.43	3730.43	2771.23	-2891.61	6464595.630	571286.370	N58 18 54.7427	W1 46 59.8723	1.16	3992.39	
6455.00	73.15	312.82	3911.44	3756.44	2831.74	-2957.26	6464614.070	571266.360	N58 18 55.3504	W1 47 1.0806	1.35	4081.67	
6549.00	72.73	313.64	3939.02	3784.02	2893.29	-3022.73	6464632.820	571246.410	N58 18 55.9683	W1 47 2.2853	0.95	4171.54	
6641.00	73.53	314.84	3965.72	3810.72	2954.72	-3085.80	6464651.530	571227.190	N58 18 56.5845	W1 47 3.4451	1.52	4259.57	
6734.00	72.64	314.90	3992.77	3837.77	3017.49	-3148.86	6464670.660	571207.980	N58 18 57.2140	W1 47 4.6041	0.96	4348.51	
6830.00	72.76	312.97	4021.32	3866.32	3081.08	-3214.86	6464690.040	571187.870	N58 18 57.8521	W1 47 5.8180	1.92	4440.16	
6924.00	71.00	313.81	4050.56	3895.56	3142.45	-3279.78	6464708.740	571168.090	N58 18 58.4680	W1 47 7.0124	2.06	4529.50	
7018.00	70.33	313.42	4081.68	3926.68	3203.63	-3344.00	6464727.380	571148.520	N58 18 59.0821	W1 47 8.1937	0.81	4618.19	
7112.00	69.97	312.21	4113.60	3958.60	3263.72	-3408.85	6464745.690	571128.760	N58 18 59.6854	W1 47 9.3874	1.27	4706.60	
7207.00	71.19	311.37	4145.19	3990.19	3323.42	-3475.65	6464763.880	571108.410	N58 19 0.2853	W1 47 10.6176	1.53	4796.16	
7300.00	71.09	310.36	4175.25	4020.25	3381.00	-3542.21	6464781.420	571088.130	N58 19 0.8643	W1 47 11.8439	1.03	4884.07	
7395.00	72.61	310.76	4204.84	4049.84	3439.70	-3610.79	6464799.310	571067.230	N58 19 1.4546	W1 47 13.1078	1.65	4974.23	
7489.00	73.76	312.36	4232.04	4077.04	3499.39	-3678.11	6464817.500	571046.720	N58 19 2.0545	W1 47 14.3478	2.04	5064.16	
7581.00	74.18	312.97	4257.44	4102.44	3559.32	-3743.13	6464835.760	571026.910	N58 19 2.6562	W1 47 15.5447	0.78	5152.57	
7675.00	75.03	312.29	4282.40	4127.40	3620.70	-3809.81	6464854.460	571006.590	N58 19 3.2726	W1 47 16.7721	1.14	5243.19	
7770.00	73.70	313.54	4308.00	4153.00	3682.98	-3876.81	6464873.440	570986.180	N58 19 3.8980	W1 47 18.0052	1.89	5334.66	
7863.00	72.42	312.85	4335.10	4180.10	3743.88	-3941.66	6464891.990	570966.420	N58 19 4.5092	W1 47 19.1987	1.55	5423.63	
7957.00	73.61	313.79	4362.56	4207.56	3805.56	-4007.06	6464910.780	570946.490	N58 19 5.1283	W1 47 20.4021	1.59	5513.52	
8050.00	74.06	313.26	4388.45	4233.45	3867.07	-4071.83	6464929.530	570926.750	N58 19 5.7457	W1 47 21.5937	0.73	5602.85	
8144.00	74.34	313.55	4414.04	4259.04	3929.22	-4137.54	6464948.460	570906.730	N58 19 6.3695	W1 47 22.8029	0.42	5693.29	
8238.00	73.16	313.24	4440.35	4285.35	3991.22	-4203.11	6464967.360	570886.750	N58 19 6.9917	W1 47 24.0095	1.29	5783.54	
8332.00	73.18	312.64	4467.56	4312.56	4052.51	-4268.98	6464986.030	570866.680	N58 19 7.6071	W1 47 25.2218	0.61	5873.51	
8424.00	71.37	311.86	4495.57	4340.57	4111.43	-4333.84	6465003.980	570846.920	N58 19 8.1989	W1 47 26.4161	2.13	5961.12	
8516.00	71.00	311.85	4525.24	4370.24	4169.54	-4398.71	6465021.690	570827.160	N58 19 8.7827	W1 47 27.6108	0.40	6048.17	
8608.00	69.74	312.28	4556.15	4401.15	4227.59	-4463.03	6465039.380	570807.550	N58 19 9.3658	W1 47 28.7954	1.44	6134.79	
8627.00	70.04	312.14	4562.68	4407.68	4239.58	-4476.25	6465043.030	570803.530	N58 19 9.4862	W1 47 29.0388	1.72	6152.63	
8699.00	71.18	311.62	4586.58	4431.58	4284.92	-4526.82	6465056.840	570788.120	N58 19 9.9417	W1 47 29.9701	1.72	6220.52	
8790.00	72.09	311.21	4615.26	4460.26	4342.05	-4591.59	6465074.250	570768.390	N58 19 10.5159	W1 47 31.1633	1.09	6306.83	
8870.00	72.85	310.90	4639.35	4484.35	4392.15	-4649.11	6465089.520	570750.860	N58 19 11.0195	W1 47 32.2233	1.02	6383.05	