

Wellpath Geographic Report

Report Date:	31-Jul-03	Grid Convergence Angle:	1.10 deg
Client:	ChevronTexaco	Grid Scale Factor:	0.99967
Field:	Captain	Survey / DLS Computation Method:	Minimum Curvature
Structure / Slot:	Captain B / Slot KK	Vertical Section Azimuth:	234.05 deg
Well Name:	13/22a-B13z	Vertical Section Origin:	47.20S, 53.06W
Wellbore Name:	13/22a-B13z (AWB)	TVD Reference Datum:	RKB
Wellpath Name:	13/22a-B13z Definitive Survey	TVD Reference Elevation:	Rig (Datum #2 86.5ft above Mean Sea Level)
Grid Coordinate System:	European Datum 1950 / UTM Zone 30 N	Sea Bed / Ground Level Elevation:	-369.40 ft to Mean Sea Level
Slot Location Lat/Long:	N58 18 3.6531, W1 42 24.1321	North Reference:	Grid
Slot Location Grid N/E Y/X:	6463099.3280 m, 575804.0430 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)		
86.50	0.00	0.00	86.50	0.00	-47.20	-53.06	6463099.330	575804.040	N58 18 3.6531	W1 42 24.1321	0.00	0.00		
455.90	0.00	0.00	455.90	369.40	-47.20	-53.06	6463099.330	575804.040	N58 18 3.6531	W1 42 24.1321	0.00	0.00		
456.00	0.00	0.00	456.00	369.50	-47.20	-53.06	6463099.330	575804.040	N58 18 3.6531	W1 42 24.1321	0.00	0.00		
500.00	0.24	33.09	500.00	413.50	-47.12	-53.01	6463099.350	575804.060	N58 18 3.6539	W1 42 24.1311	0.55	-0.09		
600.00	0.12	43.97	600.00	513.50	-46.87	-52.82	6463099.430	575804.120	N58 18 3.6563	W1 42 24.1275	0.12	-0.38		
700.00	0.28	21.06	700.00	613.50	-46.57	-52.66	6463099.520	575804.160	N58 18 3.6593	W1 42 24.1244	0.18	-0.69		
800.00	0.41	68.02	800.00	713.50	-46.21	-52.24	6463099.630	575804.290	N58 18 3.6628	W1 42 24.1164	0.30	-1.24		
900.00	0.22	314.55	900.00	813.50	-45.94	-52.05	6463099.710	575804.350	N58 18 3.6654	W1 42 24.1127	0.54	-1.56		
1000.00	2.03	307.38	999.97	913.47	-44.73	-53.59	6463100.080	575803.880	N58 18 3.6776	W1 42 24.1411	1.81	-1.02		
1100.00	4.36	298.54	1099.81	1013.31	-41.84	-58.34	6463100.960	575802.430	N58 18 3.7070	W1 42 24.2289	2.37	1.13		
1200.00	7.10	291.23	1199.30	1112.80	-37.78	-67.44	6463102.200	575799.660	N58 18 3.7486	W1 42 24.3977	2.83	6.11		
1300.00	8.04	290.25	1298.43	1211.93	-33.12	-79.76	6463103.620	575795.910	N58 18 3.7968	W1 42 24.6266	0.95	13.35		
1400.00	11.00	286.28	1397.04	1310.54	-28.03	-95.48	6463105.170	575791.120	N58 18 3.8500	W1 42 24.9189	3.03	23.09		
1500.00	15.29	287.88	1494.40	1407.90	-21.30	-117.20	6463107.220	575784.500	N58 18 3.9204	W1 42 25.3228	4.30	36.72		
1600.00	18.46	287.98	1590.08	1503.58	-12.36	-144.82	6463109.940	575776.080	N58 18 4.0136	W1 42 25.8362	3.17	53.83		
1700.00	19.73	287.65	1684.58	1598.08	-2.36	-175.96	6463112.990	575766.590	N58 18 4.1180	W1 42 26.4153	1.27	73.17		
1725.00	20.59	286.93	1708.05	1621.55	0.20	-184.19	6463113.770	575764.090	N58 18 4.1448	W1 42 26.5683	3.58	78.33		
1750.00	21.19	284.92	1731.40	1644.90	2.65	-192.76	6463114.520	575761.480	N58 18 4.1705	W1 42 26.7278	3.74	83.83		
1775.00	22.03	280.46	1754.65	1668.15	4.66	-201.74	6463115.130	575758.740	N58 18 4.1920	W1 42 26.8951	7.38	89.92		
1800.00	22.73	277.47	1777.77	1691.27	6.14	-211.14	6463115.580	575755.880	N58 18 4.2084	W1 42 27.0704	5.34	96.66		
1825.00	23.79	273.76	1800.73	1714.23	7.10	-220.96	6463115.870	575752.880	N58 18 4.2197	W1 42 27.2538	7.23	104.05		
1850.00	24.82	270.59	1823.52	1737.02	7.48	-231.24	6463115.990	575749.750	N58 18 4.2254	W1 42 27.4460	6.65	112.15		
1875.00	25.53	268.79	1846.15	1759.64	7.42	-241.87	6463115.970	575746.510	N58 18 4.2268	W1 42 27.6449	4.18	120.79		
1900.00	26.36	267.83	1868.63	1782.12	7.10	-252.80	6463115.870	575743.180	N58 18 4.2257	W1 42 27.8496	3.72	129.83		
1925.00	26.87	264.74	1890.98	1804.48	6.37	-263.98	6463115.650	575739.780	N58 18 4.2207	W1 42 28.0589	5.90	139.30		
1950.00	27.53	260.83	1913.21	1826.71	4.93	-275.31	6463115.210	575736.320	N58 18 4.2086	W1 42 28.2714	7.62	149.32		
1975.00	28.02	258.05	1935.33	1848.83	2.79	-286.76	6463114.560	575732.840	N58 18 4.1897	W1 42 28.4864	5.54	159.84		
2000.00	28.56	255.86	1957.35	1870.85	0.12	-298.30	6463113.750	575729.320	N58 18 4.1656	W1 42 28.7032	4.68	170.76		

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			
2025.00	29.03	251.67	1979.26	1892.76	-3.25	-309.85	6463112.720	575725.800	N58 18 4.1346	W1 42 28.9206	8.29	182.09	
2050.00	29.67	249.04	2001.05	1914.55	-7.37	-321.39	6463111.460	575722.280	N58 18 4.0962	W1 42 29.1379	5.76	193.85	
2075.00	30.30	247.20	2022.71	1936.21	-12.03	-332.98	6463110.050	575718.750	N58 18 4.0525	W1 42 29.3565	4.46	205.96	
2100.00	31.26	245.31	2044.18	1957.68	-17.18	-344.69	6463108.470	575715.180	N58 18 4.0039	W1 42 29.5774	5.45	218.47	
2125.00	32.39	242.50	2065.43	1978.93	-22.98	-356.52	6463106.710	575711.580	N58 18 3.9490	W1 42 29.8009	7.45	231.45	
2150.00	33.41	240.29	2086.42	1999.92	-29.49	-368.44	6463104.730	575707.950	N58 18 3.8872	W1 42 30.0262	6.30	244.92	
2175.00	34.64	238.89	2107.14	2020.64	-36.57	-380.50	6463102.570	575704.270	N58 18 3.8198	W1 42 30.2544	5.83	258.84	
2200.00	35.88	237.81	2127.55	2041.05	-44.14	-392.78	6463100.260	575700.530	N58 18 3.7475	W1 42 30.4869	5.55	273.23	
2225.00	37.21	235.98	2147.64	2061.14	-52.28	-405.25	6463097.780	575696.730	N58 18 3.6697	W1 42 30.7231	6.88	288.10	
2250.00	38.48	234.55	2167.38	2080.88	-61.02	-417.85	6463095.120	575692.890	N58 18 3.5860	W1 42 30.9620	6.17	303.43	
2275.00	39.56	233.51	2186.80	2100.30	-70.26	-430.59	6463092.300	575689.010	N58 18 3.4974	W1 42 31.2036	5.05	319.17	
2300.00	40.63	232.38	2205.93	2119.43	-79.97	-443.44	6463089.340	575685.090	N58 18 3.4042	W1 42 31.4475	5.18	335.27	
2325.00	42.01	231.05	2224.70	2138.20	-90.19	-456.39	6463086.230	575681.150	N58 18 3.3059	W1 42 31.6935	6.54	351.76	
2350.00	43.38	229.68	2243.07	2156.58	-101.01	-469.44	6463082.930	575677.170	N58 18 3.2019	W1 42 31.9416	6.62	368.68	
2375.00	44.21	229.02	2261.12	2174.62	-112.28	-482.57	6463079.500	575673.170	N58 18 3.0933	W1 42 32.1912	3.79	385.92	
2400.00	45.39	227.73	2278.86	2192.36	-123.98	-495.74	6463075.930	575669.160	N58 18 2.9806	W1 42 32.4417	5.96	403.45	
2425.00	46.72	226.15	2296.21	2209.71	-136.28	-508.89	6463072.190	575665.150	N58 18 2.8620	W1 42 32.6921	7.00	421.31	
2450.00	47.76	224.91	2313.18	2226.68	-149.13	-521.98	6463068.270	575661.160	N58 18 2.7378	W1 42 32.9418	5.53	439.46	
2475.00	48.94	223.96	2329.80	2243.30	-162.47	-535.06	6463064.200	575657.180	N58 18 2.6089	W1 42 33.1912	5.51	457.88	
2500.00	49.91	222.23	2346.06	2259.56	-176.34	-548.03	6463059.980	575653.230	N58 18 2.4748	W1 42 33.4389	6.53	476.52	
2525.00	50.84	220.74	2362.00	2275.50	-190.76	-560.78	6463055.580	575649.340	N58 18 2.3351	W1 42 33.6826	5.91	495.31	
2550.00	51.47	219.96	2377.68	2291.18	-205.60	-573.39	6463051.060	575645.500	N58 18 2.1913	W1 42 33.9238	3.50	514.23	
2575.00	52.32	218.66	2393.11	2306.61	-220.82	-585.85	6463046.420	575641.700	N58 18 2.0438	W1 42 34.1624	5.32	533.25	
2600.00	53.42	217.02	2408.20	2321.70	-236.57	-598.08	6463041.630	575637.980	N58 18 1.8910	W1 42 34.3967	6.83	552.39	
2625.00	54.01	216.19	2423.00	2336.50	-252.74	-610.09	6463036.700	575634.320	N58 18 1.7340	W1 42 34.6273	3.57	571.61	
2650.00	54.79	215.94	2437.55	2351.05	-269.18	-622.06	6463031.690	575630.670	N58 18 1.5744	W1 42 34.8571	3.22	590.95	
2675.00	56.17	215.96	2451.72	2365.22	-285.85	-634.15	6463026.610	575626.980	N58 18 1.4124	W1 42 35.0893	5.52	610.52	
2700.00	57.74	215.81	2465.35	2378.85	-302.83	-646.43	6463021.440	575623.240	N58 18 1.2475	W1 42 35.3252	6.30	630.43	
2725.00	59.38	215.74	2478.39	2391.89	-320.13	-658.90	6463016.170	575619.440	N58 18 1.0795	W1 42 35.5647	6.56	650.69	
2750.00	60.70	215.41	2490.87	2404.37	-337.75	-671.50	6463010.800	575615.600	N58 18 0.9083	W1 42 35.8067	5.40	671.23	
2775.00	62.35	215.14	2502.79	2416.29	-355.69	-684.19	6463005.330	575611.740	N58 18 0.7340	W1 42 36.0506	6.67	692.03	
2800.00	64.24	214.89	2514.03	2427.53	-373.98	-697.01	6462999.760	575607.830	N58 18 0.5563	W1 42 36.2969	7.61	713.15	
2825.00	65.65	214.65	2524.61	2438.11	-392.58	-709.92	6462994.090	575603.900	N58 18 0.3755	W1 42 36.5452	5.71	734.52	
2850.00	65.98	214.45	2534.86	2448.36	-411.37	-722.86	6462988.370	575599.960	N58 18 0.1929	W1 42 36.7939	1.51	756.02	
2875.00	66.89	214.64	2544.85	2458.35	-430.24	-735.85	6462982.620	575596.000	N58 18 0.0095	W1 42 37.0437	3.71	777.62	
2900.00	68.87	214.84	2554.26	2467.76	-449.27	-749.05	6462976.820	575591.980	N58 17 59.8246	W1 42 37.2975	7.95	799.47	
2925.00	70.31	214.98	2562.98	2476.48	-468.49	-762.46	6462970.960	575587.890	N58 17 59.6378	W1 42 37.5552	5.78	821.61	
2950.00	70.96	215.16	2571.27	2484.77	-487.79	-776.01	6462965.080	575583.760	N58 17 59.4503	W1 42 37.8156	2.69	843.91	
2975.00	71.86	215.45	2579.24	2492.74	-507.13	-789.70	6462959.190	575579.590	N58 17 59.2624	W1 42 38.0788	3.76	866.35	
3000.00	73.73	215.81	2586.64	2500.14	-526.53	-803.61	6462953.280	575575.350	N58 17 59.0739	W1 42 38.3460	7.61	889.01	
3025.00	75.40	216.00	2593.29	2506.79	-546.05	-817.75	6462947.330	575571.040	N58 17 58.8843	W1 42 38.6174	6.72	911.90	
3050.00	75.94	216.13	2599.48	2512.98	-565.63	-832.00	6462941.360	575566.700	N58 17 58.6941	W1 42 38.8912	2.22	934.94	
3075.00	76.64	215.93	2605.40	2518.90	-585.27	-846.29	6462935.380	575562.350	N58 17 58.5034	W1 42 39.1655	2.91	958.04	
3100.00	77.64	215.77	2610.97	2524.47	-605.03	-860.56	6462929.360	575558.000	N58 17 58.3115	W1 42 39.4396	4.05	981.19	

MD	Inc	Azi	TVD	TVD(SS)	N/-S	E/-W	Grid Coordinates		Geographic Coordinates		DLS	VS	Comment
							Northing	Easting	Latitude	Longitude			
(ft)	(deg)	(deg)	(ft)	(ft)	(ft)	(ft)	(m)	(m)			(deg/100ft)	(ft)	
3108.00	78.07	215.70	2612.65	2526.15	-611.38	-865.13	6462927.420	575556.600	N58 17 58.2498	W1 42 39.5273	5.44	988.62	
3215.00	82.10	214.23	2631.07	2544.57	-697.74	-925.51	6462901.110	575538.210	N58 17 57.4106	W1 42 40.6879	4.00	1088.20	
3299.00	80.96	214.77	2643.44	2556.94	-766.21	-972.57	6462880.250	575523.870	N58 17 56.7451	W1 42 41.5928	1.50	1166.49	
3389.00	82.12	219.89	2656.69	2570.19	-836.97	-1026.54	6462858.690	575507.420	N58 17 56.0584	W1 42 42.6277	5.77	1251.71	
3488.00	83.43	224.93	2669.15	2582.65	-909.45	-1092.76	6462836.600	575487.250	N58 17 55.3569	W1 42 43.8925	5.22	1347.87	
3582.00	84.79	229.45	2678.80	2592.30	-972.97	-1161.34	6462817.250	575466.350	N58 17 54.7442	W1 42 45.1982	5.00	1440.68	
3764.00	85.22	236.07	2694.67	2608.17	-1082.63	-1305.60	6462783.830	575422.390	N58 17 53.6914	W1 42 47.9362	3.63	1621.84	
3859.00	84.36	235.81	2703.29	2616.79	-1135.61	-1383.98	6462767.690	575398.510	N58 17 53.1842	W1 42 49.4214	0.95	1716.40	
3953.00	85.62	235.61	2711.50	2625.00	-1188.37	-1461.34	6462751.610	575374.940	N58 17 52.6792	W1 42 50.8876	1.36	1810.00	
4042.00	84.85	234.88	2718.89	2632.39	-1238.93	-1534.21	6462736.210	575352.740	N58 17 52.1949	W1 42 52.2688	1.19	1898.67	
4137.00	83.52	234.56	2728.52	2642.02	-1293.51	-1611.36	6462719.580	575329.230	N58 17 51.6718	W1 42 53.7316	1.44	1993.17	
4232.00	79.62	234.40	2742.44	2655.94	-1348.10	-1687.83	6462702.940	575305.930	N58 17 51.1486	W1 42 55.1817	4.11	2087.12	
4322.00	75.48	234.27	2761.84	2675.34	-1399.33	-1759.22	6462687.340	575284.180	N58 17 50.6574	W1 42 56.5354	4.60	2174.99	
4412.00	70.41	235.57	2788.23	2701.73	-1448.77	-1829.60	6462672.270	575262.730	N58 17 50.1836	W1 42 57.8696	5.80	2260.99	
4504.00	65.36	237.57	2822.86	2736.36	-1495.73	-1900.69	6462657.960	575241.070	N58 17 49.7345	W1 42 59.2163	5.85	2346.11	
4594.00	61.01	238.80	2863.45	2776.95	-1538.08	-1968.91	6462645.060	575220.280	N58 17 49.3302	W1 43 0.5077	4.98	2426.20	
4689.00	56.39	236.99	2912.79	2826.29	-1581.18	-2037.67	6462631.930	575199.330	N58 17 48.9186	W1 43 1.8092	5.13	2507.16	
4781.00	53.05	235.85	2965.92	2879.42	-1622.70	-2100.24	6462619.270	575180.270	N58 17 48.5214	W1 43 2.9945	3.77	2582.19	
4892.00	49.63	237.25	3035.26	2948.76	-1670.49	-2172.53	6462604.710	575158.240	N58 17 48.0643	W1 43 4.3639	3.23	2668.77	
4950.00	49.62	236.86	3072.83	2986.33	-1694.52	-2209.61	6462597.390	575146.940	N58 17 47.8346	W1 43 5.0661	0.51	2712.89	
5046.00	49.07	236.59	3135.37	3048.87	-1734.47	-2270.50	6462585.220	575128.390	N58 17 47.4524	W1 43 6.2193	0.61	2785.64	
5135.00	48.16	236.08	3194.21	3107.71	-1771.49	-2326.07	6462573.940	575111.460	N58 17 47.0983	W1 43 7.2722	1.11	2852.36	
5186.00	47.83	235.70	3228.34	3141.84	-1792.74	-2357.45	6462567.460	575101.900	N58 17 46.8948	W1 43 7.8667	0.85	2890.24	
5280.00	47.22	235.02	3291.82	3205.32	-1832.15	-2414.49	6462555.460	575084.510	N58 17 46.5174	W1 43 8.9478	0.84	2959.55	