

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:	215.14 deg
Well Name:	13/22a-B13	Vertical Section Origin:	47.20S, 53.06W
Wellbore Name:	13/22a-B13 (AWB)	TVD Reference Datum:	RKB
Wellpath Name:	13/22a-B13 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	-0.40		
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	-0.75		
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	-1.28		
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	-1.61		
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	-1.72		
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	-1.35		
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	0.58		
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	3.86		
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	8.74		
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	15.74		
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	24.32		
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	34.07		
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	36.71		
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	39.65		
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	43.16		
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	47.37		
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	52.23		
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	57.84		
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	64.00		
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	70.56		
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	77.59		
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	85.29		
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	93.62		
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	102.45		

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	111.86	
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	121.87	
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	132.35	
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	143.30	
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	154.86	
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	167.04	
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	179.77	
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	193.03	
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	206.86	
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	221.26	
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	236.15	
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	251.48	
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	267.30	
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	283.66	
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	300.43	
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	317.58	
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	335.20	
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	353.25	
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	371.69	
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	390.49	
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	409.63	
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	429.02	
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	448.64	
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	468.55	
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	488.69	
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	509.02	
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	529.61	
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	550.57	
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	571.89	
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	593.55	
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	615.53	
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	637.86	
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	660.51	
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	683.31	
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	706.22	
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	729.38	
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	752.81	
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	776.40	
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	800.09	
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	823.97	
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	848.07	
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	872.29	
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	896.57	
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	920.94	

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			
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	928.76	
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	1034.14	
3309.00	85.37	213.12	2641.33	2554.83	-775.49	-977.31	6462877.420	575522.420	N58 17 56.6546	W1 42 41.6848	3.67	1127.53	
3400.00	86.60	210.01	2647.70	2561.20	-852.83	-1024.82	6462853.850	575507.950	N58 17 55.9019	W1 42 42.6013	3.67	1218.12	
3484.00	87.97	207.90	2651.68	2565.18	-926.24	-1065.44	6462831.490	575495.570	N58 17 55.1865	W1 42 43.3874	2.99	1301.53	
3577.00	88.37	203.21	2654.65	2568.15	-1010.07	-1105.53	6462805.940	575483.360	N58 17 54.3683	W1 42 44.1674	5.06	1393.16	
3667.00	88.72	200.22	2656.94	2570.44	-1093.65	-1138.81	6462780.480	575473.210	N58 17 53.5514	W1 42 44.8199	3.34	1480.66	
3760.00	88.09	200.45	2659.53	2573.03	-1180.82	-1171.12	6462753.910	575463.370	N58 17 52.6989	W1 42 45.4555	0.72	1570.54	
3842.00	83.21	200.49	2665.74	2579.24	-1257.40	-1199.70	6462730.580	575454.660	N58 17 51.9501	W1 42 46.0176	5.95	1649.61	
3932.00	79.70	199.71	2679.11	2592.61	-1340.96	-1230.29	6462705.120	575445.340	N58 17 51.1328	W1 42 46.6196	3.99	1735.55	
4024.00	77.71	196.02	2697.14	2610.64	-1426.81	-1257.97	6462678.960	575436.910	N58 17 50.2925	W1 42 47.1682	4.49	1821.68	
4122.00	72.47	194.67	2722.35	2635.85	-1518.09	-1283.03	6462651.150	575429.270	N58 17 49.3981	W1 42 47.6697	5.51	1910.76	
4216.00	66.27	194.38	2755.45	2668.95	-1603.21	-1305.09	6462625.210	575422.550	N58 17 48.5639	W1 42 48.1127	6.60	1993.06	
4308.00	60.75	195.07	2796.47	2709.97	-1682.82	-1326.00	6462600.960	575416.180	N58 17 47.7838	W1 42 48.5323	6.04	2070.20	
4399.00	54.13	197.05	2845.42	2758.92	-1756.49	-1347.15	6462578.510	575409.730	N58 17 47.0622	W1 42 48.9545	7.50	2142.62	
4450.00	50.37	197.75	2876.64	2790.14	-1794.96	-1359.20	6462566.780	575406.060	N58 17 46.6855	W1 42 49.1936	7.45	2181.02	
4493.00	49.32	196.79	2904.37	2817.87	-1826.35	-1368.96	6462557.220	575403.090	N58 17 46.3782	W1 42 49.3874	2.98	2212.30	
4589.00	48.98	196.44	2967.16	2880.66	-1895.93	-1389.73	6462536.020	575396.760	N58 17 45.6968	W1 42 49.8007	0.45	2281.15	
4710.00	47.80	196.44	3047.51	2961.01	-1982.70	-1415.33	6462509.580	575388.960	N58 17 44.8470	W1 42 50.3106	0.98	2366.84	