BAKER HUGHES INTEQ

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 #8	Vertical Section Azimuth:	90.00 deg
Well Name:	13/22a-C19	Vertical Section Origin:	9.00N, 15.25E
Wellbore Name:	13/22a-C19 (AWB)	TVD Reference Datum:	RKB
Wellpath Name:	13/22a-C19 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 27.0159, W1 46 6.4106	North Reference:	Grid
Slot Location Grid N/E Y/X:	6463753.9820 m, 572172.0770 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	9.00	15.25	6463753.980	572172.080	N58 18 27.0159	W1 46 6.4106	0.00	0.00	
500.50	0.00	0.00	500.50	345.50	9.00	15.25	6463753.980	572172.080	N58 18 27.0159	W1 46 6.4106	0.00	0.00	
550.00	1.06	350.21	550.00	395.00	9.45	15.17	6463754.120	572172.050	N58 18 27.0204	W1 46 6.4119	2.14	-0.08	
600.00	1.47	325.45	599.99	444.99	10.43	14.73	6463754.420	572171.920	N58 18 27.0301	W1 46 6.4199	1.35	-0.52	
650.00	1.19	345.30	649.97	494.97	11.47	14.23	6463754.730	572171.770	N58 18 27.0404	W1 46 6.4288	1.07	-1.02	
700.00	1.14	68.81	699.97	544.96	12.15	14.57	6463754.940	572171.870	N58 18 27.0470	W1 46 6.4223	3.10	-0.68	
750.00	1.44	85.13	749.95	594.95	12.38	15.66	6463755.010	572172.200	N58 18 27.0491	W1 46 6.4019	0.94	0.41	
800.00	3.09	77.13	799.91	644.91	12.73	17.60	6463755.120	572172.790	N58 18 27.0523	W1 46 6.3654	3.35	2.35	
850.00	5.80	100.41	849.76	694.76	12.58	21.40	6463755.070	572173.950	N58 18 27.0500	W1 46 6.2944	6.41	6.15	
900.00	7.57	98.22	899.42	744.42	11.65	27.14	6463754.790	572175.700	N58 18 27.0399	W1 46 6.1872	3.58	11.89	
950.00	8.63	97.87	948.92	793.92	10.66	34.12	6463754.490	572177.830	N58 18 27.0289	W1 46 6.0570	2.12	18.87	
1000.00	9.08	104.34	998.32	843.32	9.17	41.66	6463754.040	572180.120	N58 18 27.0129	W1 46 5.9165	2.18	26.40	
1050.00	9.72	93.34	1047.66	892.66	7.95	49.69	6463753.660	572182.570	N58 18 26.9994	W1 46 5.7665	3.81	34.44	
1100.00	10.34	93.80	1096.89	941.89	7.41	58.38	6463753.500	572185.220	N58 18 26.9925	W1 46 5.6040	1.25	43.13	
1150.00	11.51	83.57	1145.99	990.99	7.67	67.82	6463753.580	572188.090	N58 18 26.9933	W1 46 5.4274	4.52	52.57	
1200.00	12.01	86.92	1194.94	1039.94	8.51	77.97	6463753.830	572191.190	N58 18 26.9998	W1 46 5.2371	1.69	62.72	
1250.00	12.66	74.93	1243.79	1088.79	10.21	88.46	6463754.350	572194.380	N58 18 27.0147	W1 46 5.0403	5.27	73.21	
1300.00	13.15	77.79	1292.53	1137.53	12.84	99.31	6463755.150	572197.690	N58 18 27.0386	W1 46 4.8364	1.61	84.06	
1350.00	13.81	73.71	1341.16	1186.15	15.72	110.60	6463756.030	572201.130	N58 18 27.0649	W1 46 4.6242	2.31	95.34	
1400.00	14.58	69.60	1389.63	1234.63	19.58	122.22	6463757.210	572204.670	N58 18 27.1009	W1 46 4.4053	2.54	106.97	
1450.00	14.36	68.44	1438.04	1283.04	24.06	133.89	6463758.570	572208.230	N58 18 27.1428	W1 46 4.1854	0.73	118.64	
1500.00	14.09	67.35	1486.51	1331.51	28.68	145.27	6463759.980	572211.690	N58 18 27.1863	W1 46 3.9708	0.76	130.02	
1550.00	14.09	68.56	1535.01	1380.01	33.25	156.55	6463761.370	572215.130	N58 18 27.2293	W1 46 3.7582	0.59	141.30	
1600.00	14.48	66.56	1583.46	1428.46	37.96	167.95	6463762.810	572218.600	N58 18 27.2736	W1 46 3.5432	1.26	152.70	
1650.00	14.88	64.56	1631.83	1476.83	43.20	179.49	6463764.400	572222.120	N58 18 27.3232	W1 46 3.3256	1.29	164.23	
1680.00	15.46	67.64	1660.78	1505.78	46.38	186.66	6463765.370	572224.310	N58 18 27.3532	W1 46 3.1902	3.31	171.41	
1705.00	15.55	67.85	1684.87	1529.87	48.91	192.85	6463766.140	572226.190	N58 18 27.3770	W1 46 3.0736	0.42	177.60	
1730.00	15.30	69.27	1708.97	1553.97	51.34	199.04	6463766.880	572228.080	N58 18 27.3998	W1 46 2.9570	1.81	183.78	

							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)	
1755.00	15.06	72.70	1733.10	1578.10	53.47	205.22	6463767.530	572229.960	N58 18 27.4197	W1 46 2.8405	3.72	189.97	
1780.00	14.61	74.83	1757.27	1602.27	55.26	211.37	6463768.080	572231.830	N58 18 27.4362	W1 46 2.7249	2.83	196.12	
1805.00	14.64	76.21	1781.46	1626.46	56.84	217.48	6463768.560	572233.690	N58 18 27.4507	W1 46 2.6100	1.40	202.23	
1830.00	15.02	76.93	1805.63	1650.63	58.33	223.70	6463769.010	572235.590	N58 18 27.4642	W1 46 2.4930	1.69	208.45	
1855.00	15.70	77.30	1829.73	1674.73	59.80	230.16	6463769.460	572237.560	N58 18 27.4776	W1 46 2.3717	2.75	214.91	
1880.00	16.53	77.76	1853.75	1698.75	61.30	236.93	6463769.920	572239.620	N58 18 27.4911	W1 46 2.2444	3.36	221.68	
1905.00	17.32	77.72	1877.67	1722.67	62.85	244.04	6463770.390	572241.790	N58 18 27.5050	W1 46 2.1108	3.16	228.79	
1930.00	18.18	77.62	1901.48	1746.48	64.47	251.49	6463770.890	572244.060	N58 18 27.5197	W1 46 1.9709	3.44	236.24	
1955.00	19.87	77.88	1925.11	1770.11	66.20	259.45	6463771.410	572246.480	N58 18 27.5353	W1 46 1.8213	6.77	244.20	
1980.00	21.07	77.78	1948.53	1793.53	68.05	268.00	6463771.970	572249.090	N58 18 27.5519	W1 46 1.6607	4.80	252.75	
2005.00	22.31	78.13	1971.76	1816.76	69.97	277.04	6463772.560	572251.840	N58 18 27.5693	W1 46 1.4910	4.99	261.78	
2030.00	23.56	78.75	1994.78	1839.78	71.92	286.58	6463773.160	572254.750	N58 18 27.5868	W1 46 1.3117	5.09	271.33	
2055.00	24.69	79.13	2017.60	1862.60	73.89	296.61	6463773.750	572257.810	N58 18 27.6043	W1 46 1.1234	4.56	281.36	
2080.00	25.65	79.76	2040.22	1885.23	75.83	307.06	6463774.350	572260.990	N58 18 27.6216	W1 46 0.9271	3.99	291.81	
2105.00	27.11	80.58	2062.62	1907.62	77.72	318.01	6463774.920	572264.330	N58 18 27.6382	W1 46 0.7217	6.02	302.76	
2130.00	28.14	80.86	2084.77	1929.77	79.59	329.45	6463775.490	572267.810	N58 18 27.6546	W1 46 0.5069	4.15	314.20	
2155.00	29.38	80.87	2106.69	1951.69	81.50	341.32	6463776.070	572271.430	N58 18 27.6712	W1 46 0.2841	4.96	326.07	
2180.00	30.82	80.74	2128.32	1973.32	83.51	353.70	6463776.680	572275.200	N58 18 27.6887	W1 46 0.0518	5.77	338.45	
2205.00	31.76	79.77	2149.68	1994.68	85.71	366.50	6463777.350	572279.100	N58 18 27.7081	W1 45 59.8116	4.27	351.24	
2230.00	32.70	80.19	2170.83	2015.83	88.03	379.62	6463778.060	572283.100	N58 18 27.7286	W1 45 59.5651	3.87	364.37	
2255.00	34.07	79.60	2191.70	2036.70	90.44	393.17	6463778.800	572287.230	N58 18 27.7499	W1 45 59.3108	5.63	377.92	
2258.00	34.25	79.51	2194.18	2039.18	90.75	394.82	6463778.890	572287.730	N58 18 27.7526	W1 45 59.2797	6.23	379.57	
2330.00	37.36	77.83	2252.57	2097.57	99.04	436.11	6463781.420	572300.310	N58 18 27.8269	W1 45 58.5043	4.53	420.86	
2425.00	41.40	77.60	2325.99	2170.99	111.87	494.99	6463785.330	572318.250	N58 18 27.9426	W1 45 57.3980	4.26	479.74	
2521.00	45.06	77.15	2395.92	2240.92	126.25	559.14	6463789.710	572337.800	N58 18 28.0726	W1 45 56.1927	3.83	543.89	
2616.00	49.12	75.25	2460.59	2305.59	142.88	626.68	6463794.770	572358.380	N58 18 28.2242	W1 45 54.9230	4.52	611.43	
2710.00	53.19	75.57	2519.54	2364.54	161.31	697.52	6463800.390	572379.960	N58 18 28.3930	W1 45 53.5911	4.34	682.27	
2807.00	57.03	77.18	2575.01	2420.01	180.02	774.83	6463806.090	572403.520	N58 18 28.5633	W1 45 52.1379	4.19	759.58	
2903.00	58.43	76.43	2626.27	2471.27	198.55	853.86	6463811.740	572427.600	N58 18 28.7315	W1 45 50.6528	1.60	838.61	
2998.00	58.74	75.95	2675.78	2520.79	217.91	932.59	6463817.640	572451.590	N58 18 28.9079	W1 45 49.1728	0.54	917.34	
3093.00	59.21	75.60	2724.75	2569.75	237.91	1011.50	6463823.730	572475.630	N58 18 29.0907	W1 45 47.6893	0.59	996.25	
3189.00	60.18	74.36	2773.19	2618.19	259.39	1091.55	6463830.280	572500.020	N58 18 29.2878	W1 45 46.1840	1.50	1076.30	
3284.00	61.47	76.53	2819.51	2664.51	280.23	1171.83	6463836.620	572524.480	N58 18 29.4785	W1 45 44.6745	2.41	1156.58	
3378.00	65.36	79.08	2861.57	2706.57	297.95	1253.97	6463842.020	572549.510	N58 18 29.6381	W1 45 43.1312	4.80	1238.72	
3474.00	68.33	79.63	2899.32	2744.32	314.25	1340.71	6463846.990	572575.940	N58 18 29.7829	W1 45 41.5025	3.14	1325.46	
3569.00	71.11	80.61	2932.24	2777.24	329.53	1428.49	6463851.650	572602.690	N58 18 29.9175	W1 45 39.8545	3.08	1413.24	
3663.00	73.58	82.07	2960.75	2805.75	343.01	1517.04	6463855.750	572629.670	N58 18 30.0342	W1 45 38.1930	3.02	1501.78	
3760.00	77.27	85.10	2985.16	2830.16	353.47	1610.30	6463858.940	572658.080	N58 18 30.1204	W1 45 36.4441	4.86	1595.05	
3856.00	79.28	87.78	3004.67	2849.67	359.30	1704.10	6463860.720	572686.670	N58 18 30.1608	W1 45 34.6867	3.44	1688.85	
3951.00	78.81	89.45	3022.73	2867.73	361.56	1797.34	6463861.400	572715.080	N58 18 30.1661	W1 45 32.9412	1.80	1782.09	
4046.00	85.48	91.31	3035.70	2880.70	360.92	1891.39	6463861.210	572743.730	N58 18 30.1427	W1 45 31.1814	7.28	1876.14	
4141.00	85.57	91.15	3043.11	2888.12	358.89	1986.08	6463860.590	572772.580	N58 18 30.1055	W1 45 29.4102	0.19	1970.83	
4178.00	87.20	91.50	3045.45	2890.45	358.03	2022.99	6463860.330	572783.830	N58 18 30.0904	W1 45 28.7197	4.51	2007.74	
4259.00	90.30	91.50	3047.22	2892.21	355.91	2103.94	6463859.690	572808.490	N58 18 30.0548	W1 45 27.2057	3.83	2088.68	