

DIRECTIONAL SURVEY FOR WELL L06-18
RAW DATA

WELL No. Z2A-51-592-CD-L06(L06-18) ELEVATION: 50 FEET NUMBER OF DATA POINTS: 24

THE CONDUCTOR IS VERTICAL

No.	MEASURED DEPTH	DEVIATION ANGLE	ORIENTATION
1	740	1.00	N - 36.00 - E
2	849	4.50	N - 14.00 - W
3	940	8.75	N - 14.00 - W
4	1001	12.00	N - 13.00 - W
5	1218	20.00	N - 4.00 - W
6	1403	26.00	N - 6.00 - E
7	1540	30.50	N - 14.00 - E
8	1731	33.00	N - 10.50 - E
9	1823	34.50	N - 1.00 - E
10	2019	35.50	N - 0.00 - E
11	2204	35.50	N - 1.00 - E
12	2516	36.00	N - 3.50 - E
13	2884	36.50	N - 6.00 - E
14	3103	36.00	N - 8.00 - E
15	3472	35.50	N - 10.50 - E
16	3787	34.00	N - 13.00 - E
17	4159	33.00	N - 17.00 - E
18	4436	32.50	N - 18.00 - E
19	4787	32.00	N - 23.00 - E
20	5170	30.75	N - 27.00 - E
21	5405	31.00	N - 29.00 - E
22	5795	29.50	N - 35.00 - E
23	6171	29.00	N - 39.00 - E
24	6254	29.00	N - 40.00 - E

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COMPUTATIONS AT 10 FEET INCREMENTS

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	MEASURED DEPTH	VERTICAL DEPTH	TRUE SUB-SEA	TOTAL CO - ORDINATES			HORIZONTAL DISTANCE	
*	400	400.00	350.00	N	0.00	E	0.00	0.00 *
	410	409.99	359.99	N	0.00	E	0.00	0.00
	420	419.99	369.99	N	0.01	E	0.00	0.01
	430	429.99	379.99	N	0.02	E	0.01	0.03 ✓
	440	439.99	389.99	N	0.04	E	0.03	0.05
	450	449.99	399.99	N	0.06	E	0.04	0.07
	460	459.99	409.99	N	0.08	E	0.06	0.10
	470	469.99	419.99	N	0.11	E	0.08	0.14
	480	479.99	429.99	N	0.14	E	0.10	0.18
	490	489.99	439.99	N	0.18	E	0.13	0.23
	500	499.99	449.99	N	0.22	E	0.16	0.28
	510	509.99	459.99	N	0.27	E	0.19	0.33
	520	519.99	469.99	N	0.32	E	0.23	0.40
	530	529.99	479.99	N	0.37	E	0.27	0.46
	540	539.99	489.99	N	0.43	E	0.31	0.53
	550	549.99	499.99	N	0.49	E	0.36	0.61
	560	559.99	509.99	N	0.56	E	0.41	0.69
	570	569.99	519.99	N	0.63	E	0.46	0.78
	580	579.99	529.99	N	0.71	E	0.51	0.87
	590	589.99	539.99	N	0.78	E	0.57	0.97
	600	599.99	549.99	N	0.87	E	0.63	1.07
	610	609.99	559.99	N	0.95	E	0.69	1.18
	620	619.99	569.99	N	1.05	E	0.76	1.29
	630	629.99	579.99	N	1.14	E	0.83	1.41 ✓
	640	639.99	589.99	N	1.24	E	0.90	1.53
	650	649.99	599.99	N	1.34	E	0.98	1.66
	660	659.99	609.99	N	1.45	E	1.05	1.80
	670	669.99	619.99	N	1.56	E	1.14	1.94
	680	679.98	629.98	N	1.68	E	1.22	2.08
	690	689.98	639.98	N	1.80	E	1.31	2.23
	700	699.98	649.98	N	1.93	E	1.40	2.38
	710	709.98	659.98	N	2.05	E	1.49	2.54
	720	719.98	669.98	N	2.19	E	1.59	2.71
	730	729.98	679.98	N	2.32	E	1.69	2.87
*	740	739.98	689.98	N	2.47	E	1.79	3.05 *
	750	749.97	699.97	N	2.69	E	1.73	3.20
	760	759.97	709.97	N	2.97	E	1.67	3.40
	770	769.96	719.96	N	3.30	E	1.58	3.66
	780	779.96	729.96	N	3.69	E	1.49	3.98
	790	789.95	739.95	N	4.13	E	1.38	4.35
	800	799.93	749.93	N	4.62	E	1.25	4.79
	810	809.92	759.92	N	5.17	E	1.12	5.29
	820	819.90	769.90	N	5.78	E	0.96	5.86
	830	829.87	779.87	N	6.44	E	0.80	6.49 ✓
	840	839.85	789.85	N	7.15	E	0.62	7.18

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	MEASURED DEPTH	VERTICAL DEPTH	TRUE SUB-SEA	TOTAL CO - ORDINATES				HORIZONTAL DISTANCE	
*	849	848.82	798.82	N	7.83	E	0.45	7.85	*
	850	849.82	799.82	N	7.91	E	0.43	7.92	
	860	859.78	809.78	N	8.76	E	0.22	8.76	
	870	869.73	819.73	N	9.68	W	0.00	9.68	
	880	879.68	829.68	N	10.69	W	0.25	10.69	
	890	889.62	839.62	N	11.77	W	0.52	11.79	
	900	899.54	849.54	N	12.94	W	0.81	12.96	
	910	909.46	859.46	N	14.18	W	1.12	14.22	
	920	919.37	869.37	N	15.50	W	1.45	15.57	
	930	929.26	879.26	N	16.90	W	1.80	16.99	
*	940	939.15	889.15	N	18.37	W	2.17	18.50	*
	950	949.02	899.02	N	19.94	W	2.53	20.10	
	960	958.87	908.87	N	21.60	W	2.91	21.80	
	970	968.71	918.71	N	23.35	W	3.32	23.59	
	980	978.53	928.53	N	25.19	W	3.74	25.47	
	990	988.33	938.33	N	27.12	W	4.19	27.44	
	1000	998.11	948.11	N	29.14	W	4.65	29.51	
*	1001	999.09	949.09	N	29.34	W	4.70	29.72	*
	1010	1,007.88	957.88	N	31.26	W	4.83	31.63	
	1020	1,017.64	967.64	N	33.45	W	4.99	33.82	
	1030	1,027.38	977.38	N	35.71	W	5.14	36.08	
	1040	1,037.11	987.11	N	38.03	W	5.31	38.40	
	1050	1,046.82	996.82	N	40.41	W	5.47	40.78	
	1060	1,056.51	1,006.51	N	42.85	W	5.64	43.22	
	1070	1,066.19	1,016.19	N	45.35	W	5.82	45.73	
	1080	1,075.86	1,025.86	N	47.92	W	6.00	48.30	
	1090	1,085.50	1,035.50	N	50.55	W	6.18	50.93	
	1100	1,095.13	1,045.13	N	53.24	W	6.37	53.62	
	1110	1,104.74	1,054.74	N	55.99	W	6.56	56.38	
	1120	1,114.34	1,064.34	N	58.81	W	6.76	59.20	
	1130	1,123.91	1,073.91	N	61.69	W	6.96	62.08	
	1140	1,133.47	1,083.47	N	64.62	W	7.17	65.02	
	1150	1,143.01	1,093.01	N	67.62	W	7.37	68.02	
	1160	1,152.53	1,102.53	N	70.68	W	7.59	71.09	
	1170	1,162.02	1,112.02	N	73.80	W	7.81	74.21	
	1180	1,171.50	1,121.50	N	76.98	W	8.03	77.40	
	1190	1,180.96	1,130.96	N	80.23	W	8.26	80.65	
	1200	1,190.39	1,140.39	N	83.53	W	8.49	83.96	
	1210	1,199.81	1,149.81	N	86.89	W	8.72	87.33	
*	1218	1,207.33	1,157.33	N	89.62	W	8.91	90.06	*
	1220	1,209.20	1,159.20	N	90.30	W	8.84	90.74	
	1230	1,218.58	1,168.58	N	93.77	W	8.48	94.15	
	1240	1,227.93	1,177.93	N	97.29	W	8.11	97.62	
	1250	1,237.27	1,187.27	N	100.86	W	7.73	101.15	
	1260	1,246.58	1,196.58	N	104.48	W	7.35	104.74	

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MEASURED DEPTH	VERTICAL DEPTH	TRUE SUB-SEA	TOTAL CO - ORDINATES				HORIZONTAL DISTANCE
1270	1,255.87	1,205.87	N	108.15	W	6.97	108.38
1280	1,265.14	1,215.14	N	111.88	W	6.57	112.07
1290	1,274.39	1,224.39	N	115.66	W	6.18	115.83
1300	1,283.62	1,233.62	N	119.49	W	5.77	119.63
1310	1,292.83	1,242.83	N	123.38	W	5.37	123.49
1320	1,302.01	1,252.01	N	127.31	W	4.95	127.41
1330	1,311.17	1,261.17	N	131.30	W	4.53	131.38
1340	1,320.31	1,270.31	N	135.34	W	4.11	135.40
1350	1,329.42	1,279.42	N	139.43	W	3.68	139.47
1360	1,338.52	1,288.52	N	143.57	W	3.24	143.60
1370	1,347.59	1,297.59	N	147.76	W	2.80	147.78
1380	1,356.63	1,306.63	N	152.00	W	2.36	152.02
1390	1,365.65	1,315.65	N	156.30	W	1.91	156.31
1400	1,374.64	1,324.64	N	160.64	W	1.45	160.65
* 1403	1,377.34	1,327.34	N	161.95	W	1.31	161.95 *
1410	1,383.62	1,333.62	N	164.95	W	0.56	164.95
1420	1,392.56	1,342.56	N	169.29	E	0.51	169.29
1430	1,401.48	1,351.48	N	173.68	E	1.60	173.68
1440	1,410.38	1,360.38	N	178.11	E	2.71	178.13
1450	1,419.24	1,369.24	N	182.60	E	3.83	182.64
1460	1,428.08	1,378.08	N	187.14	E	4.96	187.20 ✓
1470	1,436.90	1,386.90	N	191.72	E	6.10	191.82
1480	1,445.68	1,395.68	N	196.36	E	7.26	196.49
1490	1,454.44	1,404.44	N	201.04	E	8.42	201.22
1500	1,463.17	1,413.17	N	205.77	E	9.60	205.99
1510	1,471.87	1,421.87	N	210.55	E	10.80	210.83
1520	1,480.55	1,430.55	N	215.38	E	12.00	215.71
1530	1,489.19	1,439.19	N	220.26	E	13.22	220.65
* 1540	1,497.81	1,447.81	N	225.18	E	14.44	225.64 *
1550	1,506.41	1,456.41	N	230.19	E	15.37	230.70
1560	1,515.01	1,465.01	N	235.22	E	16.30	235.78
1570	1,523.59	1,473.59	N	240.27	E	17.24	240.89
1580	1,532.16	1,482.16	N	245.33	E	18.18	246.01
1590	1,540.71	1,490.71	N	250.42	E	19.12	251.15
1600	1,549.26	1,499.26	N	255.53	E	20.07	256.31
1610	1,557.79	1,507.79	N	260.65	E	21.02	261.50
1620	1,566.32	1,516.32	N	265.80	E	21.97	266.70
1630	1,574.83	1,524.83	N	270.96	E	22.93	271.93
1640	1,583.33	1,533.33	N	276.14	E	23.89	277.18
1650	1,591.81	1,541.81	N	281.35	E	24.85	282.44
1660	1,600.29	1,550.29	N	286.57	E	25.82	287.73
1670	1,608.75	1,558.75	N	291.81	E	26.79	293.03
1680	1,617.20	1,567.20	N	297.06	E	27.77	298.36
1690	1,625.63	1,575.63	N	302.34	E	28.75	303.71
1700	1,634.06	1,584.06	N	307.64	E	29.73	309.07 ✓

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	1710	1,642.47	1,592.47	N	312.95	E 30.71	314.46
	1720	1,650.87	1,600.87	N	318.29	E 31.70	319.86
	1730	1,659.26	1,609.26	N	323.64	E 32.69	325.29
*	1731	1,660.10	1,610.10	N	324.18	E 32.79	325.83 *
	1740	1,667.63	1,617.63	N	329.10	E 32.88	330.74
	1750	1,675.99	1,625.99	N	334.59	E 32.97	336.21
	1760	1,684.33	1,634.33	N	340.10	E 33.07	341.71
	1770	1,692.66	1,642.66	N	345.64	E 33.17	347.23
	1780	1,700.97	1,650.97	N	351.20	E 33.26	352.78
	1790	1,709.26	1,659.26	N	356.79	E 33.36	358.35
	1800	1,717.54	1,667.54	N	362.40	E 33.46	363.94
	1810	1,725.80	1,675.80	N	368.03	E 33.56	369.56
	1820	1,734.05	1,684.05	N	373.69	E 33.66	375.20
*	1823	1,736.52	1,686.52	N	375.39	E 33.69	376.89 *
	1830	1,742.29	1,692.29	N	379.35	E 33.69	380.85
	1840	1,750.52	1,700.52	N	385.03	E 33.69	386.50
	1850	1,758.75	1,708.75	N	390.71	E 33.69	392.16
	1860	1,766.97	1,716.97	N	396.41	E 33.69	397.84
	1870	1,775.19	1,725.19	N	402.10	E 33.69	403.51
	1880	1,783.40	1,733.40	N	407.81	E 33.69	409.20
	1890	1,791.61	1,741.61	N	413.52	E 33.69	414.89
	1900	1,799.81	1,749.81	N	419.24	E 33.69	420.60
	1910	1,808.01	1,758.01	N	424.97	E 33.69	426.31
	1920	1,816.20	1,766.20	N	430.71	E 33.69	432.02
	1930	1,824.39	1,774.39	N	436.45	E 33.69	437.75
	1940	1,832.57	1,782.57	N	442.20	E 33.69	443.48 ✓
	1950	1,840.74	1,790.74	N	447.96	E 33.69	449.22
	1960	1,848.92	1,798.92	N	453.72	E 33.69	454.97
	1970	1,857.08	1,807.08	N	459.49	E 33.69	460.72
	1980	1,865.24	1,815.24	N	465.27	E 33.69	466.49
	1990	1,873.40	1,823.40	N	471.06	E 33.69	472.26
	2000	1,881.55	1,831.55	N	476.85	E 33.69	478.04
	2010	1,889.70	1,839.70	N	482.65	E 33.69	483.82
*	2019	1,897.02	1,847.02	N	487.88	E 33.69	489.04 *
	2020	1,897.84	1,847.84	N	488.46	E 33.70	489.62
	2030	1,905.98	1,855.98	N	494.26	E 33.80	495.42
	2040	1,914.12	1,864.12	N	500.07	E 33.90	501.22
	2050	1,922.26	1,872.26	N	505.88	E 34.00	507.02
	2060	1,930.40	1,880.40	N	511.68	E 34.10	512.82
	2070	1,938.54	1,888.54	N	517.49	E 34.20	518.62
	2080	1,946.68	1,896.68	N	523.29	E 34.30	524.42
	2090	1,954.83	1,904.83	N	529.10	E 34.41	530.22
	2100	1,962.97	1,912.97	N	534.91	E 34.51	536.02
	2110	1,971.11	1,921.11	N	540.71	E 34.61	541.82
	2120	1,979.25	1,929.25	N	546.52	E 34.71	547.62

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	2130	1,987.39	1,937.39	N	552.32	E 34.81	553.42
	2140	1,995.53	1,945.53	N	558.13	E 34.91	559.22
	2150	2,003.67	1,953.67	N	563.94	E 35.01	565.02
	2160	2,011.81	1,961.81	N	569.74	E 35.12	570.82
	2170	2,019.96	1,969.96	N	575.55	E 35.22	576.63
	2180	2,028.10	1,978.10	N	581.35	E 35.32	582.43
	2190	2,036.24	1,986.24	N	587.16	E 35.42	588.23
	2200	2,044.38	1,994.38	N	592.97	E 35.52	594.03
*	2204	2,047.64	1,997.64	N	595.29	E 35.56	596.35 *
	2210	2,052.52	2,002.52	N	598.77	E 35.77	599.84
	2220	2,060.66	2,010.66	N	604.57	E 36.13	605.65
	2230	2,068.79	2,018.79	N	610.37	E 36.48	611.46
	2240	2,076.93	2,026.93	N	616.17	E 36.84	617.28
	2250	2,085.06	2,035.06	N	621.98	E 37.19	623.09
	2260	2,093.20	2,043.20	N	627.79	E 37.55	628.91
	2270	2,101.33	2,051.33	N	633.60	E 37.90	634.73
	2280	2,109.45	2,059.45	N	639.41	E 38.26	640.56
	2290	2,117.58	2,067.58	N	645.23	E 38.62	646.39
	2300	2,125.71	2,075.71	N	651.05	E 38.97	652.21
	2310	2,133.83	2,083.83	N	656.87	E 39.33	658.05
	2320	2,141.95	2,091.95	N	662.69	E 39.68	663.88
	2330	2,150.07	2,100.07	N	668.52	E 40.04	669.71
	2340	2,158.19	2,108.19	N	674.34	E 40.40	675.55
	2350	2,166.31	2,116.31	N	680.17	E 40.75	681.39
	2360	2,174.43	2,124.43	N	686.00	E 41.11	687.24
	2370	2,182.54	2,132.54	N	691.84	E 41.47	693.08
	2380	2,190.65	2,140.65	N	697.67	E 41.82	698.93
	2390	2,198.76	2,148.76	N	703.51	E 42.18	704.78
	2400	2,206.87	2,156.87	N	709.35	E 42.54	710.63
	2410	2,214.98	2,164.98	N	715.20	E 42.89	716.48
	2420	2,223.09	2,173.09	N	721.04	E 43.25	722.34
	2430	2,231.19	2,181.19	N	726.89	E 43.61	728.20
	2440	2,239.29	2,189.29	N	732.74	E 43.97	734.06
	2450	2,247.39	2,197.39	N	738.59	E 44.33	739.92
	2460	2,255.49	2,205.49	N	744.44	E 44.68	745.78
	2470	2,263.59	2,213.59	N	750.30	E 45.04	751.65
	2480	2,271.69	2,221.69	N	756.16	E 45.40	757.52
	2490	2,279.78	2,229.78	N	762.02	E 45.76	763.39
	2500	2,287.87	2,237.87	N	767.88	E 46.12	769.27
	2510	2,295.97	2,245.97	N	773.75	E 46.48	775.14
*	2516	2,300.82	2,250.82	N	777.27	E 46.69	778.67 *
	2520	2,304.06	2,254.06	N	779.61	E 46.94	781.02
	2530	2,312.14	2,262.14	N	785.46	E 47.55	786.90
	2540	2,320.23	2,270.23	N	791.31	E 48.17	792.77
	2550	2,328.32	2,278.32	N	797.16	E 48.78	798.65

DIRECTIONAL SURVEY FOR WELL L06-18

COMPUTATIONS AT 10 FEET INCREMENTS

WELL NO. Z2A-51-592-CD-L06(L06-18) ELEVATION: 50 FEET NUMBER OF DATA POINTS: 24

CONDUCTOR IS VERTICAL

CONDUCTOR DATA: 400' MD.

MEASURED DEPTH	VERTICAL DEPTH	TRUE SUB-SEA	TOTAL CO - ORDINATES			HORIZONTAL DISTANCE
2560	2,336.40	2,286.40	N	803.01	E 49.40	804.53
2570	2,344.48	2,294.48	N	808.87	E 50.01	810.41
2580	2,352.56	2,302.56	N	814.73	E 50.63	816.30
2590	2,360.64	2,310.64	N	820.59	E 51.24	822.19
2600	2,368.72	2,318.72	N	826.45	E 51.86	828.07
2610	2,376.80	2,326.80	N	832.31	E 52.48	833.96
2620	2,384.88	2,334.88	N	838.18	E 53.09	839.86
2630	2,392.95	2,342.95	N	844.04	E 53.71	845.75
2640	2,401.02	2,351.02	N	849.91	E 54.33	851.65
2650	2,409.09	2,359.09	N	855.79	E 54.94	857.55
2660	2,417.16	2,367.16	N	861.66	E 55.56	863.45
2670	2,425.23	2,375.23	N	867.53	E 56.18	869.35
2680	2,433.30	2,383.30	N	873.41	E 56.80	875.26
2690	2,441.37	2,391.37	N	879.29	E 57.41	881.16
2700	2,449.43	2,399.43	N	885.17	E 58.03	887.07
2710	2,457.49	2,407.49	N	891.05	E 58.65	892.98
2720	2,465.55	2,415.55	N	896.94	E 59.27	898.89
2730	2,473.62	2,423.62	N	902.82	E 59.89	904.81
2740	2,481.67	2,431.67	N	908.71	E 60.51	910.72
2750	2,489.73	2,439.73	N	914.60	E 61.13	916.64
2760	2,497.79	2,447.79	N	920.49	E 61.74	922.56
2770	2,505.84	2,455.84	N	926.39	E 62.36	928.49
2780	2,513.90	2,463.90	N	932.28	E 62.98	934.41
2790	2,521.95	2,471.95	N	938.18	E 63.60	940.34
2800	2,530.00	2,480.00	N	944.08	E 64.22	946.26
2810	2,538.05	2,488.05	N	949.98	E 64.84	952.19
2820	2,546.09	2,496.09	N	955.89	E 65.46	958.13
2830	2,554.14	2,504.14	N	961.79	E 66.09	964.06
2840	2,562.19	2,512.19	N	967.70	E 66.71	970.00
2850	2,570.23	2,520.23	N	973.61	E 67.33	975.93
2860	2,578.27	2,528.27	N	979.52	E 67.95	981.87
2870	2,586.31	2,536.31	N	985.43	E 68.57	987.82
2880	2,594.35	2,544.35	N	991.35	E 69.19	993.76
* 2884	2,597.57	2,547.57	N	993.71	E 69.44	996.14 *
2890	2,602.39	2,552.39	N	997.25	E 69.94	999.70
2900	2,610.43	2,560.43	N	1,003.13	E 70.76	1,005.63
2910	2,618.48	2,568.48	N	1,009.01	E 71.59	1,011.55
2920	2,626.52	2,576.52	N	1,014.89	E 72.42	1,017.47
2930	2,634.57	2,584.57	N	1,020.77	E 73.24	1,023.39
2940	2,642.62	2,592.62	N	1,026.64	E 74.07	1,029.31
2950	2,650.68	2,600.68	N	1,032.51	E 74.89	1,035.22
2960	2,658.74	2,608.74	N	1,038.38	E 75.72	1,041.13
2970	2,666.79	2,616.79	N	1,044.24	E 76.54	1,047.04
2980	2,674.86	2,624.86	N	1,050.10	E 77.37	1,052.95
2990	2,682.92	2,632.92	N	1,055.96	E 78.19	1,058.85

DIRECTIONAL SURVEY FOR WELL L06-18

COMPUTATIONS AT 10 FEET INCREMENTS

WELL NO. Z2A-51-592-CD-L06(L06-18) ELEVATION: 50 FEET NUMBER OF DATA POINTS: 24

CONDUCTOR IS VERTICAL

CONDUCTOR DATA: 400' MD.

MEASURED DEPTH	VERTICAL DEPTH	TRUE SUB-SEA	TOTAL CO - ORDINATES			HORIZONTAL DISTANCE
3000	2,690.99	2,640.99	N 1,061.81	E	79.01	1,064.75
3010	2,699.05	2,649.05	N 1,067.66	E	79.83	1,070.64
3020	2,707.12	2,657.12	N 1,073.51	E	80.65	1,076.53
3030	2,715.20	2,665.20	N 1,079.35	E	81.48	1,082.42
3040	2,723.27	2,673.27	N 1,085.19	E	82.30	1,088.31
3050	2,731.35	2,681.35	N 1,091.03	E	83.12	1,094.19
3060	2,739.43	2,689.43	N 1,096.86	E	83.94	1,100.07
3070	2,747.51	2,697.51	N 1,102.70	E	84.76	1,105.95
3080	2,755.60	2,705.60	N 1,108.52	E	85.58	1,111.82
3090	2,763.69	2,713.69	N 1,114.35	E	86.39	1,117.69
3100	2,771.77	2,721.77	N 1,120.17	E	87.21	1,123.56
* 3103	2,774.20	2,724.20	N 1,121.92	E	87.46	1,125.32 *
3110	2,779.87	2,729.87	N 1,125.96	E	88.21	1,129.41
3120	2,787.96	2,737.96	N 1,131.74	E	89.28	1,135.25
3130	2,796.05	2,746.05	N 1,137.51	E	90.35	1,141.09
3140	2,804.15	2,754.15	N 1,143.28	E	91.42	1,146.93
3150	2,812.24	2,762.24	N 1,149.05	E	92.49	1,152.77
3160	2,820.34	2,770.34	N 1,154.82	E	93.56	1,158.61
3170	2,828.44	2,778.44	N 1,160.59	E	94.63	1,164.44 ✓
3180	2,836.54	2,786.54	N 1,166.35	E	95.69	1,170.27
3190	2,844.64	2,794.64	N 1,172.12	E	96.76	1,176.11
3200	2,852.75	2,802.75	N 1,177.88	E	97.83	1,181.93
3210	2,860.85	2,810.85	N 1,183.64	E	98.90	1,187.76
3220	2,868.96	2,818.96	N 1,189.40	E	99.96	1,193.59
3230	2,877.07	2,827.07	N 1,195.15	E	101.03	1,199.41
3240	2,885.18	2,835.18	N 1,200.90	E	102.10	1,205.24
3250	2,893.29	2,843.29	N 1,206.66	E	103.16	1,211.06
3260	2,901.40	2,851.40	N 1,212.41	E	104.23	1,216.88
3270	2,909.51	2,859.51	N 1,218.15	E	105.29	1,222.70
3280	2,917.63	2,867.63	N 1,223.90	E	106.36	1,228.51
3290	2,925.74	2,875.74	N 1,229.64	E	107.42	1,234.33
3300	2,933.86	2,883.86	N 1,235.39	E	108.49	1,240.14
3310	2,941.98	2,891.98	N 1,241.13	E	109.55	1,245.95
3320	2,950.10	2,900.10	N 1,246.87	E	110.62	1,251.76
3330	2,958.22	2,908.22	N 1,252.60	E	111.68	1,257.57
3340	2,966.34	2,916.34	N 1,258.34	E	112.74	1,263.38
3350	2,974.47	2,924.47	N 1,264.07	E	113.80	1,269.18
3360	2,982.59	2,932.59	N 1,269.80	E	114.87	1,274.99
3370	2,990.72	2,940.72	N 1,275.53	E	115.93	1,280.79
3380	2,998.85	2,948.85	N 1,281.26	E	116.99	1,286.59
3390	3,006.98	2,956.98	N 1,286.98	E	118.05	1,292.39
3400	3,015.11	2,965.11	N 1,292.71	E	119.11	1,298.18
3410	3,023.24	2,973.24	N 1,298.43	E	120.17	1,303.98
3420	3,031.38	2,981.38	N 1,304.15	E	121.23	1,309.77 ✓
3430	3,039.51	2,989.51	N 1,309.86	E	122.29	1,315.56

DIRECTIONAL SURVEY FOR WELL L06-18

COMPUTATIONS AT 10 FEET INCREMENTS

WELL NO. Z2A-51-592-CD-L06(L06-18)

ELEVATION: 50 FEET

NUMBER OF DATA POINTS: 24

CONDUCTOR IS VERTICAL

CONDUCTOR DATA: 400' MD.

MEASURED DEPTH	VERTICAL DEPTH	TRUE SUB-SEA	TOTAL CO - ORDINATES			HORIZONTAL DISTANCE
3440	3,047.65	2,997.65	N 1,315.58	E 123.35		1,321.35
3450	3,055.79	3,005.79	N 1,321.29	E 124.41		1,327.14
3460	3,063.93	3,013.93	N 1,327.01	E 125.47		1,332.93
3470	3,072.07	3,022.07	N 1,332.72	E 126.53		1,338.71
* 3472	3,073.70	3,023.70	N 1,333.86	E 126.74		1,339.87 *
3480	3,080.21	3,030.21	N 1,338.38	E 127.78		1,344.47
3490	3,088.36	3,038.36	N 1,344.03	E 129.09		1,350.21
3500	3,096.52	3,046.52	N 1,349.67	E 130.39		1,355.95
3510	3,104.68	3,054.68	N 1,355.30	E 131.69		1,361.68
3520	3,112.84	3,062.84	N 1,360.93	E 132.99		1,367.41
3530	3,121.01	3,071.01	N 1,366.55	E 134.29		1,373.13
3540	3,129.18	3,079.18	N 1,372.16	E 135.58		1,378.84
3550	3,137.36	3,087.36	N 1,377.77	E 136.88		1,384.55
3560	3,145.55	3,095.55	N 1,383.37	E 138.17		1,390.25
3570	3,153.73	3,103.73	N 1,388.96	E 139.46		1,395.94
3580	3,161.93	3,111.93	N 1,394.55	E 140.75		1,401.63
3590	3,170.12	3,120.12	N 1,400.13	E 142.04		1,407.31
3600	3,178.33	3,128.33	N 1,405.70	E 143.33		1,412.99
3610	3,186.53	3,136.53	N 1,411.27	E 144.61		1,418.66
3620	3,194.75	3,144.75	N 1,416.83	E 145.89		1,424.32
3630	3,202.96	3,152.96	N 1,422.38	E 147.18		1,429.98
3640	3,211.18	3,161.18	N 1,427.93	E 148.46		1,435.62
3650	3,219.41	3,169.41	N 1,433.47	E 149.74		1,441.27
3660	3,227.64	3,177.64	N 1,439.00	E 151.01		1,446.90 ✓
3670	3,235.88	3,185.88	N 1,444.53	E 152.29		1,452.53
3680	3,244.12	3,194.12	N 1,450.05	E 153.56		1,458.16
3690	3,252.36	3,202.36	N 1,455.56	E 154.84		1,463.77
3700	3,260.61	3,210.61	N 1,461.07	E 156.11		1,469.39
3710	3,268.87	3,218.87	N 1,466.57	E 157.38		1,474.99
3720	3,277.13	3,227.13	N 1,472.06	E 158.65		1,480.59
3730	3,285.39	3,235.39	N 1,477.55	E 159.91		1,486.18
3740	3,293.66	3,243.66	N 1,483.03	E 161.18		1,491.76
3750	3,301.93	3,251.93	N 1,488.50	E 162.44		1,497.34
3760	3,310.21	3,260.21	N 1,493.97	E 163.70		1,502.91
3770	3,318.49	3,268.49	N 1,499.43	E 164.96		1,508.48
3780	3,326.78	3,276.78	N 1,504.88	E 166.22		1,514.04
* 3787	3,332.58	3,282.58	N 1,508.70	E 167.10		1,517.92 *
3790	3,335.07	3,285.07	N 1,510.30	E 167.59		1,519.57
3800	3,343.36	3,293.36	N 1,515.64	E 169.23		1,525.06
3810	3,351.66	3,301.66	N 1,520.98	E 170.86		1,530.55
3820	3,359.96	3,309.96	N 1,526.32	E 172.49		1,536.03
3830	3,368.26	3,318.26	N 1,531.65	E 174.12		1,541.52
3840	3,376.56	3,326.56	N 1,536.98	E 175.75		1,546.99
3850	3,384.87	3,334.87	N 1,542.30	E 177.38		1,552.47
3860	3,393.18	3,343.18	N 1,547.62	E 179.00		1,557.94

DIRECTIONAL SURVEY FOR WELL L06-18

COMPUTATIONS AT 10 FEET INCREMENTS

WELL NO. Z2A-51-592-CD-L06(L06-18) ELEVATION: 50 FEET NUMBER OF DATA POINTS: 24

CONDUCTOR IS VERTICAL

CONDUCTOR DATA: 400' MD.

MEASURED DEPTH	VERTICAL DEPTH	TRUE SUB-SEA	TOTAL CO - ORDINATES			HORIZONTAL DISTANCE
3870	3,401.49	3,351.49	N 1,552.94	E 180.63		1,563.41
3880	3,409.81	3,359.81	N 1,558.25	E 182.25		1,568.87
3890	3,418.12	3,368.12	N 1,563.56	E 183.88		1,574.34
3900	3,426.44	3,376.44	N 1,568.87	E 185.50		1,579.80
3910	3,434.77	3,384.77	N 1,574.17	E 187.12		1,585.25
3920	3,443.09	3,393.09	N 1,579.47	E 188.74		1,590.70
3930	3,451.42	3,401.42	N 1,584.76	E 190.36		1,596.15
3940	3,459.75	3,409.75	N 1,590.05	E 191.98		1,601.60
3950	3,468.08	3,418.08	N 1,595.34	E 193.59		1,607.04
3960	3,476.42	3,426.42	N 1,600.62	E 195.21		1,612.48
3970	3,484.76	3,434.76	N 1,605.90	E 196.82		1,617.92
3980	3,493.10	3,443.10	N 1,611.18	E 198.43		1,623.35
3990	3,501.44	3,451.44	N 1,616.46	E 200.05		1,628.78
4000	3,509.79	3,459.79	N 1,621.72	E 201.66		1,634.21
4010	3,518.13	3,468.13	N 1,626.98	E 203.27		1,639.63
4020	3,526.49	3,476.49	N 1,632.24	E 204.88		1,645.05
4030	3,534.84	3,484.84	N 1,637.50	E 206.48		1,650.47
4040	3,543.20	3,493.20	N 1,642.75	E 208.09		1,655.88
4050	3,551.55	3,501.55	N 1,648.00	E 209.69		1,661.29
4060	3,559.92	3,509.92	N 1,653.25	E 211.30		1,666.69
4070	3,568.28	3,518.28	N 1,658.49	E 212.90		1,672.10
4080	3,576.65	3,526.65	N 1,663.73	E 214.50		1,677.50
4090	3,585.02	3,535.02	N 1,668.96	E 216.10		1,682.89
4100	3,593.39	3,543.39	N 1,674.19	E 217.70		1,688.29
4110	3,601.76	3,551.76	N 1,679.42	E 219.30		1,693.68
4120	3,610.14	3,560.14	N 1,684.64	E 220.90		1,699.06
4130	3,618.52	3,568.52	N 1,689.86	E 222.49		1,704.44
4140	3,626.90	3,576.90	N 1,695.08	E 224.09		1,709.82
4150	3,635.28	3,585.28	N 1,700.29	E 225.68		1,715.20
* 4159	3,642.83	3,592.83	N 1,704.97	E 227.11		1,720.04 *
4160	3,643.67	3,593.67	N 1,705.49	E 227.28		1,720.57
4170	3,652.06	3,602.06	N 1,710.67	E 228.96		1,725.92
4180	3,660.45	3,610.45	N 1,715.84	E 230.64		1,731.28
4190	3,668.84	3,618.84	N 1,721.02	E 232.32		1,736.63
4200	3,677.23	3,627.23	N 1,726.19	E 234.00		1,741.98
4210	3,685.63	3,635.63	N 1,731.35	E 235.68		1,747.32
4220	3,694.03	3,644.03	N 1,736.52	E 237.36		1,752.66
4230	3,702.43	3,652.43	N 1,741.68	E 239.04		1,758.01
4240	3,710.83	3,660.83	N 1,746.84	E 240.71		1,763.35
4250	3,719.23	3,669.23	N 1,752.00	E 242.39		1,768.68
4260	3,727.63	3,677.63	N 1,757.15	E 244.06		1,774.02
4270	3,736.04	3,686.04	N 1,762.30	E 245.74		1,779.35
4280	3,744.45	3,694.45	N 1,767.45	E 247.41		1,784.68
4290	3,752.85	3,702.85	N 1,772.60	E 249.08		1,790.01
4300	3,761.27	3,711.27	N 1,777.74	E 250.76		1,795.34

DIRECTIONAL SURVEY FOR WELL L06-18

COMPUTATIONS AT 10 FEET INCREMENTS

WELL NO. Z2A-51-592-CD-L06(L06-18)

ELEVATION: 50 FEET NUMBER OF DATA POINTS: 24

CONDUCTOR IS VERTICAL

CONDUCTOR DATA: 400' MD.

MEASURED DEPTH	VERTICAL DEPTH	TRUE SUB-SEA	TOTAL CO - ORDINATES			HORIZONTAL DISTANCE
4310	3,769.68	3,719.68	N 1,782.88	E 252.43		1,800.67
4320	3,778.09	3,728.09	N 1,788.02	E 254.10		1,805.99
4330	3,786.51	3,736.51	N 1,793.16	E 255.77		1,811.31
4340	3,794.93	3,744.93	N 1,798.29	E 257.43		1,816.63
4350	3,803.35	3,753.35	N 1,803.43	E 259.10		1,821.94
4360	3,811.77	3,761.77	N 1,808.56	E 260.77		1,827.26
4370	3,820.19	3,770.19	N 1,813.68	E 262.43		1,832.57
4380	3,828.61	3,778.61	N 1,818.81	E 264.10		1,837.88 ✓
4390	3,837.04	3,787.04	N 1,823.93	E 265.76		1,843.19
4400	3,845.47	3,795.47	N 1,829.05	E 267.43		1,848.49
4410	3,853.90	3,803.90	N 1,834.16	E 269.09		1,853.80
4420	3,862.33	3,812.33	N 1,839.28	E 270.75		1,859.10
4430	3,870.76	3,820.76	N 1,844.39	E 272.41		1,864.40
* 4436	3,875.82	3,825.82	N 1,847.46	E 273.41		1,867.58 *
4440	3,879.20	3,829.20	N 1,849.43	E 274.25		1,869.66
4450	3,887.63	3,837.63	N 1,854.38	E 276.34		1,874.86
4460	3,896.07	3,846.07	N 1,859.32	E 278.44		1,880.05
4470	3,904.51	3,854.51	N 1,864.26	E 280.54		1,885.25
4480	3,912.95	3,862.95	N 1,869.19	E 282.63		1,890.44
4490	3,921.39	3,871.39	N 1,874.13	E 284.73		1,895.64
4500	3,929.83	3,879.83	N 1,879.06	E 286.82		1,900.83
4510	3,938.27	3,888.27	N 1,884.00	E 288.92		1,906.02
4520	3,946.72	3,896.72	N 1,888.92	E 291.01		1,911.21
4530	3,955.17	3,905.17	N 1,893.85	E 293.10		1,916.40
4540	3,963.61	3,913.61	N 1,898.78	E 295.19		1,921.59
4550	3,972.06	3,922.06	N 1,903.70	E 297.28		1,926.77
4560	3,980.51	3,930.51	N 1,908.62	E 299.37		1,931.96
4570	3,988.96	3,938.96	N 1,913.54	E 301.46		1,937.15
4580	3,997.42	3,947.42	N 1,918.46	E 303.55		1,942.33
4590	4,005.87	3,955.87	N 1,923.38	E 305.63		1,947.51
4600	4,014.33	3,964.33	N 1,928.29	E 307.72		1,952.69
4610	4,022.78	3,972.78	N 1,933.20	E 309.81		1,957.87
4620	4,031.24	3,981.24	N 1,938.11	E 311.89		1,963.05 ✓
4630	4,039.70	3,989.70	N 1,943.02	E 313.97		1,968.23
4640	4,048.16	3,998.16	N 1,947.93	E 316.06		1,973.40
4650	4,056.63	4,006.63	N 1,952.83	E 318.14		1,978.58
4660	4,065.09	4,015.09	N 1,957.74	E 320.22		1,983.75
4670	4,073.56	4,023.56	N 1,962.64	E 322.30		1,988.93
4680	4,082.02	4,032.02	N 1,967.54	E 324.38		1,994.10
4690	4,090.49	4,040.49	N 1,972.43	E 326.46		1,999.27
4700	4,098.96	4,048.96	N 1,977.33	E 328.53		2,004.44
4710	4,107.43	4,057.43	N 1,982.22	E 330.61		2,009.60
4720	4,115.90	4,065.90	N 1,987.11	E 332.69		2,014.77
4730	4,124.37	4,074.37	N 1,992.00	E 334.76		2,019.93
4740	4,132.85	4,082.85	N 1,996.89	E 336.84		2,025.10

DIRECTIONAL SURVEY FOR WELL L06-18

COMPUTATIONS AT 10 FEET INCREMENTS

WELL NO. Z2A-51-592-CD-L06(L06-18)

ELEVATION: 50 FEET

NUMBER OF DATA POINTS: 24

CONDUCTOR IS VERTICAL

CONDUCTOR DATA: 400' MD.

MEASURED DEPTH	VERTICAL DEPTH	TRUE SUB-SEA	TOTAL CO - ORDINATES	HORIZONTAL DISTANCE
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4750	4,141.32	4,091.32	N 2,001.77 E 338.91	2,030.26
4760	4,149.80	4,099.80	N 2,006.66 E 340.98	2,035.42
4770	4,158.28	4,108.28	N 2,011.54 E 343.06	2,040.58
4780	4,166.76	4,116.76	N 2,016.42 E 345.13	2,045.74
* 4787	4,172.69	4,122.69	N 2,019.83 E 346.58	2,049.35 *
4790	4,175.24	4,125.24	N 2,021.25 E 347.30	2,050.87
4800	4,183.72	4,133.72	N 2,025.96 E 349.70	2,055.92
4810	4,192.21	4,142.21	N 2,030.67 E 352.10	2,060.97
4820	4,200.70	4,150.70	N 2,035.38 E 354.50	2,066.02
4830	4,209.19	4,159.19	N 2,040.09 E 356.90	2,071.07
4840	4,217.69	4,167.69	N 2,044.78 E 359.29	2,076.11
4850	4,226.19	4,176.19	N 2,049.48 E 361.68	2,081.15
4860	4,234.69	4,184.69	N 2,054.17 E 364.07	2,086.18
4870	4,243.20	4,193.20	N 2,058.85 E 366.46	2,091.21
4880	4,251.71	4,201.71	N 2,063.54 E 368.84	2,096.24
4890	4,260.22	4,210.22	N 2,068.21 E 371.23	2,101.27
4900	4,268.73	4,218.73	N 2,072.89 E 373.61	2,106.29
4910	4,277.25	4,227.25	N 2,077.55 E 375.99	2,111.30
4920	4,285.77	4,235.77	N 2,082.22 E 378.36	2,116.32
4930	4,294.29	4,244.29	N 2,086.88 E 380.74	2,121.33
4940	4,302.82	4,252.82	N 2,091.53 E 383.11	2,126.33
4950	4,311.35	4,261.35	N 2,096.19 E 385.48	2,131.34
4960	4,319.88	4,269.88	N 2,100.83 E 387.85	2,136.33
4970	4,328.42	4,278.42	N 2,105.47 E 390.21	2,141.33
4980	4,336.95	4,286.95	N 2,110.11 E 392.58	2,146.32
4990	4,345.50	4,295.50	N 2,114.75 E 394.94	2,151.31
5000	4,354.04	4,304.04	N 2,119.38 E 397.30	2,156.29
5010	4,362.59	4,312.59	N 2,124.00 E 399.65	2,161.28
5020	4,371.14	4,321.14	N 2,128.62 E 402.01	2,166.25
5030	4,379.69	4,329.69	N 2,133.24 E 404.36	2,171.23
5040	4,388.25	4,338.25	N 2,137.85 E 406.71	2,176.20
5050	4,396.81	4,346.81	N 2,142.46 E 409.06	2,181.16
5060	4,405.37	4,355.37	N 2,147.06 E 411.40	2,186.12
5070	4,413.93	4,363.93	N 2,151.66 E 413.75	2,191.08
5080	4,422.50	4,372.50	N 2,156.26 E 416.09	2,196.04
5090	4,431.07	4,381.07	N 2,160.85 E 418.43	2,200.99
5100	4,439.64	4,389.64	N 2,165.43 E 420.76	2,205.94
5110	4,448.22	4,398.22	N 2,170.02 E 423.10	2,210.88
5120	4,456.80	4,406.80	N 2,174.59 E 425.43	2,215.82
5130	4,465.38	4,415.38	N 2,179.17 E 427.76	2,220.75
5140	4,473.97	4,423.97	N 2,183.73 E 430.09	2,225.69
5150	4,482.56	4,432.56	N 2,188.30 E 432.41	2,230.61
5160	4,491.15	4,441.15	N 2,192.86 E 434.74	2,235.54
* 5170	4,499.74	4,449.74	N 2,197.41 E 437.06	2,240.46 *
5180	4,508.33	4,458.33	N 2,201.89 E 439.54	2,245.33

DIRECTIONAL SURVEY FOR WELL L06-18

COMPUTATIONS AT 10 FEET INCREMENTS

WELL NO. Z2A-51-592-CD-L06(L06-18) ELEVATION: 50 FEET NUMBER OF DATA POINTS: 24

CONDUCTOR IS VERTICAL

CONDUCTOR DATA: 400' MD.

MEASURED DEPTH	VERTICAL DEPTH	TRUE SUB-SEA	TOTAL CO - ORDINATES		HORIZONTAL DISTANCE
5190	4,516.93	4,466.93	N 2,206.36	E 442.02	2,250.20
5200	4,525.52	4,475.52	N 2,210.84	E 444.50	2,255.08
5210	4,534.11	4,484.11	N 2,215.32	E 446.98	2,259.96
5220	4,542.70	4,492.70	N 2,219.80	E 449.47	2,264.84
5230	4,551.29	4,501.29	N 2,224.28	E 451.95	2,269.73
5240	4,559.87	4,509.87	N 2,228.76	E 454.43	2,274.61
5250	4,568.46	4,518.46	N 2,233.24	E 456.92	2,279.50
5260	4,577.04	4,527.04	N 2,237.72	E 459.40	2,284.40
5270	4,585.63	4,535.63	N 2,242.21	E 461.89	2,289.29
5280	4,594.21	4,544.21	N 2,246.70	E 464.38	2,294.19
5290	4,602.80	4,552.80	N 2,251.19	E 466.87	2,299.09
5300	4,611.38	4,561.38	N 2,255.68	E 469.35	2,303.99
5310	4,619.96	4,569.96	N 2,260.17	E 471.84	2,308.90
5320	4,628.54	4,578.54	N 2,264.66	E 474.33	2,313.80
5330	4,637.12	4,587.12	N 2,269.15	E 476.83	2,318.71
5340	4,645.69	4,595.69	N 2,273.65	E 479.32	2,323.63
5350	4,654.27	4,604.27	N 2,278.15	E 481.81	2,328.54
5360	4,662.85	4,612.85	N 2,282.65	E 484.30	2,333.46
5370	4,671.42	4,621.42	N 2,287.15	E 486.80	2,338.38
5380	4,680.00	4,630.00	N 2,291.65	E 489.29	2,343.30
5390	4,688.57	4,638.57	N 2,296.15	E 491.79	2,348.22
5400	4,697.14	4,647.14	N 2,300.65	E 494.29	2,353.15
* 5405	4,701.43	4,651.43	N 2,302.91	E 495.53	2,355.62 *
5410	4,705.71	4,655.71	N 2,305.01	E 497.01	2,357.99
5420	4,714.29	4,664.29	N 2,309.23	E 499.96	2,362.73
5430	4,722.87	4,672.87	N 2,313.43	E 502.91	2,367.46
5440	4,731.46	4,681.46	N 2,317.63	E 505.85	2,372.20
5450	4,740.04	4,690.04	N 2,321.83	E 508.79	2,376.93
5460	4,748.63	4,698.63	N 2,326.03	E 511.72	2,381.65
5470	4,757.23	4,707.23	N 2,330.21	E 514.66	2,386.37
5480	4,765.82	4,715.82	N 2,334.40	E 517.58	2,391.09
5490	4,774.43	4,724.43	N 2,338.58	E 520.51	2,395.80
5500	4,783.03	4,733.03	N 2,342.75	E 523.43	2,400.51
5510	4,791.64	4,741.64	N 2,346.92	E 526.35	2,405.22
5520	4,800.25	4,750.25	N 2,351.08	E 529.27	2,409.92
5530	4,808.86	4,758.86	N 2,355.24	E 532.18	2,414.62
5540	4,817.48	4,767.48	N 2,359.40	E 535.09	2,419.32
5550	4,826.10	4,776.10	N 2,363.55	E 538.00	2,424.01
5560	4,834.73	4,784.73	N 2,367.70	E 540.90	2,428.69
5570	4,843.36	4,793.36	N 2,371.84	E 543.80	2,433.38
5580	4,851.99	4,801.99	N 2,375.97	E 546.70	2,438.06
5590	4,860.62	4,810.62	N 2,380.10	E 549.59	2,442.73
5600	4,869.26	4,819.26	N 2,384.23	E 552.48	2,447.41
5610	4,877.90	4,827.90	N 2,388.35	E 555.36	2,452.07
5620	4,886.55	4,836.55	N 2,392.47	E 558.25	2,456.74

DIRECTIONAL SURVEY FOR WELL L06-18

COMPUTATIONS AT 10 FEET INCREMENTS

WELL NO. Z2A-51-592-CD-L06(L06-18) ELEVATION: 50 FEET NUMBER OF DATA POINTS: 24

CONDUCTOR IS VERTICAL

CONDUCTOR DATA: 400' MD.

MEASURED DEPTH	VERTICAL DEPTH	TRUE SUB-SEA	TOTAL CO - ORDINATES	HORIZONTAL DISTANCE
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5630	4,895.20	4,845.20	N 2,396.58 E 561.13	2,461.40
5640	4,903.85	4,853.85	N 2,400.69 E 564.00	2,466.05
5650	4,912.50	4,862.50	N 2,404.79 E 566.88	2,470.70
5660	4,921.16	4,871.16	N 2,408.89 E 569.75	2,475.35
5670	4,929.82	4,879.82	N 2,412.98 E 572.61	2,480.00
5680	4,938.49	4,888.49	N 2,417.07 E 575.47	2,484.64
5690	4,947.16	4,897.16	N 2,421.16 E 578.33	2,489.27
5700	4,955.83	4,905.83	N 2,425.24 E 581.19	2,493.90
5710	4,964.50	4,914.50	N 2,429.31 E 584.04	2,498.53
5720	4,973.18	4,923.18	N 2,433.38 E 586.89	2,503.15
5730	4,981.87	4,931.87	N 2,437.44 E 589.74	2,507.77
5740	4,990.55	4,940.55	N 2,441.50 E 592.58	2,512.39
5750	4,999.24	4,949.24	N 2,445.56 E 595.42	2,517.00
5760	5,007.93	4,957.93	N 2,449.61 E 598.26	2,521.61
5770	5,016.63	4,966.63	N 2,453.66 E 601.09	2,526.21
5780	5,025.33	4,975.33	N 2,457.70 E 603.92	2,530.81
5790	5,034.03	4,984.03	N 2,461.73 E 606.75	2,535.40
* 5795	5,038.38	4,988.38	N 2,463.75 E 608.16	2,537.70 ✓ *
5800	5,042.73	4,992.73	N 2,465.66 E 609.71	2,539.93
5810	5,051.44	5,001.44	N 2,469.49 E 612.80	2,544.39
5820	5,060.14	5,010.14	N 2,473.31 E 615.90	2,548.84
5830	5,068.85	5,018.85	N 2,477.13 E 618.99	2,553.30
5840	5,077.56	5,027.56	N 2,480.95 E 622.09	2,557.76
5850	5,086.27	5,036.27	N 2,484.77 E 625.18	2,562.21
5860	5,094.98	5,044.98	N 2,488.59 E 628.27	2,566.67
5870	5,103.69	5,053.69	N 2,492.40 E 631.36	2,571.12
5880	5,112.41	5,062.41	N 2,496.21 E 634.45	2,575.58
5890	5,121.12	5,071.12	N 2,500.03 E 637.53	2,580.04
5900	5,129.84	5,079.84	N 2,503.84 E 640.62	2,584.49
5910	5,138.55	5,088.55	N 2,507.65 E 643.70	2,588.95
5920	5,147.27	5,097.27	N 2,511.45 E 646.79	2,593.40
5930	5,155.99	5,105.99	N 2,515.26 E 649.87	2,597.86
5940	5,164.71	5,114.71	N 2,519.06 E 652.95	2,602.31
5950	5,173.43	5,123.43	N 2,522.86 E 656.03	2,606.77
5960	5,182.15	5,132.15	N 2,526.67 E 659.11	2,611.22
5970	5,190.88	5,140.88	N 2,530.47 E 662.18	2,615.67
5980	5,199.60	5,149.60	N 2,534.26 E 665.26	2,620.13
5990	5,208.33	5,158.33	N 2,538.06 E 668.33	2,624.58
6000	5,217.05	5,167.05	N 2,541.85 E 671.41	2,629.03
6010	5,225.78	5,175.78	N 2,545.65 E 674.48	2,633.49
6020	5,234.51	5,184.51	N 2,549.44 E 677.55	2,637.94
6030	5,243.24	5,193.24	N 2,553.23 E 680.62	2,642.39
6040	5,251.97	5,201.97	N 2,557.02 E 683.68	2,646.84
6050	5,260.70	5,210.70	N 2,560.80 E 686.75	2,651.29
6060	5,269.44	5,219.44	N 2,564.59 E 689.82	2,655.74

DIRECTIONAL SURVEY FOR WELL L06-18

COMPUTATIONS AT 10 FEET INCREMENTS

WELL NO. Z2A-51-592-CD-L06(L06-18)

ELEVATION: 50 FEET NUMBER OF DATA POINTS: 24

CONDUCTOR IS VERTICAL

CONDUCTOR DATA: 400' MD.

	MEASURED DEPTH	VERTICAL DEPTH	TRUE SUB-SEA	TOTAL CO - ORDINATES		HORIZONTAL DISTANCE
	6070	5,278.17	5,228.17	N 2,568.37	E 692.88	2,660.19
	6080	5,286.91	5,236.91	N 2,572.15	E 695.94	2,664.64
	6090	5,295.65	5,245.65	N 2,575.93	E 699.00	2,669.09
	6100	5,304.38	5,254.38	N 2,579.71	E 702.06	2,673.54
	6110	5,313.12	5,263.12	N 2,583.49	E 705.12	2,677.99
	6120	5,321.86	5,271.86	N 2,587.27	E 708.18	2,682.44
	6130	5,330.61	5,280.61	N 2,591.04	E 711.24	2,686.89
	6140	5,339.35	5,289.35	N 2,594.81	E 714.29	2,691.33
	6150	5,348.09	5,298.09	N 2,598.58	E 717.35	2,695.78
	6160	5,356.84	5,306.84	N 2,602.35	E 720.40	2,700.23
	6170	5,365.58	5,315.58	N 2,606.12	E 723.45	2,704.67
*	6171	5,366.46	5,316.46	N 2,606.50	E 723.75	2,705.12 *
	6180	5,374.33	5,324.33	N 2,609.84	E 726.56	2,709.09
	6190	5,383.08	5,333.08	N 2,613.55	E 729.67	2,713.50
	6200	5,391.82	5,341.82	N 2,617.27	E 732.79	2,717.92
	6210	5,400.57	5,350.57	N 2,620.98	E 735.91	2,722.34
	6220	5,409.31	5,359.31	N 2,624.70	E 739.02	2,726.75
	6230	5,418.06	5,368.06	N 2,628.41	E 742.14	2,731.17
	6240	5,426.81	5,376.81	N 2,632.12	E 745.26	2,735.60
	6250	5,435.55	5,385.55	N 2,635.84	E 748.37	2,740.02
*	6254	5,439.05	5,389.05	N 2,637.32	E 749.62	2,741.79 *