

THUMS LONG BEACH COMPANY
 ISLAND CHAFFEE, C-239 M1
 WILMINGTON, CALIFORNIA

SURVEY LISTING Page 3
 Your ref :
 Last revised : 4-Feb-94

Measured Depth	Inclin. Degrees	Azimuth Degrees	True Vert. Depth	R E C T A N G U L A R C O O R D I N A T E S		Dogleg Deg/100Ft	Vert Sect
6938.00	16.25	151.50	5190.53	3040.84 S	2917.19 E	1.58	4213.45
6972.00	16.25	151.75	5223.17	3049.21 S	2921.72 E	0.20	4222.66
7068.00	15.25	152.25	5315.57	3072.22 S	2933.95 E	1.05	4247.83
7164.00	15.00	153.00	5408.24	3094.46 S	2945.47 E	0.33	4271.95
7261.00	15.00	153.50	5501.94	3116.88 S	2956.77 E	0.13	4296.06
7357.00	14.25	156.25	5594.83	3138.83 S	2967.06 E	1.06	4319.12
7454.00	14.75	155.00	5688.74	3160.95 S	2977.08 E	0.61	4342.14
7550.00	14.75	153.50	5781.58	3182.97 S	2987.70 E	0.40	4365.48
7645.00	16.25	153.25	5873.12	3205.66 S	2999.08 E	1.58	4389.84
7741.00	16.75	149.50	5965.17	3229.59 S	3012.14 E	1.22	4416.25
7837.00	15.75	152.75	6057.33	3253.12 S	3025.11 E	1.41	4442.30
7934.00	15.50	155.50	6150.75	3276.62 S	3036.51 E	0.80	4467.27
7988.00	15.00	156.50	6202.85	3289.60 S	3042.29 E	1.05	4480.70
8031.00	15.00	156.50	6244.38	3299.81 S	3046.73 E	0.00	4491.19

All data is in feet unless otherwise stated
 Coordinates from C-239 M1 and TVD from wellhead.
 Vertical section is from N 0.00 E 0.00 on azimuth 137.00 degrees.
 Declination is 0.00 degrees, Convergence is 0.00 degrees.
 Calculation uses the average angle method.
 Presented by Baker Hughes INTEQ