Experimental Investigation of a New Series of Planing Hulls

by

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Errata

Page	Says	Should say
3	Brown [28]	and Brown [3]
3	Mandel [20]	Mandel [4]
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4	direction parallel to z_o	direction parallel to yo
5	Savitsky [27]	Savitsky [5]
5	document [27]	document [5]
5	Almeter [2]	Almeter [6]
6	Gerritsma [19]	Gerritsma [8]
7	Fridsma [12]	Fridsma [9]
7	Compton [9]	Compton [10]
8	1974 [15]	1974 [11]
8	Almeter [2]	Almeter [6]
9	such as [4],[5],[14],[16] and [24]	such as [12],[13],[14] and [15]
44	reference [20]	reference [19]
44	Opel [24]	Opel [14]
62	work [13],[27]	work [5],[24]
62	methods [22],[26]	methods [1],[25]
63	Brown [28]	Brown [3]
65	such as [3],[10],[21],[25] and [27]	such as [26],[27],[28] and [29]

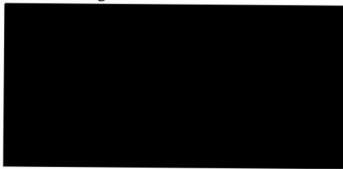
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Gabriel Delgado-Saldivar



This work is dedicated completely to the memory of my Mother, Luz Maria, who encouraged me to continue in my education, but who unfortunately had to depart when I was half way down the road.

To you, wherever you are, with all my love.

TABLE OF CONTENTS

			Page
LIST	OF TA	BLES	viii
LIST	OF FIG	FURES	xii
NOT	ATION	AND SYMBOLS	xvii
ACK	NOWLE	EDGEMENTS	xx
ABST	ΓRACT.		xxi
1.0 I	NTROD	OUCTION	1
1.1 F	Planing (Craft Definition	2
1.2 S	Stages of	Planing Motion	. 3
1.3 A	Acting F	orces	3
1.4 E	Experime	ental Work on Planing Boats	5
	1.4.1	Series 62	5
	1.4.2	Modified 62 Series	6
	1.4.3	Fridsma's Rough Water Tests	7
	1.4.4	Naval Academy Series	7
	1.4.5	Series 65	8
	1.4.6	Series BK and MBK	8
2.0 S	SERIES	DESIGN	11
2.1 H	Hull Para	meter Data Base	11
	2.1.1	Dimensional Parametric Analysis	12
	2.1.2	Non-Dimensional Parametric Analysis	14

			Page
2.2	Main Par	rticulars of the Series	16
2.3	Parent H	ull Definition	17
	2.3.1	Hull Shape Parameters	18
	2.3.2	Hull Development	19
2.4	Series De	evelopment	20
	2.4.1	L/B Variation	20
	2.4.2	Deadrise Angle Variation	20
3.0	EXPERI	MENT DESIGN	30
3.1	Facilities		30
	3.1.1	Towing Tank	30
	3.1.2	Data Acquisition	30
3.2	Model C	onstruction	31
3.3	Test Con	ditions	32
	3.3.1	Displacements	32
	3.3.2	Centre of Gravity	32
	3.3.3	Velocity Range	33
	3.3.4	Thrust Lines.	34
3.4	Tank Siz	e Effects	35
	3.4.1	Shallow Water Effects	35
	3.4.2	Tank Wall Effects	36
	3.4.3	Aerodynamic Effects	36
3.5	Turbulen	ce Stimulation	37

			Page
4.0	TEST O	F THE SERIES	43
4.1	Tank Ca	libration	43
4.2	Final Tes	st Ranges	45
	4.2.1	Varying Displacement and Centre of Gravity	45
	4.2.2	Static Trim	46
	4.2.3	Test Velocities	46
4.3	Data Pre	sentation	47
	4.3.1	Raw Data	47
	4.3.2	Data Analysis	48
	4.3.3	Tabular and Graphical Results.	48
4.4	Reproduc	cibility of Experiments.	50
4.5	Standard	Deviation Analysis	51
5.0	DISCUS	SION OF THE RESULTS	62
5.1	Data Rel	iability	63
5.2	Series Re	esults	63
	5.2.1	Displacement to Planing Range Transition	63
	5.2.2	Resistance Curves	64
	5.2.3	Trim Angle Curves	64
	5.2.4	Sinkage Curves	65
	5.2.5	Wetted Surface Curves	65
	5.2.6	Porpoising Conditions	65
5.3	Prelimina	ary Cross Analysis of the Data	66

	Page
5.3.1 Effect of the Centre of Gravity Location	67
5.3.2 Effect of the L/B Ratio	67
5.3.3 Effect of the Thrust Line	67
5.4 Reproducibility Results	68
5.5 Error Analysis Results	68
6.0 CONCLUSIONS AND RECOMMENDATIONS	73
7.0 REFERENCES	76
APPENDIX A. Lines and Offsets for the Series Models	80
APPENDIX B. Series Results (Tables and Figures)	99

LIST OF TABLES

		Page
2.1	Characteristics for the Series	17
2.2	Parent Hull Proportions	19
2.3	Parent Hull Dimensions	19
3.1	Test Displacements Coefficients	32
3.2	L _{CG} Position for the Models	33
4.1	Summary of Test Displacement Coefficients	46
4.2	Summary of Test Velocities	47
4.3	Test Conditions for Reproducibility	51
5.1	Summary of Porpoising Conditions	66
A. 1	Hull Offsets. L/B = 2.5; β = 12°	82
A.2	Hull Offsets. L/B = 3.0; β = 12°	84
A.3	Hull Offsets. L/B = 3.5; β = 12°	86
A.4	Hull Offsets. L/B = 2.5; β = 18°	88
A. 5	Hull Offsets. L/B = 3.0; β = 18°	90
A. 6	Hull Offsets. L/B = 3.5; β = 18°	92
A.7	Hull Offsets. L/B = 2.5; β = 24°	94
A. 8	Hull Offsets. L/B = 3.0; β = 24°	96
A .9	Hull Offsets. L/B = 3.5; β = 24°	98
B.1	L/B = 2.5; β = 12°; L _{CG} = 35%; Thrust Line: Centre of Gravity	101
B.2	L/B = 2.5; β = 12°; L _{CG} = 35%; Thrust Line: Base Line	103
B.3	L/B = 2.5; β = 12°; L _{CG} = 30%; Thrust Line: Centre of Gravity	105
B.4	L/B = 2.5; β = 12°; L_{∞} = 30%; Thrust Line; Base Line	107

	rag
B.5 L/B = 2.5; β = 12°; L _{CG} = 25%; Thrust Line: Centre of Gravity	109
B.6 L/B = 2.5; β = 12°; L _{CG} = 25%; Thrust Line: Base Line	111
B.7 L/B = 3.0; β = 12°; L _{CG} = 35%; Thrust Line: Centre of Gravity	113
B.8 L/B = 3.0; β = 12°; L _{CG} = 35%; Thrust Line: Base Line	115
B.9 L/B = 3.0; β = 12°; L _{CG} = 30%; Thrust Line: Centre of Gravity	117
B.10 L/B = 3.0; β = 12°; L _{CG} = 30%; Thrust Line: Base Line	119
B.11 L/B = 3.0; β = 12°; L _{CG} = 25%; Thrust Line: Centre of Gravity	121
B.12 L/B = 3.0; β = 12°; L _{CG} = 25%; Thrust Line: Base Line	123
B.13 L/B = 3.5; β = 12°; L _{CG} = 35%; Thrust Line: Centre of Gravity	125
B.14 L/B = 3.5; β = 12°; L _{CG} = 35%; Thrust Line: Base Line	128
B.15 L/B = 3.5; β = 12°; L _{CG} = 30%; Thrust Line: Centre of Gravity	131
B.16 L/B = 3.5; β = 12°; L _{CG} = 30%; Thrust Line: Base Line	134
B.17 L/B = 3.5; β = 12°; L _{CG} = 25%; Thrust Line: Centre of Gravity	137
B.18 L/B = 3.5; β = 12°; L _{CG} = 25%; Thrust Line: Base Line	139
B.19 L/B = 2.5; β = 18°; L _{CG} = 35%; Thrust Line: Centre of Gravity	141
B.20 L/B = 2.5; β = 18°; L _{CG} = 35%; Thrust Line: Base Line	143
B.21 L/B = 2.5; β = 18°; L _{CG} = 30%; Thrust Line: Centre of Gravity	145
B.22 L/B = 2.5; β = 18°; L _{CG} = 30%; Thrust Line: Base Line	147
B.23 L/B = 2.5; β = 18°; L _{CG} = 25%; Thrust Line: Centre of Gravity	149
B.24 L/B = 2.5; β = 18°; L _{CG} = 25%; Thrust Line: Base Line	. 151
B.25 L/B = 3.0; β = 18°; L _{CG} = 35%; Thrust Line: Centre of Gravity	153
B.26 L/B = 3.0; β = 18°; L _{CG} = 35%; Thrust Line: Base Line	155
B.27 L/B = 3.0; β = 18°; L _{CG} = 30%; Thrust Line: Centre of Gravity	157

		Page
B.28	L/B = 3.0; β = 18°; L _{CG} = 30%; Thrust Line: Base Line	159
B.29	L/B = 3.0; β = 18°; L _{CG} = 25%; Thrust Line: Centre of Gravity	161
B.30	L/B = 3.0; β = 18°; L_{CG} = 25%; Thrust Line: Base Line	163
B.31	L/B = 3.5; β = 18°; L _{CG} = 35%; Thrust Line: Centre of Gravity	165
B.32	L/B = 3.5; β = 18°; L_{CG} = 35%; Thrust Line: Base Line	168
B.33	L/B = 3.5; β = 18°; L _{CG} = 30%; Thrust Line: Centre of Gravity	171
B.34	L/B = 3.5; β = 18°; L _{CG} = 30%; Thrust Line: Base Line	174
B.35	L/B = 3.5; β = 18°; L _{CG} = 25%; Thrust Line: Centre of Gravity	177
B.36	L/B = 3.5; β = 18°; L_{CG} = 25%; Thrust Line: Base Line	179
B.37	L/B = 2.5; β = 24°; L_{CG} = 35%; Thrust Line: Centre of Gravity	181
B.38	L/B = 2.5; β = 24°; L_{CG} = 35%; Thrust Line: Base Line	183
B.39	L/B = 2.5; β = 24°; L _{CG} = 30%; Thrust Line: Centre of Gravity	185
B.40	L/B = 2.5; β = 24°; L_{CG} = 30%; Thrust Line: Base Line	187
B.41	L/B = 2.5; β = 24°; L _{CG} = 25%; Thrust Line: Centre of Gravity	189
B.42	L/B = 2.5; β = 24°; L_{CG} = 25%; Thrust Line: Base Line	191
B.43	L/B = 3.0; β = 24°; L _{CG} = 35%; Thrust Line: Centre of Gravity	193
B.44	L/B = 3.0; β = 24°; L_{CG} = 35%; Thrust Line: Base Line	195
B.45	L/B = 3.0; β = 24°; L _{CG} = 30%; Thrust Line: Centre of Gravity	197
B.46	L/B = 3.0; β = 24°; L _{CG} = 30%; Thrust Line: Base Line	199
B.47	L/B = 3.0; β = 24°; L _{CG} = 25%; Thrust Line: Centre of Gravity	201
B. 48	L/B = 3.0; β = 24°; L _{CG} = 25%; Thrust Line: Base Line	203
B.49	L/B = 3.5; β = 24°; L _{CG} = 35%; Thrust Line: Centre of Gravity	205
B.50	L/B = 3.5; β = 24°; L _{CG} = 35%; Thrust Line: Base Line	208

		Page
B.51	L/B = 3.5; β = 24°; L _{CG} = 30%; Thrust Line: Centre of Gravity	211
B.52	L/B = 3.5; β = 24°; L _{CG} = 30%; Thrust Line: Base Line	214
B.53	L/B = 3.5; β = 24°; L _{CG} = 25%; Thrust Line: Centre of Gravity	217
B.54	L/B = 3.5; β = 24°; L _{CG} = 25%; Thrust Line: Base Line	219

LIST OF FIGURES

	Page
1.1 Coordinate System	10
1.2 Acting Forces	10
2.1 Length vs Beam	22
2.2 Length vs Deadrise Angle	22
2.3 Length vs Displacement	22
2.4 Length vs Cruise Speed	22
2.5 Length vs Installed Power	23
2.6 Displacement vs Installed Power	23
2.7 Cruise Speed vs Deadrise Angle	23
2.8 L/B Distribution	24
2.9 Deadrise Angle Distribution	24
2.10 Velocity Coefficient Distribution	24
2.11 Displacement Coefficient Distribution	24
2.12 C _v vs L/B	25
2.13 C _v vs β	25
2.14 C _v vs C _D	25
2.15 L/B vs C _D	25
2.16 Hull Shape Measurements	26
2.17 L _{OA} /B vs L _B as % of L _{OA}	27
2.18 L _{OA} /B vs L _{CD} as % of L _{OA}	27
2.19 L _{OA} /B vs L _{CC} as % of L _{OA}	27
2.20 L _{OA} /B vs L _B as % of L _{OA}	27

	Page
2.21 L _{OA} /B vs D _B as % of L _{OA}	28
2.22 L _{OA} /B vs D _C as % of L _{OA}	28
2.23 α ₁ vs L _{OA} /B	28
2.24 Parent Hull Lines	29
3.1 Tow Post Arrangement	38
3.2 Underwater Photograph	39
3.3 Thrust Line Compensation	40
3.4 Shallow Water Effect on the Wave Making Resistance	41
3.5 Turbulence Stimulation Tests	42
4.1 Fridsma's Prismatic Hull	53
4.2 Towing Tank Calibration	54
4.3 Towing Tank Calibration	55
4.4 Displacement and Centre of Gravity Determination	56
4.5 Raw Data Display Printout	57
4.6 Raw Data Files Example	58
4.7 Tabular Data Presentation	59
4.8 Data Graphical Presentation	60
4.9 Reproducibility Results	61
5.1 Effect of the Longitudinal Position of the Centre of Gravity	70
5.2 Effect of L/B Ratio	71
5.3 Effect of Thrust Line Location	72
A.1 Lines Plan L/B = 2.5; β = 12°	81
A.2 Lines Plan L/B = 3.0; β = 12°	83

	Page
A.3 Lines Plan L/B = 3.5; β = 12°	85
A.4 Lines Plan L/B = 2.5; β = 12°	87
A.5 Lines Plan L/B = 3.0; β = 12°	89
A.6 Lines Plan L/B = 3.5; β = 12°	91
A.7 Lines Plan L/B = 2.5; β = 12°	93
A.8 Lines Plan L/B = 3.0; β = 12°	95
A.9 Lines Plan L/B = 3.5; β = 12°	97
B.1 L/B = 2.5; β = 12°; L _{CG} = 35%; Thrust Line: Centre of Gravity	100
B.2 L/B = 2.5; β = 12°; L _{CG} = 35%; Thrust Line: Base Line	102
B.3 L/B = 2.5; β = 12°; L _{CG} = 30%; Thrust Line: Centre of Gravity	104
B.4 L/B = 2.5; β = 12°; L _{CG} = 30%; Thrust Line: Base Line	106
B.5 L/B = 2.5; β = 12°; L _{CG} = 25%; Thrust Line: Centre of Gravity	108
B.6 L/B = 2.5; β = 12°; L _{CG} = 25%; Thrust Line: Base Line	110
B.7 L/B = 3.0; β = 12°; L _{CG} = 35%; Thrust Line: Centre of Gravity	112
B.8 L/B = 3.0; β = 12°; L _{CG} = 35%; Thrust Line: Base Line	114
B.9 L/B = 3.0; β = 12°; L _{CG} = 30%; Thrust Line: Centre of Gravity	116
B.10 L/B = 3.0; β = 12°; L _{CG} = 30%; Thrust Line: Base Line	118
B.11 L/B = 3.0; β = 12°; L _{CG} = 25%; Thrust Line: Centre of Gravity	120
B.12 L/B = 3.0; β = 12°; L _{CG} = 25%; Thrust Line: Base Line	122
B.13 L/B = 3.5; β = 12°; L _{CG} = 35%; Thrust Line: Centre of Gravity	124
B.14 L/B = 3.5; β = 12°; L _{CG} = 35%; Thrust Line: Base Line	127
B.15 L/B = 3.5; β = 12°; L _{CG} = 30%; Thrust Line: Centre of Gravity	130
B.16 L/B = 3.5; β = 12°; L _{CG} = 30%; Thrust Line: Base Line	133

		Page
B.17	L/B = 3.5; β = 12°; L _{CG} = 25%; Thrust Line: Centre of Gravity	136
B.18	L/B = 3.5; β = 12°; L _{CG} = 25%; Thrust Line: Base Line	138
B.19	L/B = 2.5; β = 18°; L _{CG} = 35%; Thrust Line: Centre of Gravity	140
B.20	L/B = 2.5; β = 18°; L _{CG} = 35%; Thrust Line: Base Line	142
B.21	L/B = 2.5; β = 18°; L _{CG} = 30%; Thrust Line: Centre of Gravity	144
B.22	L/B = 2.5; β = 18°; L _{CG} = 30%; Thrust Line: Base Line	146
B.23	L/B = 2.5; β = 18°; L _{CG} = 25%; Thrust Line: Centre of Gravity	148
B.24	L/B = 2.5; β = 18°; L _{CG} = 25%; Thrust Line: Base Line	150
B.25	L/B = 3.0; β = 18°; L _{CG} = 35%; Thrust Line: Centre of Gravity	152
B.26	L/B = 3.0; β = 18°; L _{CG} = 35%; Thrust Line: Base Line	154
B.27	L/B = 3.0; β = 18°; L _{CG} = 30%; Thrust Line: Centre of Gravity	156
B.28	L/B = 3.0; β = 18°; L _{CG} = 30%; Thrust Line: Base Line	158
B.29	L/B = 3.0; β = 18°; L _{CG} = 25%; Thrust Line: Centre of Gravity	160
B.30	L/B = 3.0; β = 18°; L _{CG} = 25%; Thrust Line: Base Line	162
B.31	L/B = 3.5; β = 18°; L _{CG} = 35%; Thrust Line: Centre of Gravity	164
B.32	L/B = 3.5; β = 18°; L _{CG} = 35%; Thrust Line: Base Line	167
B.33	L/B = 3.5; β = 18°; L _{CG} = 30%; Thrust Line: Centre of Gravity	170
B.34	L/B = 3.5; β = 18°; L _{CG} = 30%; Thrust Line: Base Line	173
B.35	L/B = 3.5; β = 18°; L _{CG} = 25%; Thrust Line: Centre of Gravity	176
B.36	L/B = 3.5; β = 18°; L _{CG} = 25%; Thrust Line: Base Line	178
B.37	L/B = 2.5; β = 24°; L _{CG} = 35%; Thrust Line: Centre of Gravity	180
B.38	L/B = 2.5; β = 24°; L _{CG} = 35%; Thrust Line: Base Line	182
B.39	L/B = 2.5; β = 24°; L _{CG} = 30%; Thrust Line: Centre of Gravity	184

		Page
B.40	L/B = 2.5; β = 24°; L _{CG} = 30%; Thrust Line: Base Line	186
B.41	L/B = 2.5; β = 24°; L _{CG} = 25%; Thrust Line: Centre of Gravity	188
B.42	L/B = 2.5; β = 24°; L _{CG} = 25%; Thrust Line: Base Line	190
B.43	L/B = 3.0; β = 24°; L _{CG} = 35%; Thrust Line: Centre of Gravity	192
B.44	L/B = 3.0; β = 24°; L _{CG} = 35%; Thrust Line: Base Line	194
B.45	L/B = 3.0; β = 24°; L _{CG} = 30%; Thrust Line: Centre of Gravity	196
B.46	L/B = 3.0; β = 24°; L _{CG} = 30%; Thrust Line: Base Line	198
B.47	L/B = 3.0; β = 24°; L _{CG} = 25%; Thrust Line: Centre of Gravity	200
B.4 8	L/B = 3.0; β = 24°; L _{CG} = 25%; Thrust Line: Base Line	202
B.49	L/B = 3.5; β = 24°; L _{CG} = 35%; Thrust Line: Centre of Gravity	204
B.50	L/B = 3.5; β = 24°; L _{CG} = 35%; Thrust Line: Base Line	207
B.51	L/B = 3.5; β = 24°; L _{CG} = 30%; Thrust Line: Centre of Gravity	210
B.52	L/B = 3.5; β = 24°; L _{CG} = 30%; Thrust Line: Base Line	213
B.53	L/B = 3.5; β = 24°; L _{CG} = 25%; Thrust Line: Centre of Gravity	216
B.54	L/B = 3.5; $β = 24^\circ$; L _{CG} = 25%; Thrust Line: Base Line	218

NOTATION AND SYMBOLS

A_P Projected Planing Area

B Beam

B_{PTR} Beam on the Transom

B_{PX} Maximum Beam on the Chine

B_{CY} Buoyant Force

C_v, CV Velocity Coefficient based on Chine Beam V/√g·B_{PX}

C_D, CDL Displacement Coefficient W/ρ.B³ (Based on Maximum Beam)

C_{f∞} Wave Making Resistance Coefficient for Infinite Depth

C_{fh} Wave Making Resistance Coefficient for Finite Depth

C_{SP} Cruising Speed

 C_T Total Resistance Coefficient $R_T/(0.5^{\circ}\rho.V^2W_{SPH})$

D Drag Force

D_B, DB Bow Depth

 $D_{\rm C}$, DC Chine Depth at the Intersection with the Stem

F Total Hydrodynamic Force

 Fn_V Froude Number based on Volume $V/\sqrt{g \cdot W^{1/3}}$

g Gravitational Constant

h Tank Depth

H Sinkage

HP Installed Horse Power

K Tank Width

L Lift Force

L_c, LC Wetted Length of the Chine

L_B, LB Bow Length

L_{cc}, LCC Length of Constant Beam on Chine

L_{CD}, LCD Length of Constant Beam on Deck

L_c, LC Chine Length

L_{CG}, LCG Longitudinal Position of the Centre of Gravity

L_K, LK Wetted Length of the Keel.

L_{OA} ,LOA Length Overall.

L_{PP}, LPP Length Between Perpendiculars

Rn Reynolds Number V·L/\(\varphi\)

ρ, RHO Specific Weight of Water

R_T, RT Total Resistance

t Draught

T Thrust Force

V, VEL Velocity

 V_{CR} Critical Speed for Shallow Water Effects.

 V_{CG} , VCG Vertical Position of the Centre of Gravity

V/VL Velocity Parameter where V in Knots and L in Feet

W, DIS Weight Displacement

W_{SPH}, WSPH Hull Bottom Wetted Surface

o, x, y, z Body Fix Coordinate System

 o_o , x_o , y_o , z_o Space Fix Coordinate System

▼ Volume Displacement

α₁, ALFA1 Stem Angle to Base Line

ß, BETA Deadrise Angle

τ, TAO Relative Planing Angle

TAO(Abs) Absolute Planing Angle

το Static trim Angle

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ABSTRACT

In reviewing the state-of-the-art in planing hull testing it was observed that the hulls tested cannot be considered representative of the modern high-speed Small Craft. This is because the length-beam ratio is too high for modern forms, the deadrise angle is not varied systematically, and some series use dated or prismatic forms. A data base was generated containing general information from several hundred recently-built boats in a length range from 15 to 85 feet and a displacement range of 1,000 to 150,000 lbs. The lines of several boats have been studied to determine shape parameters for the parent hull and ranges to be covered by a series which has been developed in this research. The series consists of 9 models with a systematic variation of the length-beam ratio from 2.5 to 3.5 and deadrise angle from 12° to 24° . Weight displacements and L_{CG} location are as well varied systematically resulting in a total of 210 test conditions for the series at 10 speeds each. The towing tank performance and instrumentation were validated by testing a hull previously tested at another towing tank under the same conditions. All the conditions tested are presented in tabular and graphical forms and recommendations for future research are also made.

1.0 INTRODUCTION

The research and design of planing hull forms is in no way a new topic in the nautical sciences. For many years before boats capable of reaching speeds of 100 mph or more were conceived, designers have been looking for hull lines, machinery and configurations that would allow higher speeds while at the same time producing good seakeeping characteristics, to a point where power boats, fast patrol crafts, recreational boats, rescue craft, fast fishing boats, and other planing boats, are now common around any port, harbour or marina.

Designs have evolved greatly over the years and higher speeds can be easily obtained with the combination of light-weight materials and power plants, as well as the propulsion systems developed over the past 15 years. But information on the performance of planing hulls, specifically experimental data, has not been studied systematically in recent years, or if it has, it is not available in the public domain.

The absence of new published experimental data is the main reason for developing the present research work, with the idea of supplying naval architects with qualitative and, if possible, quantitative information on the calm water performance of typical modern planing hull shapes, and in the future to study the seakeeping performance of these hulls.

1.1 PLANING CRAFT DEFINITION

Several definitions of a planing craft may be found in the literature, Mercier and Savitsky [1] define a planing hull as a small, high-speed boat operating at Fn_v greater than 2.0, with the following characteristics:

- a) transom stern;
- b) hard chines;
- c) straight buttock lines in the aft section; and a
- d) combination of load and centre of gravity position that will ensure positive trim and complete emergence of the bow when planing.

At Fn_V less than 2.0, it is unlikely that full planing will be achieved. Hulls which run at these speeds are commonly referred to as semi-planing or semi-displacement vessels.

Du Cane [2] defines planing craft as a vessel where the objective of the designer is to induce planing by making use of the dynamic lift generated by the bottom of the hull running over the water surface. Planing occurs when the speed is sufficient for the boat to move toward the surface and the hull acts as a plane in some extent. True planing is the velocity condition at which the flow separates from the transom and chines.

1.2 STAGES OF PLANING MOTION

Savitsky and Brown [28] consider four different stages in the motion of a high speed boat:

- a) At zero or low speed the craft behaves as a displacement hull. The entire lift is obtained by buoyancy.
- b) When velocity and geometry result in $C_v = 0.5$, the first evidence of dynamic effects arise, the transom ventilates, i.e. a separation of flow on the transom occurs so the transom is considered to be "dry", but the bow is still immersed.
- c) At $0.5 < C_{\rm v} < 1.5$, the flow has separated from the forward half length of the chine, while a considerable wet-side still exists for the aft half length. At this speed the vessel is considered to be semi-planing. There is not a sufficient rise in the centre of gravity to allow bow emergence.
- d) When $C_V > 1.5$, the planing boat develops a dynamic lift that results in a rise of the center of gravity, positive trim, bow emergence and almost complete separation of flow on the chines.

1.3 ACTING FORCES

Referring to Figure 1.1 for the coordinate system used throughout this work, according to Mandel [20] every water-borne vehicle may be considered to be acting upon four independent forces as shown in Figure 1.2:

i) Weight W. This force is generated by the gravity and is always parallel to z_o.

- ii) Buoyancy B_{cy} . This is the force resulting from the amount of fluid displaced by the hull, and will always have a direction parallel to z_{\bullet} in opposite direction to W.
- iii) Thrust T. This is the force exerted by the vehicle's propulsor. Its direction is a function of the propulsion system and the vehicle orientation.
- iv) Total hydrodynamic force F. This is the force exerted by the fluid on the vehicle. For fluid-borne vehicles F may be resolved into the lift component L normal to vehicle velocity, and the drag component D, parallel to the vehicle's velocity. Its direction will be a function of the propulsion system arrangement, hull shape and vehicle orientation.

In the case of vehicles moving with constant speed and direction, the sum of the four acting forces B_{cy} , F, W and T, as well as the moment of these forces on the vehicle must be equal to zero. For slow speed displacement ships, W and B_{cy} are in the same order and in balance, so the ship appears to be acting only by D and T. The weight W of slow moving vehicles is usually supported almost entirely by the buoyancy component, and the lift contribution L is almost negligible.

In the case of high-speed boats, the buoyancy component may become very small or almost negligible depending on the speed, so the weight is supported greatly by the lift component L of the total hydrodynamic force. However, this class of boats depends on buoyancy for support at zero or low speed. This complicates the description of their hydrodynamic behaviour, so performance prediction relies on experimental results as well as numerical methods derived from the experimental results.

1.4 EXPERIMENTAL WORK ON PLANING BOATS

The towing of models to obtain performance data has been carried out by researchers for many years, with different scopes of research, objectives and installations. Some of the work addresses a wide range of boats, and other research is very specific designs or applications. Probably the first reported work on planing hulls was done at the beginning of this Century, when floats for hydroplanes were tested to observe their behaviour and to improve subsequent designs. Direct application to planing boats did not begin until the 1930's; Savitsky [27] outlined most of the experimental and numerical work which was performed before the 1960's. Much of this work had very limited circulation, and it was not until the commonly-used document [27] was published, that results of the early research were made available in the form of a method to predict the hydrodynamic behaviour of planing hulls in calm water.

Recently Almeter [2] made a review of the-state-of-the-art of planing hull research, summarizing the systematic series, as well as numerical and empirical methods, for mainly those developed after 1960. The systematic series addressed in Almeter's review and that are readily available are now described.

1.4.1 SERIES 62

In 1963, Clement and Blount [7] presented the results for systematic tests on five planing boats. The authors considered that the parameters affecting the performance of planing hulls are L/B ratio, hull size and displacement, and L_{CG} location. The deadrise angle was not considered as a varying parameter. The main particulars for this series are as follows:

 $B = 12.5^{\circ}$

 $B_{PTR} = 65\%$ of maximum chine beam

2.0 < L/B < 7.0

 $0.2 < Fn_v < 6.0$

 $0.0 < L_{CG} < 12\%$ aft A_P centroid

Each model was tested at four displacements and four L_{CG} locations, with a total of 80 conditions at several speeds. The results for resistance, sinkage, trim, wetted chine and keel length were presented in graphical and tabular forms as well as a simplified prediction method. It is important to quote part of the written discussions from the document because it contains some of the reasons for developing a new series:

"The narrowed transom improves the performance in quartering seas, and reduces the tendency to broach, but limits the engine space. It may be preferable to continue to the maximum beam to the stern. The slamming tendency can be eliminated to a considerable extent by raising the run of the chine, thereby presenting a deeper vee to the incoming wave. It is suggested to conduct a test with the range of variables and model size, but on a series in deadrise of 5°, 10°, 15°, 20° and 25°. This data is needed before the mechanisms of planing hulls can be fully understood. The effect of deadrise angle is as important as the L/B ratio."

1.4.2 MODIFIED 62 SERIES

In 1982, Kuening and Gerritsma [19] performed a systematic test of identical models of the Series 62 but varied the deadrise angle from 12.5° to 25°. The idea of this experiment was to add data to the original experiment. No attempt was made to use a more up-to-date model. Five models were built and tested under the same conditions except for speed due to the limitation of facilities.

1.4.3 FRIDSMA'S ROUGH WATER TESTS

In 1969, Fridsma [12] performed experiments on motions of planing hulls in waves. The experiments were carried out on a series of constant deadrise models, prismatic hulls, and included a calm water test of all the models, from where the test conditions for the rough water experiments were selected. Unconventional forms were used because Fridsma considered that incorporating a more realistic bow shape would throw another variable into the research and would complicate the evaluation. The series covered the range:

$$4.0 < L/B < 6.0$$
 $0.0 < V/\sqrt{L} < 6.0$ $50.0 < L_{CG} < 80.0\%$ aft Station 0 (Fwd. end) $\beta = 10^\circ$, 20° and 30°

Nine models were built, and the results for the calm water experiments are presented in graphical forms.

1.4.4 NAVAL ACADEMY SERIES

In 1986, Compton [9] tested a series of semi-planing hulls, consisting of six models, three with round bilge and three similar models incorporating a hard chine. The main objective of this experiment was to obtain a direct comparison of the behaviour of round bilge vessels with respect to hard chine hulls. Although the series does not consider a wide range of models, parameters such as L_{CG} , displacement and velocity were varied systematically. The L_{CG} location was varied from 45% to 35% of the length measured from the transom, and three displacements per model. The results were presented in a graphical form, and include resistance, trim and sinkage.

1.4.5 **SERIES 65**

This series was tested by Holling and Hubble in 1974 [15], and two different parent hulls were considered. Series 65A was designed to investigate its application to hydrofoil hulls, and featured a very narrow transom beam. Series 65B is a planing hull series that features constant deadrise and constant beam in the aft section of the hull. This series was tested over a wide span of displacements, L/B ratios, and deadrise angles, covering the ranges:

$$21^{\circ} < \beta < 37^{\circ}$$

$$0.0 < C_v < 6.0$$

$$0.1 < C_D < 1.7$$

The hull shapes were deep-vee, and results were presented in tabular and graphical forms.

1.4.6 SERIES BK AND MBK

According to Almeter [2], the BK series are a very extensive series tested in Russia during the 1960's and oriented towards large patrol boats. The hull shape resembles the "PT" boats used by the USA during the Second World War. The main parameters of the series are as follows:

$$0.43 < C_D < 0.85$$

$$0.35 < L_{CG}/L_{PP} < .45$$

$$1.0 < Fn_v < 4.5$$

The MBK series was also tested by the Russians and, although it resembles the BK series in approach and methodology, the parent hull is different and the series largely represent an addition to the BK series.

The ranges covered by the MBK series were:

2.5
$$<$$
 L/B $<$ 3.75
7° $<$ ß $<$ 18°
0.158 $<$ C_D $<$ 0.352
0.35 $<$ L_{CG}/L_{PP} $<$ 0.45
1.0 $<$ Fn_V $<$ 4.5

Clearly there is a great amount of additional experimental work published and unpublished on the performance of planing hulls, such as [4], [5], [14], [16] and [24] among others. Furthermore there must be a great amount of test data at research and experimental centres around the world that may not be available for public domain. However, the research work described in Section 1.4 addresses the planing hull series most widely referred to in research and design.

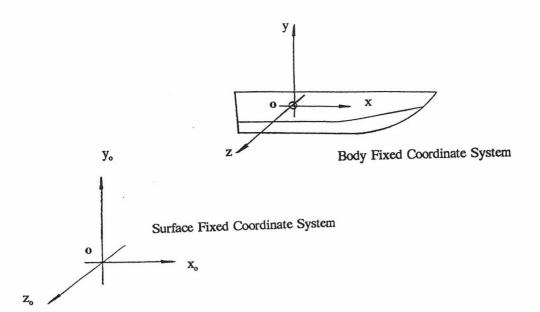


Figure 1.1 Coordinate System.

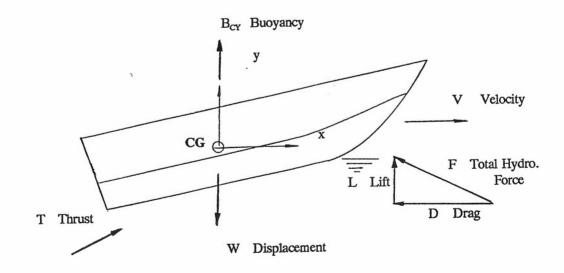


Figure 1.2 Acting Forces

2.0 SERIES DESIGN.

In reviewing the experimental work on planing hulls it is noted that the most widely addressed series do not necessarily represent a modern small craft hull shape; Series 62 is typical of the design of the 1960's, with a narrow transom and relatively large L/B ratio. Modified Series 62 follows the same trend. Series 65B features deep-vee hull shapes and was tested with a systematic variation of L/B ratio and deadrise angle, but low deadrise angle values were not considered. Fridsma's series can not be used in the design because it represents a prismatic, non-realistic hull shape. The U.S. Naval Academy series may not considered to be a pure planing series. Finally, with series MBK, low L/B ratio and low deadrise were considered. Furthermore, the hull shapes were typical of boats designed a few decades ago.

For this reason it is believed that a new series for planing hulls is needed to aid designers and researchers in studying the performance of this category of vessels. This conclusion was also made by Almeter [6] who stated that the typical fast boat had 23° deadrise angle and recommended that a new series be based on L/B ratio variations.

2.1 HULL PARAMETER DATA BASE.

To design the new series of planing hulls, recent hull design specifications and technical data were collected from two main sources:

- a) serials, journals and publications; and
- b) nearly 50 boat designers and builders, who were contacted for data on their designs.

The final data base contained a total of 306 boats, from 83 boat builders and designers, and hulls in the range of 16.0 to 85.0 ft. (4.8 to 26.0 m) in length, displacements from 1000 to 150,000 lb. (0.5 to 70 tonnes) and speeds from 12 to 70 knots. All the designs are deep-vee hulls, and most of them have constant beam and constant deadrise on the aft section of the hull. This is an important characteristic of a modern planing hull shape.

Semi-displacement hull designs were also included in the data base, as were the fast and light racing boats. This was done to cover both extremes during the analysis. The types of boats considered were mainly: pilot boats, rescue vessels, fast patrol boats, pleasure boats, sport fishing boats, ocean cruisers, yachts, and racing boats.

Two analyses were performed on the data base. At first the characteristics of boats with their dimensional properties were considered. Secondly a parametric analysis was conducted.

2.1.1 DIMENSIONAL PARAMETRIC ANALYSIS.

A number of combinations of hull parameters were plotted to examine their trends and patterns. In some cases no obvious patterns could be observed, whereas in others the relationship between each other was very clear. The most important findings are discussed in the following:

The length versus beam plot given in Figure 2.1 shows an almost linear relation between these two parameters with a proportion in the order of 3:1 given by:

 $B=0.243.L_{OA}+2.93$

The plot of length versus deadrise angle is given in Figure 2.2, where a great scattering distribution of data is observed, but it can be noted that as the length increases the deadrise angle tends to decrease. From Figure 2.3 it is seen that as the length increases, the displacement increases constantly in a trend as:

$$W=19.L_{QA}^2-117.L_{QA}-3778$$

The length versus cruising speed plot, Figure 2.4, shows also great scattering of data. This may be expected for a fixed size of vessel of the same length, as the designed cruising speed may be very different. The speed depends on the operational requirements of the boat, but it is interesting to note from Figure 2.5 that as the length increases, the installed power also increases in a constant form. This means that for a given length, the vessels have the same order of installed power, but the speed varies considerably.

The two last figures presented for this part of the analysis indicate that, for a given displacement, the installed power shows a clear increasing changing pattern, as observed on Figure 2.6, and an important fact is observed from Figure 2.7 where it is very clear that as the velocity increases the deadrise tends to increase, although scattered data are observed.

Several conclusions may be obtained from this part of analysis:

- a) The length varies with the beam in a ratio 3:1.
- b) As the length increases, the following changes occur::
 - deadrise angle decreases
 - displacement increases

- cruising velocity decreases
- installed power increases
- c) As the displacement increases the installed power does too, but not necessarily the speed.
- d) As the cruising speed increases, there is a clear tendency for the deadrise angle to increase.

2.1.2 NON-DIMENSIONAL PARAMETRIC ANALYSIS.

The data were also analyzed in a non-dimensional form. Several authors have determined that the main parameters affecting the performance of a planing boat are the centre of gravity location, beam, length and deadrise angle. The data base does not include the centre of gravity location because it was not given in this analysis. This means that in this series it would be a variable for each test condition.

From the previous work on planing hulls, it has been observed that there are several ways to define a speed coefficient. The most commonly used expressions are:

- a) V/\sqrt{L} (where V in knots and L in ft)
- b) V/\sqrt{gL} (V, L, B, g and W for expressions b, c and d must be in a consistent system of units in terms of ft/sec, ft, ft²/sec, ft³, or m/sec, m, m²/sec, m³).
- c) V/\sqrt{gB}
- d) $V/\sqrt{g \cdot \nabla^{1/3}}$

It was decided that the speed coefficient selected in this analysis should not include a parameter that changes with speed. Thus the expression chosen was (c), understanding that the wetted beam

would not vary significantly with speed. If C_v is the time dependant coefficient, the function is defined as:

$$C_V = f(L/B, \beta, C_D)$$

All the boats in the data base were non-dimensionalized, and the coefficients were plotted in several combinations, with the following results:

a) Coefficient distribution.

The L/B distribution is given in Figure 2.8. It is observed that 87% of the boats are within the range of 2.4 < L/B < 3.8, with a concentration in the range of 2.8 to 3.2.

Figure 2.9 shows that the deadrise angle in 91% of the boats is in the range 12° to 25°, with a maximum at 18°.

Figure 2.10 gives the distribution of the velocity coefficient. It is found that 89% of the boats are in the range of 1.2 to 3.6.

Figure 2.11 shows that the displacement coefficient of 99% of the boats is within the range 0.06 to 0.25.

b) Non-dimensional coefficients results.

Figure 2.12 shows that, regardless of the C_v coefficient, the L/B ratio is in range of 2.0 to 4.0, with a concentration at L/B = 3.0. It is also observed that the designs with a high L/B ratio are also the boats that have a high C_v coefficient.

From Figure 2.13 it is observed that as the velocity coefficient C_v increases, the deadrise angle β also increases.

Figure 2.14 indicates that, as the velocity coefficient C_v increases, the displacement coefficient C_D decreases, but after C_v equal 4.0, C_D tends to increase. This, together with the results obtained from Figure 2.12 indicate the slender and fast boats are also the more heavily loaded, and this is also confirmed on Figure 2.15, where clearly the displacement coefficient C_D is increasing with respect to L/B ratio.

2.2 MAIN PARTICULARS OF THE SERIES

From the results of analysis, the characteristics for the series to be studied are defined as follows:

L/B ratio.

From Figures 2.1 and 2.12 it can be seen that most of the boats analyzed will be covered within the range:

$$2.5 < L/B_1 < 3.5$$

Deadrise angle (B)

The range for this parameter is not as clear as the L/B ratio, as shown in the scattering distribution of data points in all the related figures. Nevertheless, from Figures 2.2, 2.9 and 2.13 the typical deadrise angle will be in the range:

$$12^{\circ} < \beta < 24^{\circ}$$

Displacement coefficient

This range is set based on the results from Figures 2.11, 2.14 and 2.15, from which:

$$0.05 < C_D < .25$$

The actual displacement coefficient used during the experiments was dependent on the L/B ratio, as observed from Figure 2.15, so that each model was tested at different C_D values.

Velocity coefficient

The typical velocity coefficient, for the L/B ratio range selected, is in the range:

However, the model size and the carriage velocity have restricted C_v to a maximum of 2.75 for the experiments.

The final characteristics for the series are given in Table 2.1 below.

Table 2.1 Characteristics for the Series.

Coefficient	Low	Medium	High
L/B	2.5	3.0	3.5
ß	12.0 °	18.0 °	24.0°
$C_{\rm p}$	0.05		0.25
C _D C _V	1.2		2.75

With these values, most of the high C_V designs were excluded. At the same time these vessels have the highest L/B ratio as well as the highest C_D coefficient. Furthermore, many of these vessels have the highest deadrise angle. Other vessels excluded are the low deadrise angle boats (less than 12°). Reviewing the data base, it was observed that the vessel types excluded are the high speed racing boats and the heavy loaded ocean cruisers.

2.3 PARENT HULL DEFINITION.

In designing the parent hull for this series it, is intended to design a hull which is representative of the typical planing craft presently built, based on dimensions and shape but not on performance. From Table 2.1, using the middle values, the main parameters to design the parent hull are L/B

ratio of 3.0 and deadrise angle of 18°. Additional characteristics that may be specified for a typical planing boat are:

- a) Constant beam and deadrise in the aft section of the hull;
- b) Transom stern; and
- c) Hard chine (single chine).

2.3.1 HULL SHAPE PARAMETERS.

The selection of shape parameters was made by carrying out an analysis of several Lines Plans and General Arrangements. For obvious reasons, most boat designers and builders did not supply hull form information, and only a few were made available. This, together with the information from several marine journals data on a total of 46 hulls was gathered and entered into a data base. The data measured are defined in Figure 2.16.

All the measurements were non-dimensionalized as percentages of L_{OA} and were plotted as a function of L_{OA}/B ratio. Figures 2.17 to 2.23 are the plots for this data base, and most of them show certain scattering in patterns, hence it is not possible to determine an exact trend, but they certainly provide a reference for the selection of proportions at a L/B ratio of 3.0, which as stated above, was chosen as a main parameter for the parent hull.

To select the shape parameters a straight line curve fit was obtained for Figures 2.17 to 2.22, and the intersection with L_{oA}/B equal to 3.0 was considered as the proportion for the parent hull. With this approach the length of the chine L_c as a percentage of the length overall L_{oA} is 91.8% as obtained from Figure 2.17, and following this procedure, from Figure 2.18, L_{CD} is found to be in the order of 51.2% of L_{OA} ; the length of the chine with a constant beam L_{CC} , extends on 41.0%

of L_{OA} as shown on Figure 2.19; from Figure 2.20 the length of the bow L_B is 37% of L_{OA} measured from the forward end of the hull, the typical depth at the forward end D_B is 18.2% of L_{OA} as obtained from Figure 2.21, and the height of the chine in the intersection with the bow D_C is 10.7% of L_{OA} as observed on Figure 2.22. The last value obtained from these plots is α_1 , this is, the angle between the bow and the base line, resulting in 42.5 degrees as obtained from Figure 2.23. The shape proportions for the parent hull are then summarized in table 2.2 bellow:

Table	2.2	Parent Hull Proportions in Percent	age of LOA
	$L_{\mathbf{c}}$	Chine Length	91.2%
	L_{cd}	Length of Constant Beam on Deck	51.2%
	L_{cc}	Length of Constant Beam on Chine	41.0%
	$L_{\rm B}$	Bow Length	37.0%
	D_{B}	Depth at Forward End	18.2%
	D_{c}	Chine Height	10.7%
	$\alpha_{\scriptscriptstyle 1}$	Bow Angle	42.5°

2.3.2 HULL DEVELOPMENT.

Due to the geometric limit of the towing tank the maximum beam B was selected as 230 mm, resulting in the following dimensions being selected for the parent hull:

Table 2.3	Parent Hull Di	men	sioı	<u>1S</u>
$L_{OA} = 690 \text{ r}$	nm	В	=	230 mm
$L_{CH} = 629 1$	mm	L_{CD}	=	353 mm
$L_{cc} = 283 \text{ r}$	mm	L_{B}	=	255 mm
$D_B = 125 1$	mm	D_{c}	=	74 mm
$\alpha_1 = 42.5^{\circ}$		ß	=	18°

These dimensions were used to develop the preliminary lines. Once the lines were faired, they were entered into the program AUTOPLEX to obtain a hull shape with developable surfaces. The final lines are given in Figure 2.24. The typical planing hull has deck sheer and transom rake, but for convenience of construction and testing, the deck line is considered parallel to the base line, and the transom perpendicular to the base line.

It was decided to incorporate chine spray strakes extending over the total length of the chine. The typical width of these strakes is in the order of 5% to 10% of the total beam on the chine. In our case, it was selected as 7% of the maximum beam for the length of constant beam with constant deadrise angle, and reducing its width towards the forward end.

2.4 SERIES DEVELOPMENT

In order to develop a series of geosim models, the L/B ratio and the deadrise angle were varied in the following manner:.

2.4.1 L/B VARIATION.

This parameter is relatively easy to modify if a linear transformation is performed over the x axis, the length of the hull was stretched or shrunk to obtain the desired length, with the following results for the L/B ratio selected on Table 2.1:

<u>L/B</u>	Total length
2.5	575 mm
3.0	690 mm
3.5	805 mm

2.4.2 DEADRISE ANGLE VARIATION

The variation of this parameter could have been done by one or more of the following:

- a) stretch or shrink the parent hull in the y direction.;
- b) raise or lower the chine line;
- c) raise or lower the base line.

However, it was decided to raise and lower the base line to obtain the 12° and 24° deadrise angles, respectively. With this arrangement the chine profile and plan view, as well as the bow angle remain the same for each L/B ratio, and the bow keeps the same curvature, but the height of the intersection between the chine and the bow will be modified. Using this approach most of the main parameters for the series hulls remain unaltered.

The lines and offset tables for all the hulls of the series are included in Appendix A. From these it is observed that the body plan for all hulls with the same deadrise angle keep the same shape, and the beam on the chine and the deck remain the same for all models. In the plan view, it is observed that all the hulls maintain the chine and deck lines for a given L/B ratio. In profile, all the models for a given L/B ratio keep the same chine profile as well and almost hold the same bow curvature. With this, the part of the hull that will change is the shape of the hull below the chine for each L/B ratio.

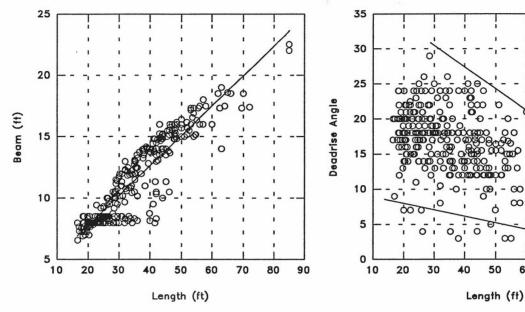
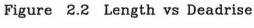


Figure 2.1 Length vs Beam



70

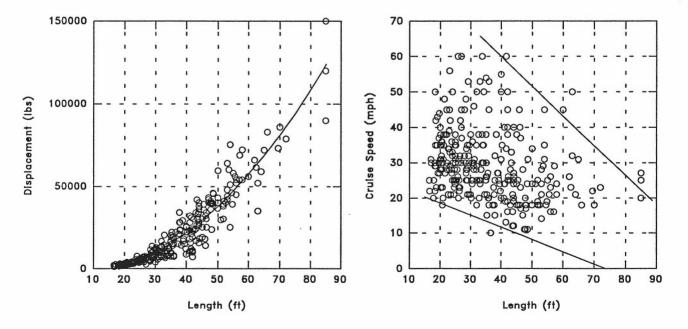


Figure 2.3 Length cs Displacement

Figure 2.4 Length vs Cruising Speed

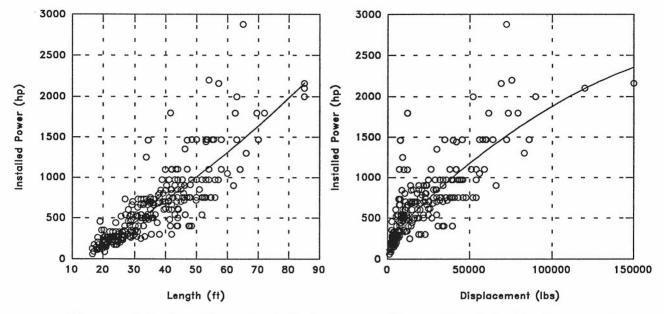


Figure 2.5 Length vs Installed Power.

Figure No. 2.6 Displacement vs Installed Power.

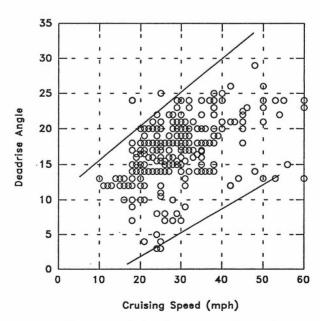


Figure 2.7 Cruising Speed vs Deadrise angle.

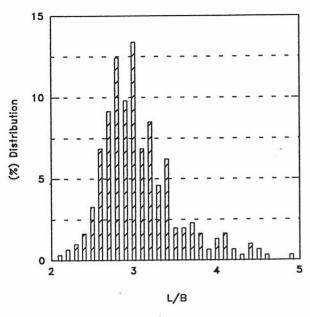


Figure 2.8 L/B Distribution

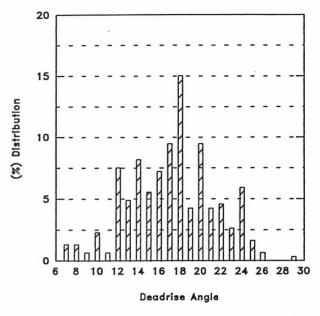


Figure 2...9 Deadrise Angle Distribution

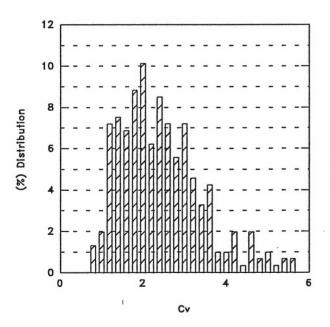


Figure 2.10 Velocity Coefficient Distribution

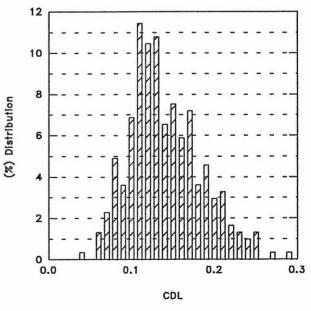
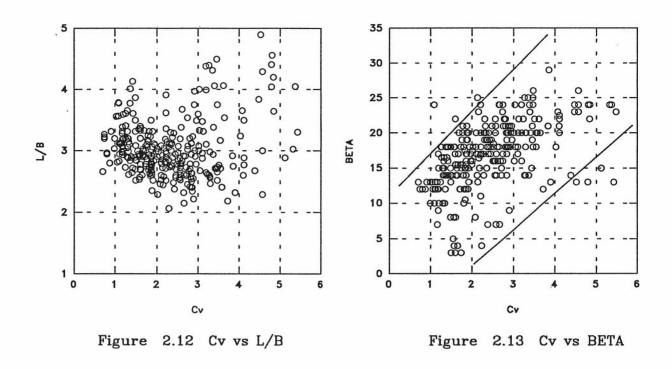


Figure 2.11 Displacement Coefficient Distribution.



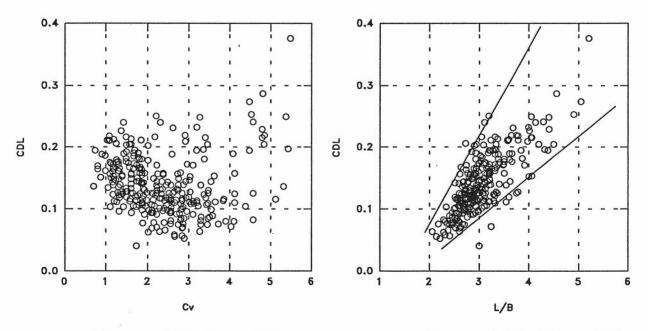
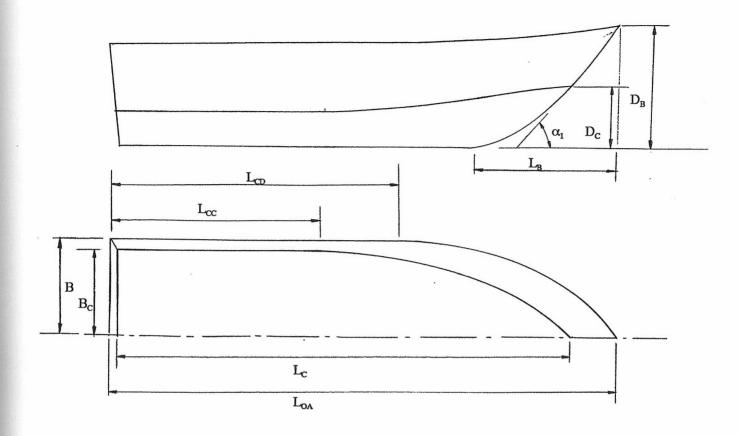


Figure 2.14 Cv vs CDL

Figure 2.15 L/B vs CDL



Loa Length overall

L_B Bow length

L_C Chine length

L_{CD} Constant beam length on deck

L_{cc} Constant beam length on chine

D_B Bow height (depth)

D_C Chine height at the intersection with the bow.

 α_1 Bow angle

B Beam

Figure 2.16 Definition of Hull Shape Measurements

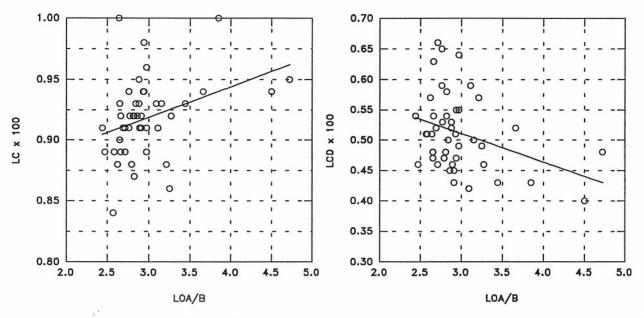


Figure 2.17 LOA/B vs LC as % LOA

Figure 2.18 LOA/B vs LCD as % LOA

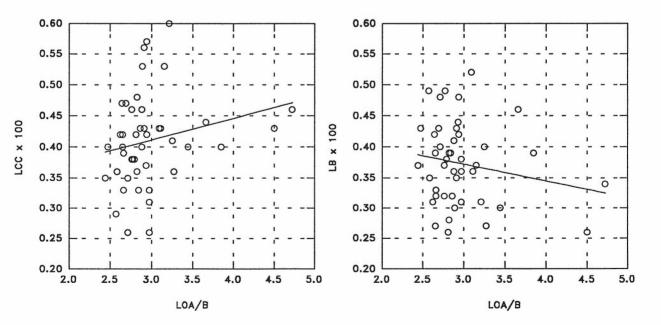


Figure 2.19 LOA/B vs LCC as % LOA

Figure 2.20 LOA/B vs LB as % LOA

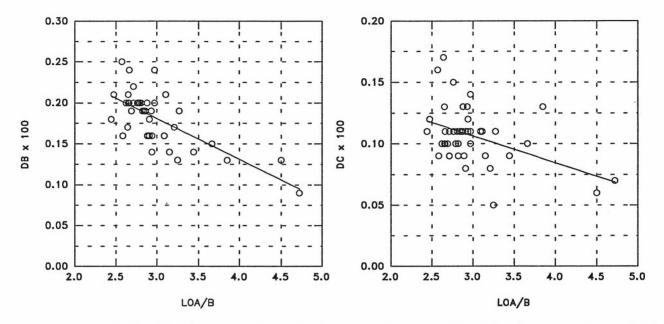


Figure 2.21 LOA/B vs DB as % LOA Figure 2.22 LOA/B vs DC as % LOA

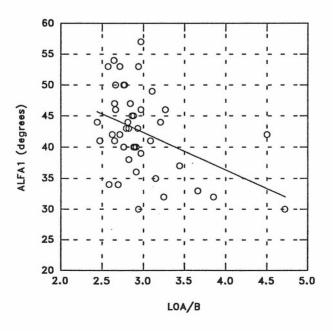


Figure 2.23 LOA/B vs Angle of the Stem to Base Line.

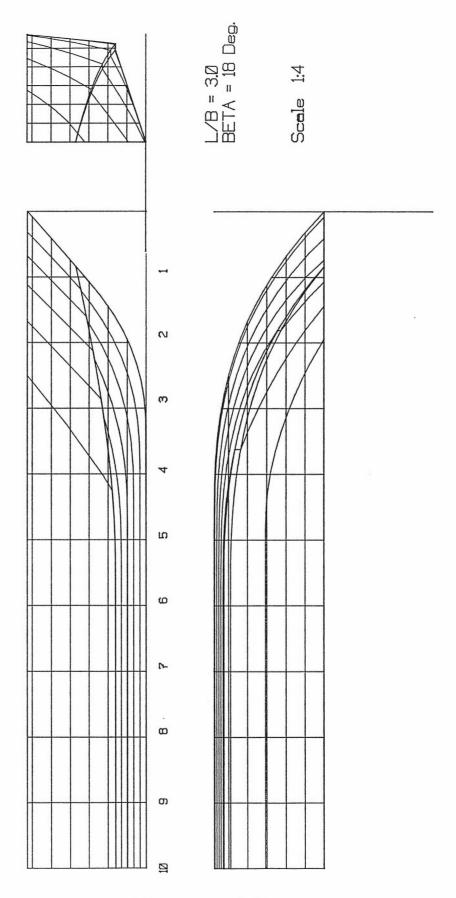


Figure 2.24 Parent Hull Lines

3.0 EXPERIMENT DESIGN

3.1 FACILITIES

3.1.1 TOWING TANK

The Towing Tank at TUNS has dimensions of 27.0m. x 0.9m. x 1.0m. with length, width and depth respectively. The tank has a 1.8 m. viewing window located at the end close to the control room. A computer-controlled wave maker/absorber is installed at each end of the tank. The electric motor-driven carriage has recently been upgraded and is able to reach a maximum speed of 4.0m/s within the tank length limit. It is controlled by a computer, and has very good velocity repeatability.

3.1.2 DATA ACQUISITION

The tank facilities can be completely operated from the Control Room. Two computer systems control the carriage and perform the data acquisition; video recording can also be controlled from the Control Room using up to four cameras.

For all experiments the models only had three degrees of freedom, i.e. surge, heave and pitch, and the data were collected with the following instruments:

- a) Forward velocity in the x direction was measured by an optical encoder driven by a belt to the rear axle.
- b) The force was measured by a 2.5 kg. load cell installed on the heave shaft of the tow

post. Figure 3.1 gives a representation of the tow post arrangement. It is noted that with this arrangement the load cell measures the horizontal component or drag force **D** of the total hydrodynamic force **F**.

- c) The sinkage in the y direction was obtained with a sonic probe mounted on the carriage, measuring the distance to a reflective plate mounted by an attachment to the model. With this device the collected data represented the rise or sinkage of the centre of gravity. The sinkage value showed negative whenever the model was in a rising condition.
- d) The trim was measured by means of a Relative Voltage Differential Transducer, (RVDT), mounted on the bottom of the heave shaft which was attached to the model. The shaft of the RVDT passes through the pivot point or the vertical centre of gravity, V_{CG} , of the models. The static trim was recorded for all the test conditions.
- e) Video recording of all the runs was made to assist in troubleshooting whenever required.
- f) As indicated by the 19TH International Towing Tank Conference [17], underwater photographs of the runs at all speeds were taken, from which the wetted surface area was computed. Black and white negatives were used and analyzed with a negative viewer. Figure 3.2 shows a typical photograph from the series.

3.2 MODEL CONSTRUCTION

All the models were built using a transverse framing system with 2.0 mm plywood for the hull and 6.0 mm plywood for the frames. All the models had developable surfaces. The hulls were coated with epoxy, primer and enamel to obtain a smooth finish. Station lines and numbers were painted on the sides and bottom. Water lines were omitted due to the number of L_{CG} and displacements tested. All the models were fitted with an integral spray strake at the chine. No additional spray strakes were fitted. This can be the subject for extensive research in the future, investigating the effect of number of strakes, angle, length, etc. on performance. No decks were fitted, i.e. the models are "open".

3.3 TEST CONDITIONS

3.3.1 DISPLACEMENTS

Table 2.1 indicated that the load coefficients C_D at which the models should be tested was in the range of 0.05 to 0.25. At the same time it was observed from Figure 2.15 that the displacement coefficient, C_D , varies depending on the L/B ratio. Each model's test conditions were chosen based on its L/B ratio. Table 3.1 gives the C_D values selected, and these were varied during the testing at increments of $\Delta C_D = 0.05$

Table No. 3.1 Test Displacement Coefficients

L/B	$\underline{\mathbf{C}}_{D\;MIN}$	\underline{C}_{DMAX}
2.5	0.5	0.20
3.0	0.10	0.25
3.5	0.10	0.30

Due to the weight of the models, some geometric restrictions and the position of the centre of gravity, it was not possible to obtain all of the minimum conditions. Section 4.0 provides all the conditions tested.

3.3.2 CENTRE OF GRAVITY

In Section 2.1.2, it was stated that the location of the longitudinal position of the centre of gravity, L_{CG} , was to be considered as a test variable. Almeter [6] indicates that the typical L_{CG} is located from 25% to 35% of L_{C} measured from the transom. From the data collected it was observed that the L_{CG} was located typically at 30% of L_{OA} from the transom. Fridsma's series [9] was tested at 30% to 50% of L_{OA} from the transom, Compton's series [10] was tested at 8% of L_{OA} from midships, and the MBK series [6] was tested at 35% to 45% of the wetted length. But then all these series were not typical of the small craft hull shape and configurations. It was decided to test each model at three L_{CG} locations, 25%, 30% and 35% of L_{OA} measured from the transom. Larger values resulted in an unrealistic trim by the bow, and smaller values gave very high static trim, which were considered unrealistic as well. Table 3.2 gives the values for L_{CG} on each model.

Table 3.2 L_{CG} Position for the models..

(Cm. from Transom)						
	L/B RATIO					
LCG/LOA	<u>2.5</u>	3.0	4.0			
0.25	14.37	17.25	20.12			
0.30	17.25	20.70	24.15			
0.35	20.12	24.15	28.17			

The vertical centre of gravity was chosen to be 30% of B (maximum beam), i.e. 70.0 mm from the base line. The heave shaft was attached to the model in such a way that the pivot point was at the vertical centre of gravity. When ballasting the models to obtain the displacement and centre of gravity, the vertical position of the centre of gravity, V_{CG} , was measured by hanging the model. In most cases the real centre of gravity was obtained close to 30% of B, but some others were within an error of 5% B. All these values were recorded and are included in Appendix B.

3.3.3 VELOCITY RANGE

The velocity coefficient, C_v , was a restriction for the experiment. As given on Section 2.0, ideally a C_v of 3.6 was needed to cover the complete analysis. This means that the carriage had to run at 5.4 m/s, but the tank length is only 27.0m long. Although the carriage is capable of running at these speeds, it was determined that the maximum speed at which a significant data could be collected was 3.93 m/s. With this restriction the maximum test C_v was 2.75. Ten speeds were tested, starting at $C_v = 0.50$ (0.72 m/s) up to 2.75 (3.93 m/s) with increments of 0.25. With this the effects on displacement, pre-planing and planing regimes were studied.

3.3.4 THRUST LINES

In most of the experimental work, the thrust line is considered to be passing through the centre of gravity, which is a very close approximation for most of the propeller driven boats. In this work it was decided to test all the conditions at two thrust lines:

- i) thrust line passing through the centre of gravity, and
- ii) thrust line parallel to, and lying on the keel or base line.

The last was chosen as a reasonable compromise to many possible configurations for boats propelled by stern drives, jet propulsion or twin propellers. The method to test this thrust line is illustrated in Figure 3.3. The models were first tested with the thrust line passing through the centre of gravity. The drag \mathbf{D} is approximate to the \mathbf{x} component of \mathbf{T} , i.e. $\mathbf{T}_{\mathbf{x}}$. If the Planing Angle τ is also known, and if the thrust line is moved to assume that it is parallel to the base line, a trimming moment \mathbf{M}_{TT} can be computed. The thrust line compensation is obtained by moving a known weight \mathbf{w} to a position within the model that would create an equivalent trimming moment. This trimming moment was computed for each velocity tested, and for each condition.

With the above considerations, the total number of runs for the series was in the order of 2500, including the tank calibration, repeatability runs and turbulence stimulation analysis.

3.4 TANK SIZE EFFECTS

During the preparation of the experiments, questions were raised regarding the effects of shallow water and tank wall, and also the aerodynamic effects on the results. These issues were addressed as follows.

3.4.1 SHALLOW WATER EFFECTS

During the literature review it was found that the work most addressed on this issue was done by Sturtzel and Graff [18,19], as well as Kirsch [20]. The critical velocity for our series is:

$$V_{CR} = \sqrt{g \cdot h}$$

 $V_{CR} = 3.13$ m/s for a tank depth, h, equal to 1.0 m.

If the Draft (t) of the models is assumed to be in the order of 10 cm, then:

$$t/h = 0.1$$

From Figure 15 of Reference [18] it was determined that the increase in wave-making resistance is in the order of 3% to 5%.

From Reference [19], it was obtained that for L/h = 0.805 (for L/B = 3.5), $C_{fh}/C_{f\infty}$ = 1.0, as shown in Figure 3.4. This means that the increase in wave-making resistance is almost negligible for this configuration.

Kisch's work [20] was also studied, but unfortunately the range of her work does not cover the

range of this series.

3.4.2 TANK WALL EFFECT

The work by Millward [21] and Kirsch [20] were studied to try to determine the effect of the proximity of tank walls on the results of our tests, but once again their ranges of results do not cover the ranges of our work. Millward's closest values are for L/h = 2.0, t/L = 0.04, and K/h = 1.67. Our numbers are L/h = 0.805, t/L = 0.08 and K/h = 0.90. Kirsch did not consider L/B lower than 5.0.

3.4.3 AERODYNAMIC EFFECTS

It has been recommended by the 19TH ITTC [17] to perform aerodynamic tests on the carriage to determine the effect of the air flow on the test results.. At this stage, no study of this has been performed, hence the effect could not be predicted.

The effect of an "open" model which has no deck or superstructure fitted may become relevant at C_v values above 2.0. But it is common practice to work with "open" models for towing tank tests. In our case, it was decided to work with this condition so long as the models were representative of any type of fast monohull.

3.5 TURBULENCE STIMULATION

Turbulence stimulator are used as a means to artificially increase the turbulence level of flow, thus avoiding laminar flow for low Reynolds number. Ideally the stimulator will provide constant turbulence stimulation with minimum parasitic drag. There are several devices that may be used, such as trip wires, studs and sand strips [22]. Also it has been indicated by the 19TH ITTC that

Hama strips are promising devices, and have been used some research facilities. Simoes Re [23] used these devices for the previous experimental work at TUNS. It was also decided to use Hama strips for this work. The shape selected was 10 mm wide strips with saw-tooth shape 8.0 mm per side and a thickness of 0.5 mm.

The position for the Hama strips was determined after testing the parent hull at $L_{CG} = 25\%$ and displacement coefficients of 0.10, 0.15 and 0.20. Figure 3.5 gives the results for $C_D = 0.15$ and 0.20. For the strips installed on Stations 4 and 7 of the model, the resistance was increased at all speeds. When the strip on Station 7 was removed the resistance was increased at low and medium speeds (hump speeds), but at high speed (relatively high Reynolds number) it remained unaltered as compared with the bare hull results. Therefore the Hama strip was only installed on Station 4 of the model for all experiments.

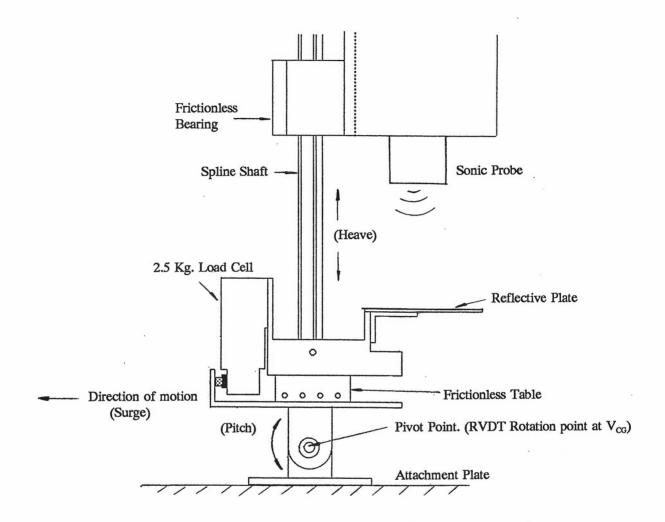


Figure 3.1 Tow Post Arrangement

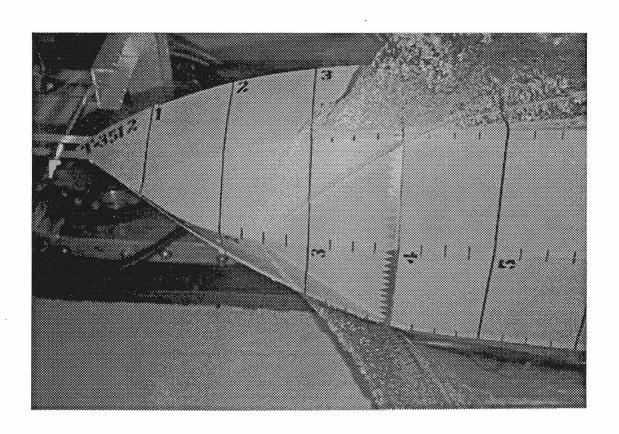
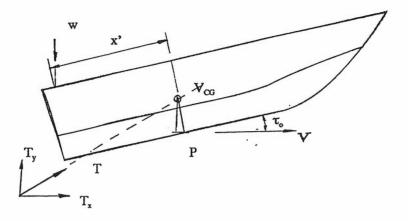


Figure 3.2 Underwater Photograph



= Absolute trim angle

= Thrust

 $T_x = x$ Component of the thrust (drag)

 $T_x = x$ Component of the thrust $M_{TT} = T_{rm}$ moment on the hull due to T_x assuming a thrust line passing through P or parallel to base line $M_{TT} = T_{x.} \cos \tau_o \cdot V_{CG}$

= Known Distance.

= Added weigth to compensate for thrust line

 $w = M_{TT} / (x' \cdot \cos \tau_o)$

Figure 3.3 Thrust Line Compensation.

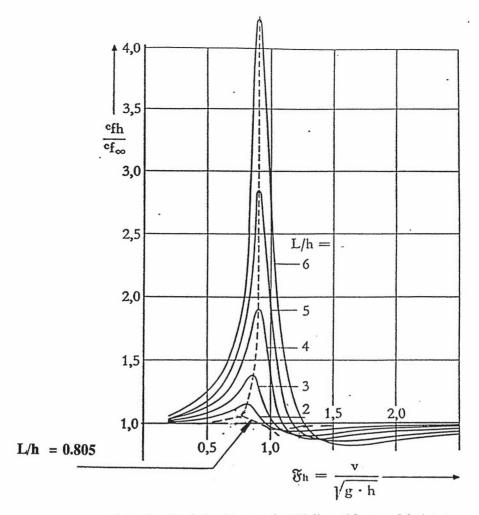


Abb. 12 Verhältniswerte der Wellenwiderstandsbeiwerte von Flach- zu Tiefwasser für verschiedene L/h-Werte

$$\begin{array}{lll} Fn_h & = & 1.0 \\ V_{CR} & = & 3.13 \text{ m/s} \\ L/h & = & 0.805 \\ C_{Fh}/C_{F\infty} = & 1.0 \end{array}$$

Figure 3.4 Shallow Water Effect on the Wave Making Resistance (From Fig 12. Reference [20])

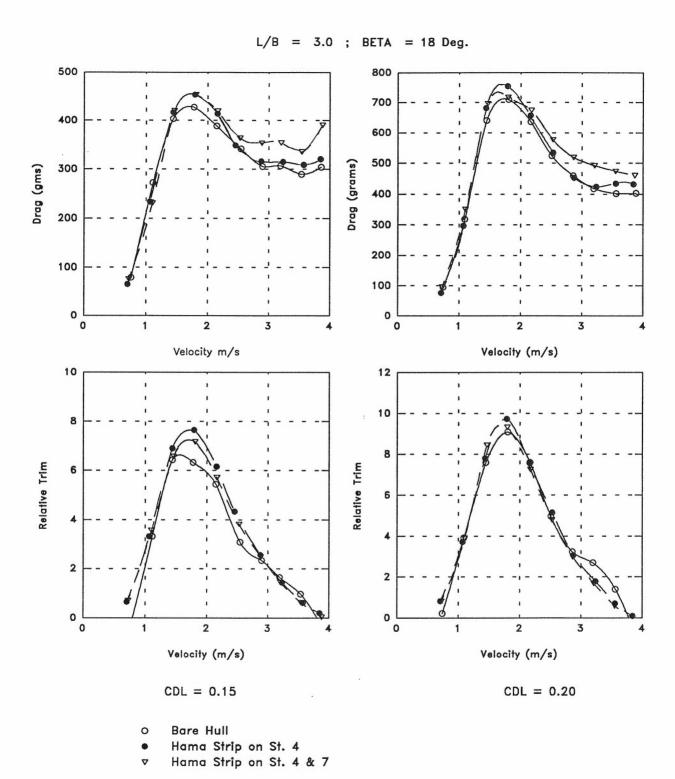


Figure 3.5 Turbulence Stimulation Tests

4.0 TEST OF THE SERIES

4.1 TANK CALIBRATION

As mentioned previously, there are various tank effects that might affect experimental results and that were not possible to predict, such as shallow water, tank wall and aerodynamic effects. In order to ensure reliability of the test results, a well known hull previously tested at other experimental facilities was selected to test again at the TUNS tank for calibration.

One of the objectives of this tank calibration was to avoid uncertainty introduced by testing a geosim model with a different scale, so it was chosen to test a hull of identical dimensions to one with published data. The hull selected was a prismatic hull tested by Fridsma [9] at the Davidson Laboratory of the Stevens Institute of Technology. This selection was made because the beam of the test model was very similar to the beam of the models of TUNS series, and that the L/B ratio of the smallest model was 4.0 which was close to the maximum L/B ratio of 3.5 for TUNS models. Another fact was that the shape of Fridsma's model had a constant beam and deadrise /angle on the aft section of the hull. The model had a L/B ratio of 4.0, a deadrise angle of 20°, a beam of 9 inches and built with the same transverse framing as TUNS models.

Figure 4.1 gives the body plan and lines equations. Fridsma fitted his models with a thin celluloid strip projecting 0.030" below the chine. The objective of this strip was to avoid the "wrapping" of water on the sides of the hull. The TUNS model for the tank calibration was fitted with similar strips, and in the same form as on Fridsma's experiments. No turbulence stimulators were used.

Six test conditions were chosen from Fridsma's work:

$$C_D = 0.304$$
 (W = 8lbs) and $L_{CG} = 30\%$, 35% and 40% of L_{OA} .

$$C_D = 0.608$$
 (W = 16lbs) and $L_{CG} = 35\%$, 40% and 45% of L_{OA} .

Each condition was tested at 12 speeds in the V/\sqrt{L} range from 1.0 to 4.0. All the runs were performed for a second time to check repeatability in the data acquisition. Fridsma's original work did not include numerical results for the calm water experiments, so the data used for comparison were read from the graphical results.

The results obtained at TUNS were encouraging, and showed very close agreement with those of the Davidson Laboratory. Only two conditions were selected to show TUNS results, but most of the experiments gave the same level of agreement:

- a) Figure 4.2 shows the results of the tests at C_D = 0.304 and L_{CG} at 30% from transom. It is observed that the R_T/W curve gives a very close agreement with the original data. The H/B value or the or rise of the centre of gravity seems to be lower than Fridsma's results, mainly in the high speed range. Trim is above the original data for low V/\sqrt{L} values, but at higher V/\sqrt{L} values are in close agreement.
- b).- Figure 4.3 gives the results for $C_D = 0.608$ and $L_{CG} = 40\%$. Included in this last graph are the values obtained by Opel [24] for a geosim model on a larger scale tested at the British Columbia Ocean Research Centre. Both figures show a very close agreement on the resistance curve, although Opel's data tend to be slightly above the original values. The rise of the centre of gravity as well as the trim angle show good agreement.

4.2 FINAL TEST RANGES

4.2.1 VARYING DISPLACEMENT AND CENTRE OF GRAVITY

Each model was tested over a different range of displacement coefficients. Each C_D was tested for 10 velocities, and each velocity was tested at the two thrust lines described in Section 3.3.4. Table 4.1 gives the summary of the displacement coefficients at which each model was tested.

The location of the longitudinal position of the centre of gravity, L_{CG} , was determined by the moments of reactions with the aid of a weighing scale, and the vertical position, V_{CG} , was determined by hanging the model as shown on Figure 4.4. This method is simple and there is no need to draw water lines on the hull. The model was set a zero heel, and this was verified with the aid of a bubble level. The change of displacements was achieved by adding equal weights at equal distances forward and backwards from the centre of gravity, and at a height as close as possible to the vertical centre of gravity. To obtain this, the amount of weights required to achieve the following C_D value, as listed in Table 4.1, were prepared in advance. Following this procedure, 54 to 90 runs could be performed before removing the model from the tow post to change the L_{CG} position.

Once the model was attached to the tow post at a certain L_{CG} , all the displacements were tested by assuming that the thrust line was passing through the centre of gravity. After the thrust line through the centre of gravity was tested, the compensation moments were calculated as shown on Figure 3.3, and the runs for the thrust line through, or parallel to the keel were performed.

Table No. 4.1 Summary of Test Displacement Coefficients.

ß	12°								
L/B		2.5			3.0			3.5	
$\underline{\mathbf{L}}_{\mathbf{CG}}$	<u>35%</u>	30%	25%	35%	30%	25%	35%	30%	25%
	0.075	0.835	0.10	0.10	0.10	0.11	0.10	0.10	0.12
	0.10	0.10	0.15	0.15	0.15	0.15	0.15	0.15	0.15
	0.15	0.15	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	0.20	0.20		0.25	0.25	0.25	0.25	0.25	0.25
							0.30	0.30	
ß	18°								
L/B		2.5			3.0			3.5	
$\underline{\mathbf{L}}_{\mathbf{CG}}$	<u>35%</u>	30%	<u>25%</u>	<u>35%</u>	30%	<u>25%</u>	<u>35%</u>	30%	25%
	0.086	0.086	0.086	0.114	0.114	0.114	0.12	0.12	0.12
	0.10	0.10	0.10	0.15	0.15	0.15	0.15	0.15	0.15
	0.15	0.15	0.15	0.20	0.20	0.20	0.20	0.20	0.20
							0.25	0.25	0.25
							0.30	0.30	
ß	24°								
L/B	2.5		3.0		3.5				
$\underline{\underline{L}}_{CG}$	<u>35%</u>	30%	25%	<u>35%</u>	<u>30%</u>	<u>25%</u>	35%	30%	<u>25%</u>
	0.075	0.10	0.10	0.10	0.10	0.11	0.10	0.10	0.117
	0.10	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
	0.15	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	0.20			0.25	0.25	0.25	0.25	0.25	0.25
							0.30	0.30	

4.2.2 STATIC TRIM.

When the model was at rest (Velocity = 0.0), the static trim for each test condition was measured and recorded. With this it was possible to give the relative trim as well as the absolute trim.

4.2.3 TEST VELOCITIES.

Each condition was tested at 10 velocities as given in Table 4.2, covering the displacement, pre-planing and planing speeds.

Table 4.2 Summary of Test Velocities.

$\underline{\mathbf{C}}_{\mathbf{v}}$	(m/s)	$\underline{\mathbf{C}}_{V}$	(m/s)
0.50	0.72	1.75	2.51
0.75	1.08	2.00	2.88
1.00	1.44	2.25	3.23
1.25	1.78	2.50	3.57
1.50	2.15	2.75	3.93

Initially the runs were made at alternating velocities, i.e. first a low speed run was tested, and then a high speed run. After several conditions had been recorded, it was observed that the results were not affected by alternating speeds, therefore the remaining conditions were performed at increasing velocities. The time interval between runs was maintained constant at five to six minutes and at the beginning of the day, or whenever the tests were interrupted, two "wake-up" runs were performed before the data collection was continued.

The slowest speed at $C_v = 0.50$ was not tested for the thrust line on keel because after several tests the same results were obtained as with thrust line through the centre of gravity.

4.3 DATA PRESENTATION.

4.3.1 RAW DATA.

During testing, after each run ended, the raw data file was pre-processed to obtain the raw values for the run. With this, the data could be viewed in case there had been a malfunction or an error during the test, and thus determine if the run needed to be repeated. A computer program collected the values from a file, accessed the calibration files, and displayed the results on screen. Figure 4.5 is an example of how the data was displayed, from which the time interval for analysis was selected. The program gave the average over time and stored the values into a file. The standard deviation of the analysis was also recorded. Figure 4.6 is the typical information in a

pre-processed file. It is noted that the water temperature was an input for each test condition. All the files for each run have been backed up, for future research work.

Underwater black and white photographs were obtained on approximately 85% of the runs. The camera was installed at mid-length of the tank and was triggered by an electronic sensor activated as the carriage ran over it. An underwater video camera was also tested, but proved to be not useful at the high velocity tests.

The load cell as well as the RVDT were calibrated periodically to check for any deviation that required the update of the calibration files, but this was never needed.

4.3.2 DATA ANALYSIS

After the underwater films were developed, each pre-processed data file was converted into the Series Data File. Each underwater photograph was interpreted to give values for the wetted length of the keel L_K and of the chine L_C . A computer program was written to read the raw data file, to input L_C and L_K , to compute the wetted surface area W_{SPH} and non-dimensional coefficients for each run, and to write a data file with the processed information.

4.3.3 TABULAR AND GRAPHICAL RESULTS

All the series data files and plots are included in Appendix B. The following is a description of the information contained on each table or graph.

a) Tabular Data.

For each model at a given L_{CG} position and thrust line, all the displacements tested are printed in the same table. Figure 4.7 gives the results for L/B = 3.0, $B = 12^{\circ}$, $L_{CG} = 25\%$

and thrust line through the ventre of gravity. The page heading gives the main particulars for the model, i.e. model geometry and L_{CG} position. Each sub-heading gives the displacement data, V_{CG} position, static trim, and water properties.

After the sub-heading, test data including the dimensional results are presented:

V Velocity (m/s)

R_T Total Resistance (gms)

H Sinkage (cm) where (+) means sinkage and (-) means rise

TAO Relative trim (Degrees). This value is the difference between the static or zero velocity trim and the running trim.

L_c Wetted length of the chine as read from the underwater photographs

L_K Wetted length of the keel

 W_{SPH} Bottom wetted surface area as computed with L_c and L_{κ} .

The coefficients are also included and calculated in non-dimensional terms of chine beam B_{px} :

C_v Velocity Coefficient (Beam Froude Number)

C_T Total resistance Coefficient.

 R_T/W Resistance/Displacement

 H/B_{PX} Non-dimensional sinkage.

TAO (Abs.) = Static + Relative trim.

C_{WSPH} Wetted area coefficient.

With this, four displacements tested for this condition, i.e. $C_D = 0.11$, 0.15, 0.20 and 0.25, each with their own sub-heading of main particulars and run data, are printed in one table.

b) Graphical Results

All the non-dimensional coefficients for each table were plotted as five graphs in one figure. As indicated in Section 2.1.2, the coefficient C_v changes with time, so all other coefficients are plotted as a function of C_v . Figure 4.8 is an example to show how the data are plotted. The figure displays five graphs of C_v versus the five coefficients C_T , R_T/W , TAO, H/B and C_{wsph} respectively.

In both tabular and graphical presentations, and whenever observed, porpoising was also recorded. In the case presented in Figure 4.8, at $C_D = 0.25$ and $C_V = 2.75$, the model presented this dynamic instability. The tabular data has an indication "** Porpoising" after $C_V = 2.50$, and the plot displays the symbol **P** at the speed before which porpoising became evident.

4.4 REPRODUCIBILITY OF EXPERIMENTS

Once the series was completely tested, a check for reproducibility of results was performed to prove that after certain periods, the tests could be modelled and repeated, and the same results would be obtained. Note that reproducibility is not the same as repeatability. Reproducibility means try to re-create the same conditions at which a model was previously tested, such as W, L_{CG} , Velocity, etc, and obtain the same results; whereas repeatability means to perform the same test without having changed any parameter and obtain the same results. The model with L/B = 3.5 and $B = 18^{\circ}$ was chosen to be tested, with two centre of gravity locations and three displacements as indicated in Table 4.3 below:

Table No. 4.3 Test Conditions for Reproducibility

L/B	= 3.5		
B	= 18°		
\underline{L}_{CG}		<u>30%</u>	35%
\overline{C}_{D}		0.15	0.15
_		0.20	0.20
		0.25	0.25

Each condition was tested with thrust line passing through C.G. and five speeds for each case. Figure 4.9 gives the graphical results of these runs, where the solid line represents the original runs, and the hollow symbols represent the reproduced ones. It is observed that a very close agreement was obtained for resistance, trim and sinkage on all six conditions tested.

4.5 STANDARD DEVIATION ANALYSIS

An analysis of the standard deviation of data acquisition was carried out to determine the accuracy range of the series data. The four parameters velocity, resistance, sinkage and trim, were studied on all the runs performed for the model with a L/B of 3.5 and deadrise angle of 18°. All the deviation files were analyzed and the following results were obtained.

a) Velocity Standard Deviation

The velocity analysis presented a very small deviation in all of the 296 runs performed on the model. 274 of the runs were in the order of 0% to 1% in deviation, and only 12 gave a value in the order of 2%.

b).- Resistance Standard Deviation

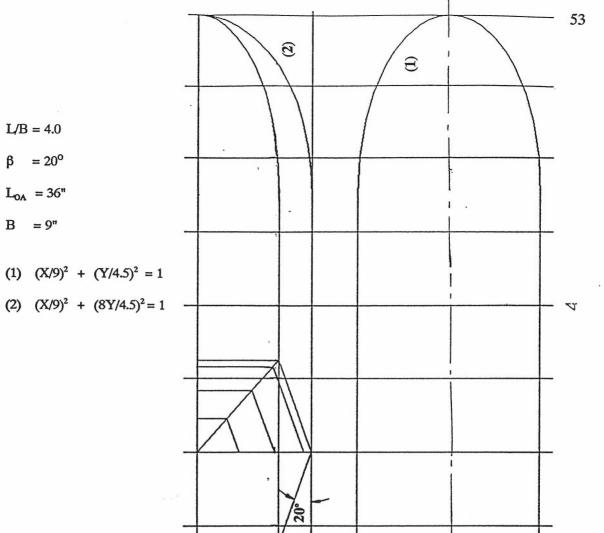
In this case, 248 runs gave a deviation of 10% or less, concentrating mainly in the 2% to 6%. Only 12 runs gave a standard deviation above 10% of the average, and in every single case this happened at a C_v of 0.50.

c).- Sinkage Standard Deviation

From the total of runs, 259 data points showed a deviation below 10%, mainly in the range of 1% to 5%. Only in 37 cases the standard deviation was above 10%, of which 33 cases happened at a C_v 1.25 and 1.50.

d).- Trim Standard Deviation

For the trim angle analysis, in 262 cases the deviation was less than 10%, mainly in the order of 1% to 6%. In 34 cases the deviation was greater than 10%, of which 13 cases were at $C_{\rm v}=2.5$ to 2.75, and the remaining 21 cases were at $C_{\rm v}=0.50$ and 0.75. No case was observed in the range of $C_{\rm v}=1.0$ to 1.25.

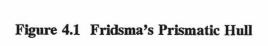


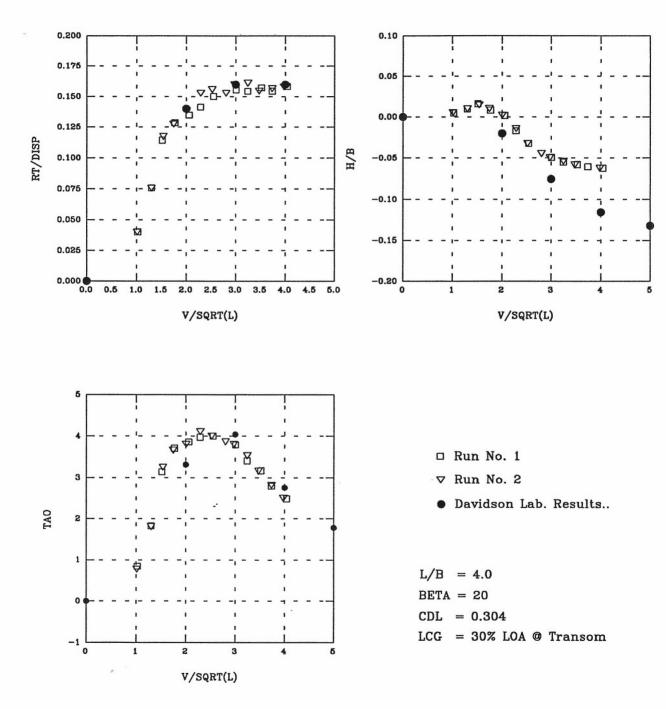
L/B = 4.0

 $\beta = 20^{\circ}$

 $L_{OA} = 36$ "

B = 9"





Flgure 4.2 Towing Tank Calibration

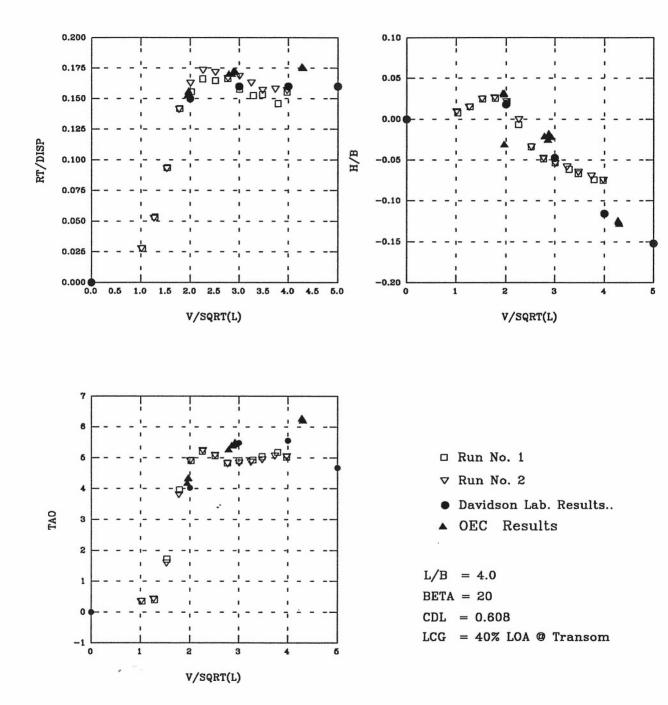
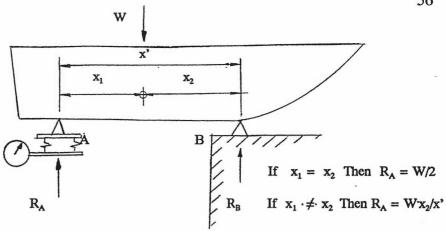
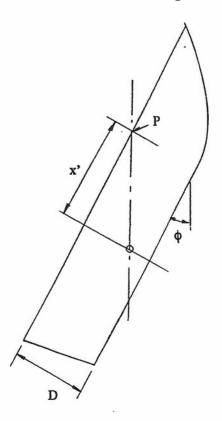


FIgure 4.3 Towing Tank Calibration



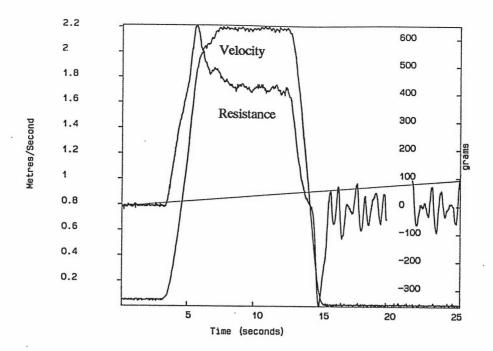
To obtain the desired L_{CG} , ballast the model until the desired W is obtained. Position the model as shown, and move the weights inside the model until R_A is obtained . R_A can be pre-determined as indicated in the figure.



To measure V_{CG} , hang the model from a fixed point P, measure the angle ϕ and compute:

$$V_{CG} = D - x' \tan(\phi)$$

Figure 4.4 Displacement and Center of Gravity Determination



Sinkage and Trim

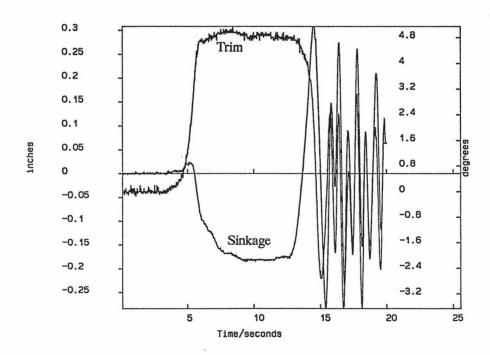


Figure 4.5 Raw Data Display Printout (Time interval is determined from these images)

m 1 21 1324 23 997.540497 0.000932 9.347029e-007

Series T. September 2, 1992

Model and Water Parameters and Coefficients

Units	(CM/IE	et): m	, Scale Factor:	1
Model	Beam:	21	, Model Disp(gms):	1324

Water Temp (deg	C):	23	, Water Density (Kg/m ³): 997.540497
-----------------	-----	----	--

Water Visc	osity:	0.000932 ,	Kinematic	Viscosity:	9.34702	9e-007	
Vel(m/s)	EVel(m/s)	Force(gm)	Heave(cm)	Pitch(deg)	Fn I	orce/disp He	eave/beam
0.718062	0.721895	52.517471	0.026249	0.722639	0.500286	0.039666	0.00125
1.085014	1.091821	165.24469	0.05067	3.416215	0.755947	0.124807	0.002413
1.47071	1.46304	228.431183	-0.03343	5.332665	1.024667	0.172531	-0.001592
1.81984	1.813686	226.69838	-0.144734	5.39462	1.267912	0.171222	-0.006892
2.180472	2.19456	210.134232	-0.247004	4.263574	1.51917	0.158712	-0.011762
2.559242	2.551814	199.271347	-0.284859	2.956167	1.783065	0.150507	-0.013565
3.274605	3.275462	189.52655	-0.29075	1.192157	2.28147	0.143147	-0.013845
3.627017	3.59764	201.295715	-0.291474	0.537147	2.527001	0.152036	-0.01388
3.946524	3.918857	237.154755	-0.294013	0.214692	2.749607	0.17912	-0.014001

a .- Pre-Processed Data File

Vel, stddev	Frc, std	Frc, inter	Heave, std	Heave, intr	Pitch, std	Pitch, intr)
0.008283	4.638415	0.0166	0.002277	-3.76	0.072697	2.24158
0.01212	5.894955	0.0166	0.001021	-3.76	0.09388	2.24158
0.008908	6.348612	0.0166	0.001155	-3.76	0.093143	2.24158
0.011756	5.347516	0.0166	0.001257	-3.76	0.081386	2.24158
0.01302	13.856941	0.0166	0.004115	-3.76	0.083139	2.24158
0.014797	8.156363	0.0166	0.008495	-3.76	0.067772	2.24158
0.012082	16.714451	0.0166	0.004418	-3.76	0.080044	2.24158
0.020163	18.682917	0.0166	0.003865	-3.76	0.097508	2.24158
0.015147	20.481842	0.0166	0.003048	-3.76	0.089939	2.24158
0.019194	19.283854	0.0166	0.002998	-3.76	0.084444	2.24158

b .- Standard Deviation File

Figure 4.6 Raw Data Files Example

L/B Rat Deadris	se	12	.0 deg		Length Ov Breath (I	eck) E hine) E	3 2: 3PX 2:	9.00 cm 3.00 cm 1.00 cm			59	
			.00 % L		17.25 cm		nsom					
VCG Pos	trim TA	.0o 4	.13 % B		Disp. Coe 5.78 cm	@ Base	Line	0.11 g/m3 Ki:	n. Visc	ocity	0.9457E	-06 m2/s
Vel	RT	н	TAO	LC	LK	WSPH	CSP	CT		H/BPX		
m/s	gms	cm	deg	cm	cm	cm2	CSF	x10-3	KI/DIS	II/ DE K	Total	Cwsph
1.078	195.2	0.30	4.10		42.78	824.5	0.751	40.062220	0.147	0.014	8.20	1.870
1.458	290.3	-0.50		24.84		617.6	1.016			-0.024		1.401
1.803 2.172	273.7 249.8	-1.34 -1.90		20.36		514.1 477.1	1.256					1.166 1.082
2.555	216.7	-2.11		15.40		443.7						1.006
2.907	203.5	-2.11		13.41		423.1				-0.100		0.959
3.273	189.8	-2.08		11.52						-0.099		0.928
3.628 3.957		-2.01 -1.96	0.13	9.87	27.80 29.33		2.528 2.757	7.455128 7.468892		-0.096	4.23 3.96	0.916 0.923
								7.400092	0.163	-0.093	3.70	0.923
	cement D sition trim TA				Disp. Coe 5.88 cm	eff. C @ Base	DL (Line	0.1503				
Water 1	remp.	22	.50 deg	C	Density	997	.658 kg	g/m3 Ki	n. Visc	ocity	0.9457E	-06 m2/s
Vel	RT	н	TAO	LC	LK	SWPH	Cv	CT	RT/DTS	H/BPX	TAO	Cswph
m/s	gms	cm	deg	cm	cm	cm2	••	x10-3	1(1/ 010	11, 11, 11	Abs.	Compii
1.086 1.449	271.6 510.8	0.36 -0.61	4.30 8.85	34.50 27.12	43.13 28.64	831.9 597.7	0.757	54.41037 80.10178		0.017	9.59 14.14	1.886 1.355
1.812		-1.88		21.39		517.8	1.262	54.69332				1.174
2.182	417.2	-2.41		17.46	26.01	466.0	1.520	36.98385				1.057
2.561	339.1	-2.82		15.53	25.88	443.8	1.784	22.91281		-0.134		1.006
2.918	301.5	-2.83		13.80		432.7	2.033			-0.135		0.981
3.285	278.3	-2.75		12.77	29.67	454.9	2.288					1.032
3.629 ** Porpo		-2.52	0.15	8.63	30.36	417.9	2.528	9.48877	0.146	-0.120	5.44	0.948
rorpo	JISING											
Displac	cement D	IS 243	2.0 gm	s	Disp. Coe	ff. C		.20				
VCG Pos	sition	26	.35 % B		6.06 cm	@ Base	Line					
Water 7	trim TA	00 6	.99 deg	C	Dengity	997	.658 kg	g/m3 Kii	n. Visco	ocity	0.9457E	-06 m2/s
water 1	remp.	22	.so deg	•	Densicy	,,,,	.030 K	3/M3 KI	1. 11500	JOICY	0.74312	-00 MZ/5
Vel	RT	H	TAO	LC	LK	WSPH	CSP	CT	RT/DIS	H/BPX		Cwsph
m/s	gms	cm	deg	cm	cm	cm2		x10-3			Total	
1.079	358.2	0.33	4.71	36.57	43.47	855.9	0.752	70.658950	0.147	0.015	11.70	1.941
1.455		-0.69		27.60	31.74	636.1		125.646900		-0.033	18.57	1.44
1.805	832.8	-2.25		23.11	27.60	543.7	1.257			-0.107	17.80	1.233
2.174	688.7	-3.33	7.66	20.70	25.88	499.3	1.515	57.379550		-0.158	14.65	1.132
2.551	543.8	-3.76			25.19			34.708190		-0.179	11.49	1.073
2.921	455.1	-3.49 -3.68		17.25	25.32		2.035		0.187	-0.166	9.33 7.78	1.035 0.998
3.291 ** Port	373.0 ooising	-3.68	0.79	15.53	25.53	440.1	2.293	15.385920	0.155	-0.175	7.70	0.996
2022	,0202119											
	cement D		2.0 gm		Disp. Coe			.25				
VCG Pos			.91 % B		5.96 cm	@ Base	Line					
Water 1	trim TA		.90 deg		Density	997	.658 kg	r/m3 Kii	n. Visco	ocity	0.9457E	-06 m2/s
water 1	remp.	22	• Ju deg	C	Density	,,,,	.020 K	3/M3 KI	1. 41300	JCICY	0.74372	-00 M2/5
Vel	RT	H	TAO	LC	LK	WSPH	CSP	CT	RT/DIS	H/BPX	TAO	Cwsph
m/s	gms	cm	deg	cm	cm	cm2		x10-3			Total	
1.081	429.7	0.34	4.99	37.95	45.20	887.8	0.753	81.455480	0.141	0.016	12.89	2.013
1.448	1184.3	-0.44	11.49	30.02	33.81	684.1		162.395800		-0.021	19.39	1.55
1.794	1101.9	-2.02	9.99	27.60	30.70	625.0		107.773200		-0.096	17.89	1.41
2.166	1010.2	-3.74	7.93	22.77	27.25	536.3	1.509	78.932640	0.332	-0.178	15.83	1.216
2.519	804.1	-4.58	5.33	20.36	25.53	491.9	1.755			-0.218	13.23	1.115
2.897	652.3	-4.34	2.66	18.29	24.50	458.6	2.019			-0.207	10.56	1.040
3.252	586.8	-4.57	-0.02	17.25	26.91	473.4	2.265	23.056260	0.193	-0.218	7.88	1.073
POI	rpoising											

 $L\!/B=3.0$; $\beta=12^{\circ}$; L_{CG} = 25% From transom ; Thrust Line : Center of Gravity

Figure 4.7 Series Tabular Data Format

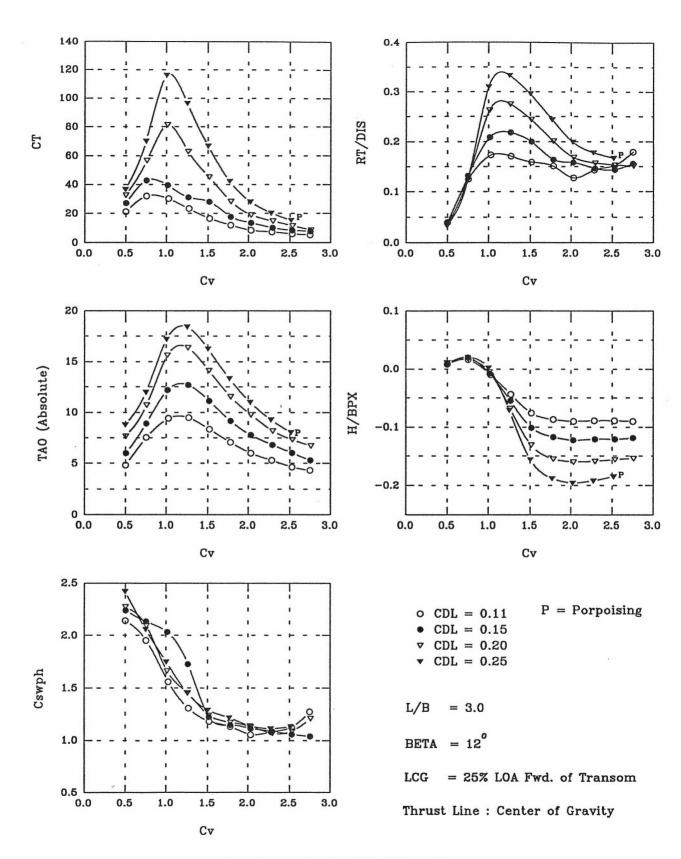


Figure 4.8 Series Graphical Format

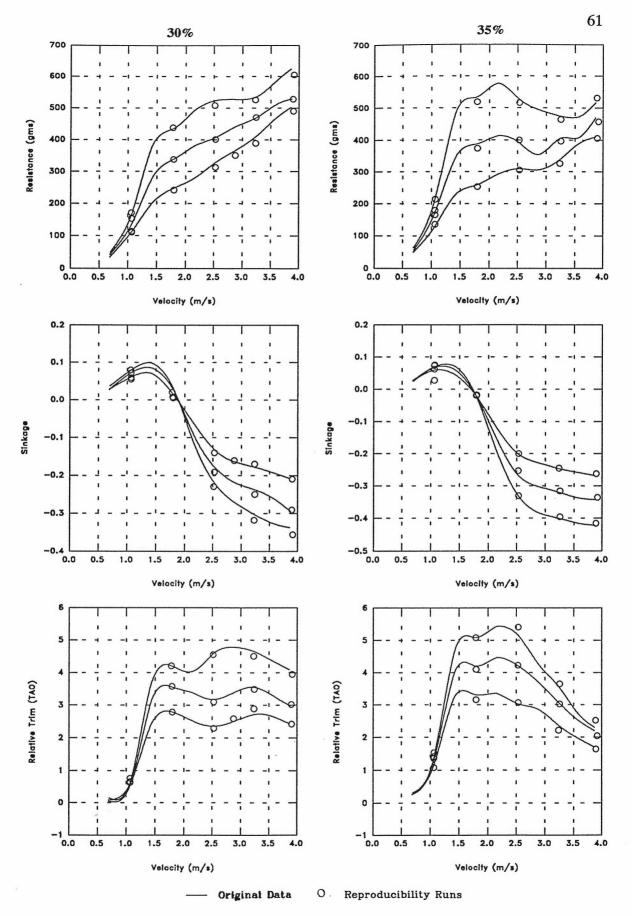


Figure 4.9 Reproducibility Runs. L/B = 3.0 ; β = 18° ; L_{CG} = 30% and 0.35%

5.0 DISCUSSIONS OF THE RESULTS

The testing of a systematic series will always raise the question of the need for this type of information, given that existing statistical and empirical prediction methods, as well as computational methods can predict the performance of marine vehicles to a certain extent. This experimental work was still required considering that:

- a) Numerical or statistical methods rely on experimental data to define curves, patterns, empirical formulas and their related coefficients. On a review of some existing methods, it was observed that various methods had been developed by considering the work addressed in Section 1.0, as well as results from earlier work [13,27], and in some cases there has been an amalgamation of planing, semi-displacement, hard chine and round bottom hulls series to develop these methods [22,26]. Incorporation of new data, based on newer hull shapes is advisable in order to update or redefine coefficients and equations,
- b) Computational methods will always require experimental data for validation. Still now there are conditions that have not been solved and must be approximated by linear theory.

It is considered that this series can provide services to research, academia and industry by presenting the data in simple tabular and graphical forms that may allow naval architects and researchers to predict performance of their new designs, giving quantitative data which are available to create new methods or to update existing prediction methods, and to validate numerical and theoretical methods and models, and introducing qualitative patterns and trends that

of planing craft and the effect of the hull parameters and proportions; or to improve and optimize designs.

5.1 DATA RELIABILITY

The question of the towing tank size and the reliability of results had to be addressed and answered to ensure that the results could be used with a good level of confidence.

From the results obtained during the tank calibration, Section 4.1, it is noted that testing a model of identical size, and as far as possible reproducing the experiment conditions, gave practically the same results as the Davidson Laboratory at the Stevens Institute of Technology. The results indicate that high speed tests can be performed in the small tank facilities to obtain reasonably reliable results.

5.2 SERIES RESULTS

As obtained from Table 4.1, testing nine models with a total of 210 conditions produced the final results of the series. Intensive analysis and cross reference will be needed to obtain definite quantitative values as well as qualitative patterns and trends. Nevertheless, some initial findings must be discussed here:

5.2.1 DISPLACEMENT TO PLANING RANGE TRANSITION

Many runs were video recorded with the camera installed in the rear end of the carriage. Close observation to the transom showed that it always ventilated between $C_v = 0.75$ to 1.0. This value seems to be slightly higher than the value of $C_v = 0.5$ indicated by Savitsky and Brown [28].

5.2.2 RESISTANCE CURVES

The resistance coefficient curves show in all cases a very uniform family of curves for all displacement conditions. The hump is very easily distinguished, and it is important to observe that once in the planing range, the C_T curves tend to converge to the same value regardless the displacement.

The displacement and pre-planing ranges of the R_T/W curves show a clear hump, very much dependent on the displacement. But once in the planing range for C_V greater then 1.50, the curves cross to each other, and the high C_D conditions give a lower R_T/W value, meaning that it becomes more efficient in terms of power/displacement. These indications could be useful in determining the overall efficiency of designs and for optimizing powering and propulsion systems.

It is noted that at very low C_D values, and in almost all the conditions tested, the R_T/W curve is very unstable. The curve seems to be oscillatory and could give indications of potential problems in propulsion system design and performance prediction, although it needs to be further investigated.

5.2.3 TRIM ANGLE CURVES

The trim angle curves also display a uniform family of curves in most graphs. The maximum angle occurs in the proximity of $C_V = 1.5$. As already described by others, there is a very close relation between the trim angle and the total resistance. It is also noted that under certain load conditions a double hump occurs in the trim angle, which seems to be dependent on L_{CG} and L/B ratio. It is clearly observed at $L_{CG} = 35\%$ from the transom and L/B = 3.5 and to a lesser extent at L/B = 3.0. As the L_{CG} moves aft to 30% and 25%, or L/B = 2.5, it tends to disappear.

5.2.4 SINKAGE CURVES

In almost all the cases the sinkage of the centre of gravity became negative (rise) at a C_v between 1.0 and 1.25. This range agrees well with the ranges stated by Savitsky and Brown [28]. It is noted that this transition from sinkage to rise is independent of τ , L/B, β and W. It can be seen that the transition happens at the same value for each condition tested on all the displacements, and that in all the cases at a C_v in the order of 2.0, the rise of the centre of gravity is constant, i.e. there is practically no rate of change, but it is noticed that the gradient in trim angle and resistance is still significant.

5.2.5 WETTED SURFACE CURVES

The wetted surface area coefficient C_{WSPH} in all the conditions tested is observed to follow not only the same family, but also the same values regardless the displacement. In the same manner that the sinkage becomes stable at C_V in the order of 2.0, the wetted surface coefficient, C_{WSPH} , seems to become constant at this same C_V value.

5.2.6 PORPOISING CONDITIONS

This is one of the several dynamic instabilities on high speed planing mono-hulls, and is characterized by a pitch motion in calm water, of increasing frequency and amplitude, which is very uncomfortable for crew and passengers, and it can cause severe structural and systems damage, if not a total loss of the vessel. Several authors have addressed this topic and work has been performed since several decades ago, such as [3], [10], [21], [25] and [27] among others.

Table 5.1 is a summary of the conditions at which porpoising was recorded in all the tests. However, other conditions most probably would have shown this instability if higher speeds had Table 5.1 is a summary of the conditions at which porpoising was recorded in all the tests. However, other conditions most probably would have shown this instability if higher speeds had been possible to achieve in the towing tank.

Table No. 5.1 Summary of Porpoising Conditions.

L/B	B	\underline{L}_{cg}	\underline{C}_{D}	$\underline{\mathbf{C}}_{\mathbf{v}}$	Thrust Line
2.5	12	25%	0.10	2.75	C.Gravity
2.5	12	25%	0.15	2.25	C.Gravity
2.5	12	25%	0.20	2.25	C.Gravity
2.5	12	25%	0.10	2.00	B.Line
2.5	12	25%	0.15	2.00	B.Line
2.5	12	25%	0.20	2.00	B.Line
3.0	12	25%	0.25	2.75	C.Gravity
3.0	12	25%	0.15	2.75	B.Line
3.0	12	25%	0.20	2.50	B.Line
3.0	12	25%	0.25	2.50	B.Line
2.5	18	25%	0.15	2.25	B.Line
2.5	24	25%	0.20	2.00	C.Gravity
2.5	24	25%	0.20	2.25	B.Line
3.0	24	25%	0.25	2.25	B.Line

It is clear that the L_{CG} has a major influence in this instability, only at 25% L_{OA} porpoising was observed. The L/B ratio also seems to be important, it was observed at a L/B of 2.5 and in some cases at L/B of 3.0, but never at L/B of 3.5. The deadrise angle had an influence, most cases occurred on the β = 12° models. The thrust line location also has an effect on this instability. If porpoising was observed for a certain condition with the thrust line through the centre of gravity, in most cases it would be observed for the thrust line passing through the base line at a lower C_V value.

5.3 PRELIMINARY CROSS ANALYSIS OF THE DATA

In a preliminary cross analysis of the series certain pattern effects have been observed and must be mentioned here, but they should not be considered as definite conclusions until a further extensive analysis is performed.

The series data should be cross-analyzed in all combinations of the main variables of the hulls to determine definite patterns and trends. There are a great number of possible combinations of variables, and in several cases analyzed the following observations are made:

5.3.1 EFFECT OF THE CENTRE OF GRAVITY LOCATION

Figure 5.1 is an example of the effect of the position of the centre of gravity, when C_D , L/B and β remain constant. It is noted that the C_T curves are significantly higher for the L_{CG} at 25% from transom, and reduces significantly as L_{CG} moves forward to 30% and 35%. The trim angle also displays this behaviour. The rise of the centre of gravity is also higher as L_{CG} is aft, and reduces as L_{CG} moves Forward.

5.3.2 EFFECT OF THE L/B RATIO

Figure 5.2 presents a case when L_{CG} , β and C_D remain constant, and L/B is the variable. Very clearly, the slenderer models have lower C_T values, lower the trim angles, and lower rise in the centre of gravity. This may mean that for a given displacement, if there is no restriction in the L/B Ratio, it seems to be preferable to select higher L/B ratios.

5.3.3 EFFECT OF THE THRUST LINE.

The effect of the thrust line is presented in an example of Figure 5.3. In the cases studied, it was noted that when the thrust line passed through the centre of gravity, the C_T curve seemed to be lower than the case with the thrust line through the base line. However, at the planing speed, it was always determined that the C_T curve for the base line condition became lower than the centre

of gravity condition. In the cases studied, this change occurred typically in the range of 1.25 to 2.25. The trim angle in the same manner would cross, which explained why the C_T values became lower. But this change most of the time happened at lower C_V than the C_T change. The raise of the centre of gravity seemed to be always smaller in the centre of gravity condition.

This type of combination analysis, as well as others, such as effect of deadrise angle, etc. will be required for the series. Once completed, a better understanding on the performance of planing hulls may be acquired.

5.4 REPRODUCIBILITY RESULTS

This part of the work indicates that the experiment can be reproduced if the conditions and all the required information is recorded and supplied. In fact, during the test of the models with 24° in deadrise, the load cell was permanently damaged. A new cell was installed, calibrated and the test continued. In this way, the reproduction runs were performed with a new load cell. It was observed on Figure 4.9 that practically the same results were obtained.

5.5 ERROR ANALYSIS RESULTS

The standard deviation in the runs were analyzed to explain whenever the deviation exceeded 10%. After reviewing the data it was determined that:

a) The resistance deviation exceeded 10% only at $C_V = 0.50$, and this is the displacement range of the towing. The typical resistance was in the order of 30 to 100 gms. The deviation values for the resistance at this speed were in the order of 3 to 15 gms, which

are a relatively small value, but when compared to relatively low resistance, it gave a relatively high deviation.

- b) The sinkage was observed to have deviations up to 80% at speeds where $C_v = 1.25$ to 1.50. This was the transition zone, where $H \sim 0$, and the deviation in these cases was noted to be in the order of tenths of millimetre. Although for such relatively low values, the deviation can certainly represent a large percentage when $H \sim 0$. It can be considered that these deviations are irrelevant.
- c) The high trim angle deviations occurred at low and high C_v values. These cases are considered similar to the resistance deviations. The resulting relative trims at such speeds are relatively small, so any variation above 0.1 to 0.3 degrees, typical in such cases, may represent a very high deviation, although a small relative value.

In an overall sense, it may be considered that the deviation of acquired data of the series is within good ranges or may be considered irrelevant.

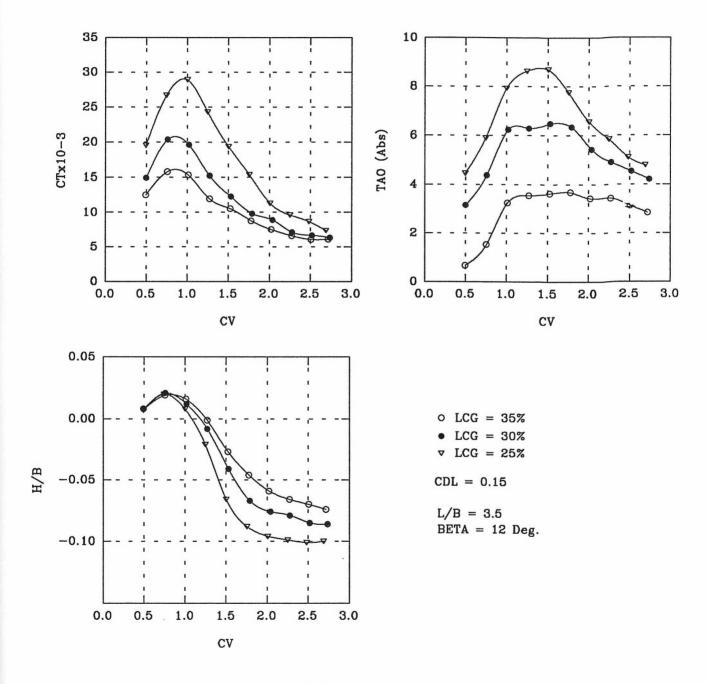


Figure 5.1 Effect of L_{CG} Position

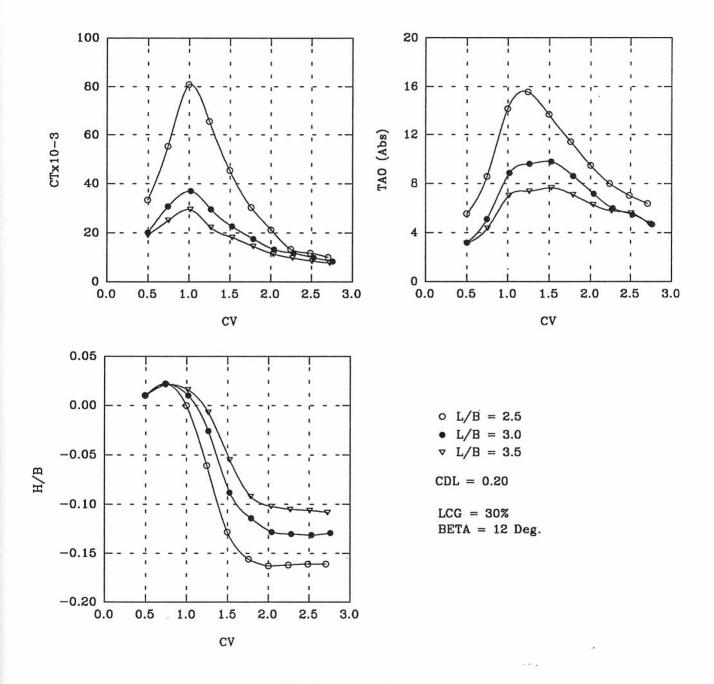


Figure 5.2 Effect of L/B Ratio

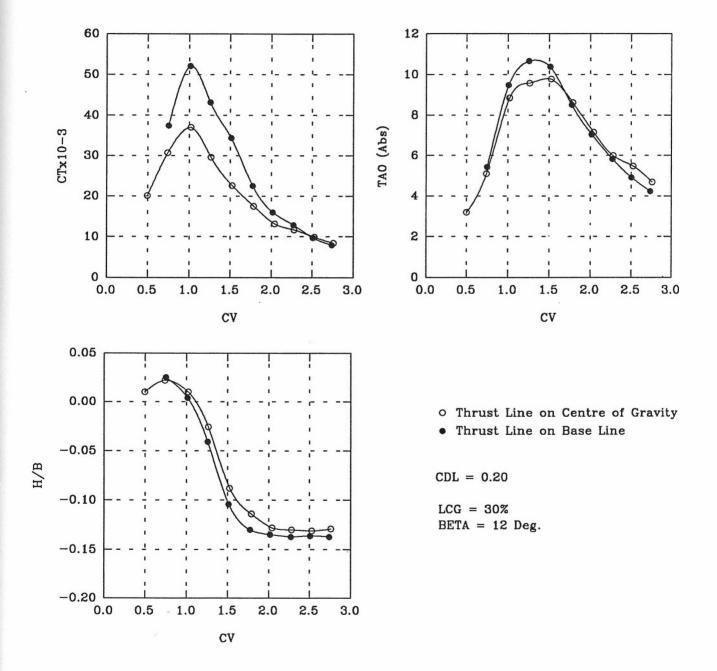


Figure 5.3 Effect of Thrust Line

6.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the review of existing experimental work, it is found that the small high speed planing mono-hull has not been completely represented by the available series. Therefore, a new series of planing hulls was designed and developed, based on the geometry of typical modern day existing designs. Nine models were built to represent small high speed craft with L/B ratios of 2.5, 3.0 and 3.5, and deadrise angles of 12°, 18° and 24°, representing patrol boats, rescue craft, fast fishing boats and pleasure craft, among others. The series was tested only in calm water for a range of displacement, centre of gravity location, thrust line and velocity determined from an analysis of existing hulls and recommendations set by other researchers, with a total of 2,500 runs approximately at 210 test conditions over a time period of approximately 8 months.

The TUNS Towing Tank has proved to give reliable results for testing high speed hulls of small craft, based on the comparison with experiments performed at other reputable experimental facilities.

The data acquisition was very constant, and a high level of repeatability was obtained as observed from the tank calibration results. Several conditions were reproduced after a period of time, and excellent results were obtained. Underwater photographs gave very good results. Video recording systems were of great help in the determination of porpoising, and the displacement to planing transition range of speeds.

Turbulence stimulation was provided by means of Hama strips installed at Station 4 on all the hulls. This configuration was chosen after testing several conditions on the parent hull. Hama

strips seem to be adequate for high speed model testing.

Data are presented in tabular and graphical forms and are readily available for further work, design or research. The following is a list of additional investigation that is considered needed for future research of this series:

- A complete cross analysis of the data, similar to the figures discussed in Section 5.3 should be performed to obtain qualitative patterns of the small planing hull with low L/B ratios.
- A prediction method can be developed for this series exclusively to represent the low L/B values and deep vee hulls. This method could be manually based on interpolation over the curves, and/or statistically based on regression analysis of the data.
- Existing prediction methods can be re-defined or re-analyzed to include or update coefficients or equations that may seem relevant from this work.
- Lift coefficients must be evaluated, and this may be done by evaluating the rise of the centre of gravity and the change of the trim angle.

Additional future experimental work with these models is recommended as:

- a study of the effect of the size and number of lifting or spray strake, and

- selecting the "best" calm water conditions for each model, and then testing such conditions in regular or irregular waves.

Other suggested investigations may include an evaluation of the porpoising conditions observed during this work and a comparison to limits determined by other researchers, and a possible redefinition of these limits.

Although the tank calibration gave good results as compared with results obtained by the Davidson's Laboratory, following the recommendations of the 19TH ITTC, it is worthwhile to investigate further the effects of the tank size on the testing results, i.e. shallow water and tank wall effects in the displacement range of speeds, and aerodynamic effects in the planing range. Turbulence stimulation devices for high speed small models should also be further studied.

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APPENDIX A LINES AND OFFSETS FOR THE SERIES MODELS

(Note: Station 6 to 10 have the same offsets)

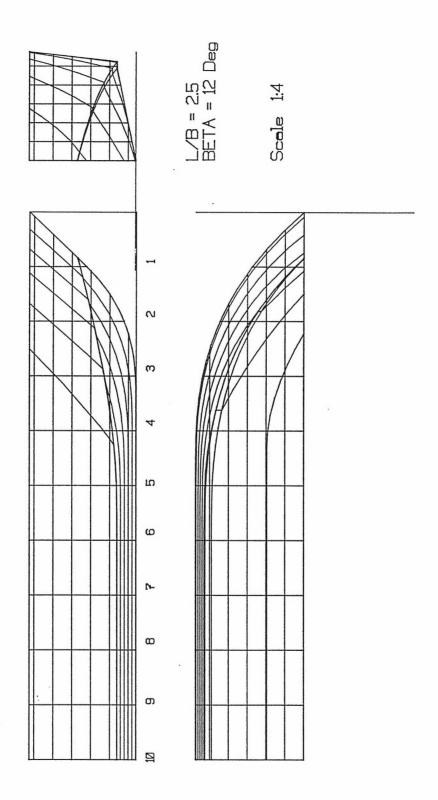


Figure A.1 Lines Plan L/B = 2.5; β = 12°

L/B = 2.5	BETA = 12 Deg.			
Station = Sheer Line Chine 1 Chine 2 Buttock	1.00 Xposition = 0 Height Height Height 0.0000	= 0.0596	Half-Breadth = Half-Breadth = Half-Breadth = Height =	0.0550 0.0096 0.0089 0.1120
Station = Sheer Line Chine 1 Chine 2 Waterline Waterline Waterline Waterline Buttock Buttock Buttock Buttock Buttock Buttock Buttock	2.00 Xposition = 0.	= 0.0455	Half-Breadth = Height = Height = Height = Height =	0.0891 0.0557 0.0520 0.0255 0.0572 0.0686 0.0783 0.0870 0.0125 0.0245 0.0374 0.0525 0.0918
Station = Sheer Line Chine 1 Chine 2 Waterline Waterline Waterline Waterline Waterline Buttock Buttock Buttock Buttock Buttock Buttock Buttock Buttock Buttock	3.00 Xposition = 0. Height Height O.0080 O.0280 O.0480 O.0680 O.0880 O.1080 O.0000 O.0200 O.0400 O.0600 O.0800 O.0800 O.1000	= 0.0338	Half-Breadth = Height =	0.1074 0.0829 0.0775 0.0226 0.0664 0.0880 0.0947 0.1008 0.1061 0.0006 0.0070 0.0152 0.0247 0.0338 0.0854

Station =	4.00 Xp	osition = 0.23	20		
Sheer Line	4.00 AP	Height =	0.1130	Half-Breadth =	0.1142
Chine 1		Height =	0.0251	Half-Breadth =	
Chine 2		177 C			0.0978
Waterline	0 0000	Height =	0.0251	Half-Breadth =	0.0914
	0.0080			Half-Breadth =	0.0382
Waterline	0.0280			Half-Breadth =	0.0985
Waterline	0.0480			Half-Breadth =	0.1029
Waterline	0.0680			Half-Breadth =	0.1069
Waterline	0.0880			Half-Breadth =	0.1105
Waterline	0.1080			Half-Breadth =	0.1135
Buttock	0.0000		•	Height =	0.0000
Buttock	0.0200			Height =	0.0041
Buttock	0.0400			Height =	0.0085
Buttock	0.0600			Height =	0.0139
Buttock	0.0800			Height =	0.0207
Buttock	0.1000			Height =	0.0346
al III .					
Station =	5.00 Xp	osition = 0.28			
Sheer Line Chine 1		Height =	0.1130	Half-Breadth =	0.1150
W. 1977		Height =	0.0206	Half-Breadth =	0.1042
Chine 2		Height =	0.0206	Half-Breadth =	0.0972
Waterline	0.0080			Half-Breadth =	0.0392
Waterline	0.0280			Half-Breadth =	0.1052
Waterline	0.0480			Half-Breadth =	0.1077
Waterline	0.0680			Half-Breadth =	0.1101
Waterline	0.0880			Half-Breadth =	0.1123
Waterline	0.1080			Half-Breadth =	0.1145
Buttock	0.0000			Height =	0.0000
Buttock	0.0200			Height =	0.0041
Buttock	0.0400			Height =	0.0082
Buttock	0.0600			Height =	0.0122
Buttock	0.0800			Height =	0.0165
Buttock	0.1000			Height =	0.0206
Chablan a	C 00 V	!hi 0 24	r 0		
Station = Sheer Line	6.00 Xp	osition = 0.34 Height =	0.1130	Half-Breadth =	0.1150
Chine 1		Height =	0.0200	Half-Breadth =	0.1150
Chine 2		Height =	0.0200	Half-Breadth =	0.1030
Waterline	0.0080	nergiit -	0.0200	Half-Breadth =	0.0392
Waterline	0.0280			Half-Breadth =	0.1059
Waterline	0.0480			Half-Breadth =	0.1039
Waterline	0.0480			Half-Breadth =	0.1102
Waterline				Half-Breadth =	0.1102
Waterline	0.0880 0.1080			Half-Breadth =	0.1123
Buttock					
Buttock	0.0000 0.0200			Height =	0.0000
Buttock	0.0400			Height = Height =	0.0041
Buttock	0.0600			Height =	0.0082
Buttock	0.0800				0.0122
Buttock	0.1000			Height =	0.0103
AULLUCK	0.1000			Height =	0.0200

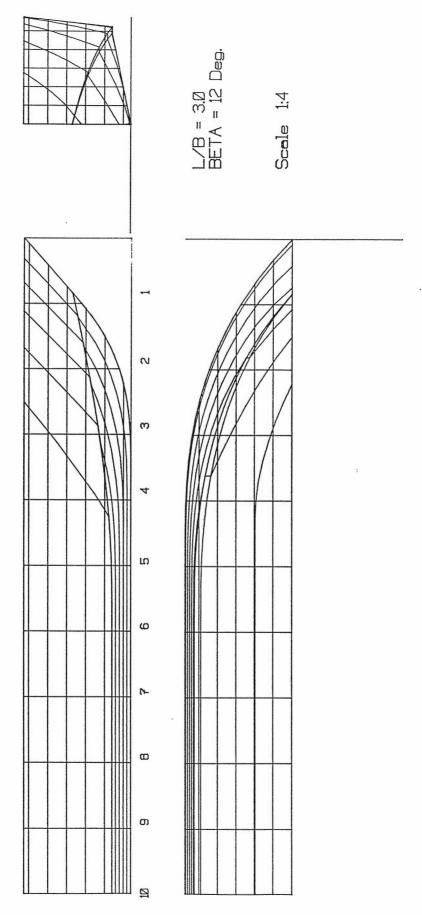


Figure A.2 Lines Plan L/B = 3.0; β = 12°

L/B = 3.0	BETA = 12 Deg.		
Station = Sheer Line Chine 1 Chine 2 Buttock	1.00 Xposition = 0.0 Height: Height: Height: 0.0000	= 0.0596 Half-Breadth =	0.0550 0.0096 0.0089 0.1122
Station = Sheer Line Chine 1 Chine 2 Waterline Waterline Waterline Waterline Waterline Buttock Buttock Buttock Buttock Buttock Buttock	2.00 Xposition = 0.1	= 0.0455 Half-Breadth =	0.0891 0.0557 0.0520 0.0255 0.0572 0.0686 0.0783 0.0870 0.0125 0.0245 0.0374 0.0525 0.0918
Station =	3.00 Xposition = 0.2	2070	
Sheer Line Chine 1 Chine 2 Waterline Waterline Waterline Waterline Waterline Buttock	Height = Height = 0.0080	= 0.0338 Half-Breadth =	0.1074 0.0829 0.0775 0.0226 0.0664 0.0880 0.0947 0.1008 0.1061 0.0006 0.0070 0.0152 0.0247 0.0338 0.0854

Station = Sheer Line Chine 1 Chine 2 Waterline Waterline Waterline Waterline Waterline Waterline Buttock Buttock Buttock Buttock Buttock Buttock Buttock Buttock Buttock	H	eight = eight =	0.1130 0.0251 0.0251	Half-Breadth = Height =	0.1142 0.0978 0.0914 0.0382 0.0985 0.1029 0.1069 0.1105 0.1135 0.0000 0.0041 0.0085 0.0139 0.0207
Station =	5.00 Xposition	- 0 2450			
Station = Sheer Line Chine 1 Chine 2 Waterline Waterline Waterline Waterline Waterline Buttock	Н	eight = eight =	0.1130 0.0206 0.0206	Half-Breadth = Height =	0.1150 0.1042 0.0972 0.0392 0.1052 0.1077 0.1101 0.1123 0.1145 0.0000 0.0041 0.0082 0.0122 0.0165 0.0206
	and the state of				
Station = Sheer Line Chine 1 Chine 2 Waterline Waterline Waterline Waterline Waterline Buttock Buttock Buttock Buttock Buttock Buttock Buttock Buttock	H	eight = eight =	0.1130 0.0200 0.0200	Half-Breadth = Height =	0.1150 0.1050 0.0980 0.0392 0.1059 0.1080 0.1102 0.1123 0.1145 0.0000 0.0041 0.0082 0.0122 0.0163 0.0200

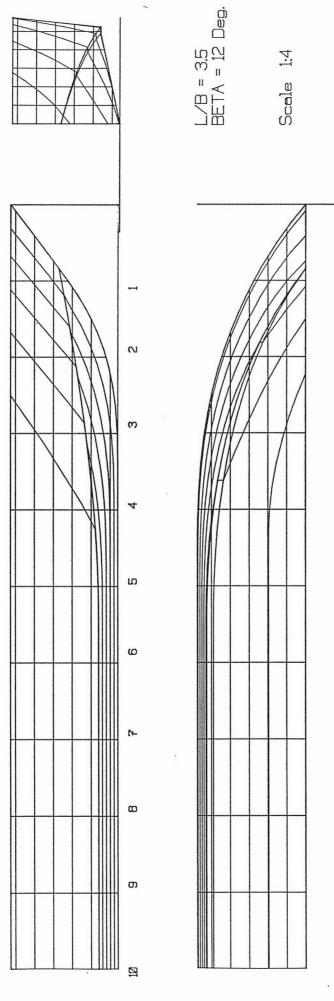


Figure A.3 Lines Plan L/B = 3.5; β = 12°

L/B = 3.5	BETA = .	12 Deg.					
Station = Sheer Line Chine 1 Chine 2		1	= 0. Height Height Height	=	0.1130 0.0596 0.0596	Half-Breadth = Half-Breadth = Half-Breadth =	0.0096
Buttock	0.0000					Height =	0.1123
Station =	2.00 X	position	= 0.	1610			
Sheer Line Chine 1			leight		0.1130	Half-Breadth =	
Chine 2			leight leight		0.0455	Half-Breadth = Half-Breadth =	0.0558
Waterline	0.0280	•				Half-Breadth =	0.0255
Waterline Waterline	0.0480					Half-Breadth =	0.0573
Waterline	0.0680					Half-Breadth = Half-Breadth =	0.0686 0.0783
Waterline	0.1080					Half-Breadth =	0.0870
Buttock Buttock	0.0000					Height =	0.0125
Buttock	0.0400					Height = Height =	0.0245
Buttock	0.0600					Height =	0.0525
Buttock	0.0800					Height =	0.0918
Station =	3.00 X	position	= 0.	2415			
Sheer Line			eight		0.1130	Half-Breadth =	0.1074
Chine 1 Chine 2			eight		0.0338	Half-Breadth =	0.0829
Waterline	0.0080	н	eight	=	0.0338	Half-Breadth = Half-Breadth =	0.0775
Waterline	0.0280					Half-Breadth =	0.0226 0.0664
Waterline	0.0480					Half-Breadth =	0.0880
Waterline	0.0680					Half-Breadth =	0.0947
Waterline	0.0880					Half-Breadth =	0.1008
Waterline	0.1080					Half-Breadth =	0.1061
Buttock	0.0000					Height =	0.0006
Buttock	0.0200					Height =	0.0070
Buttock	0.0400					Height =	0.0152
Buttock Buttock	0.0600					Height =	0.0247
Buttock	0.0800					Height =	0.0338
Durryon	0.1000					Height =	0.0854

Station =	4.00 Xposit				
Sheer Line Chine 1 Chine 2 Waterline Waterline Waterline Waterline Waterline Buttock	0.0080 0.0280 0.0480 0.0680 0.0880 0.1080 0.0000 0.0200 0.0400 0.0600 0.0800 0.1000	Height = Height = Height =	0.1130 0.0251 0.0251	Half-Breadth = Height =	0.1142 0.0978 0.0914 0.0382 0.0985 0.1029 0.1069 0.1105 0.1135 0.0000 0.0041 0.0085 0.0139 0.0207
Station = 5.00					
Sheer Line Chine 1 Chine 2 Waterline Waterline Waterline Waterline Waterline Buttock	0.0080 0.0280 0.0480 0.0680 0.1080 0.0000 0.0200 0.0400 0.0600 0.0800 0.1000	ion = 0.402 Height = Height = Height =	0.1130 0.0206 0.0206	Half-Breadth = Height =	0.1150 0.1042 0.0972 0.0972 0.1052 0.1077 0.1101 0.1123 0.1145 0.0000 0.0041 0.0082 0.0123 0.0165 0.0206
				(ALT WIS)	
Station =					
Sheer Line Chine 1 Chine 2 Waterline Waterline Waterline Waterline Waterline Waterline Buttock	0.0080 0.0280 0.0480 0.0680 0.0880 0.1080 0.0000 0.0200 0.0400 0.0600 0.0800 0.1000	Height = Height = Height =	0.1130 0.0200 0.0200	Half-Breadth = Height =	0.1150 0.1050 0.0980 0.0392 0.1059 0.1080 0.1102 0.1123 0.1145 0.0000 0.0041 0.0082 0.0122 0.0163 0.0200

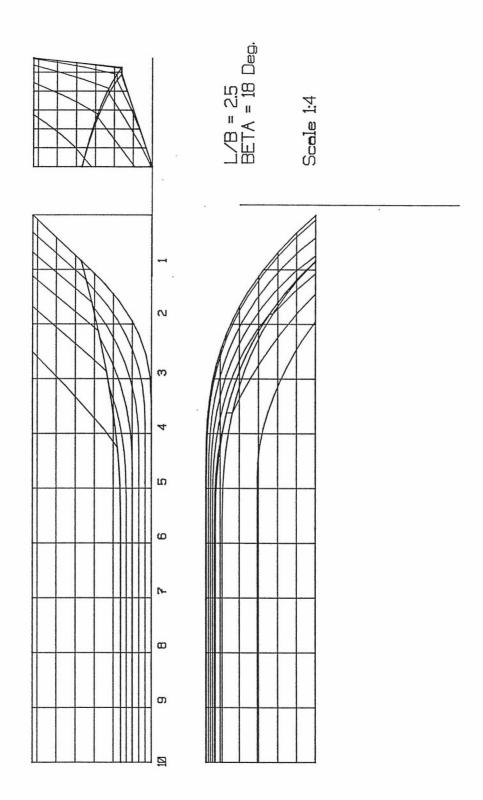


Figure A.4 Lines Plan L/B = 2.5; $\beta = 18^{\circ}$

L/B = 2.5	BETA = 18 Deg.			
Station = Sheer Line Chine 1 Chine 2 Buttock	1.00 Xposition = 0.0575	Half-Breadth = 0.0550 Half-Breadth = 0.0096 Half-Breadth = 0.0089 Height = 0.1240	Station = 4.00 Xposition = 0.230	0.1250 Half-Breadth = 0.1142 0.0371 Half-Breadth = 0.0978 0.0371 Half-Breadth = 0.0914 Half-Breadth = 0.0562 Half-Breadth = 0.0985
Station = Sheer Line Chine 1 Chine 2 Waterline Waterline Waterline Waterline Waterline	2.00 Xposition = 0.1150	Half-Breadth = 0.0891 Half-Breadth = 0.0557 Half-Breadth = 0.0520 Half-Breadth = 0.0023 Half-Breadth = 0.0291 Half-Breadth = 0.0573 Half-Breadth = 0.0686 Half-Breadth = 0.0783	Waterline 0.0600 Waterline 0.0800 Waterline 0.1000 Waterline 0.1200 Buttock 0.0000 Buttock 0.0200 Buttock 0.0400 Buttock 0.0600 Buttock 0.0800 Buttock 0.1000	Half-Breadth = 0.1029 Half-Breadth = 0.1069 Half-Breadth = 0.1105 Half-Breadth = 0.1135 Height = 0.0000 Height = 0.0065 Height = 0.0135 Height = 0.0216 Height = 0.0312 Height = 0.0466
Waterline Buttock Buttock Buttock Buttock Station = Sheer Line Chine 1 Chine 2 Waterline Waterline Waterline Waterline Waterline Waterline	0.1200 0.0000 0.0200 0.0400 0.0600 0.0800 3.00	Half-Breadth = 0.0870 Height = 0.0184 Height = 0.0331 Height = 0.0483 Height = 0.0645 Height = 0.1038 Half-Breadth = 0.1074 Half-Breadth = 0.0829 Half-Breadth = 0.0775 Half-Breadth = 0.0364 Half-Breadth = 0.0686 Half-Breadth = 0.0880 Half-Breadth = 0.0947 Half-Breadth = 0.0947 Half-Breadth = 0.1008	Station = 5.00 Xposition = 0.287	75 0.1250
Waterline Buttock Buttock Buttock Buttock Buttock Buttock	0.1200 0.0000 0.0200 0.0400 0.0600 0.0800 0.1000	Half-Breadth = 0.1061 Height = 0.0010 Height = 0.0122 Height = 0.0345 Height = 0.0458 Height = 0.0974	Station = 6.00 Xposition = 0.345	Height = 0.0326

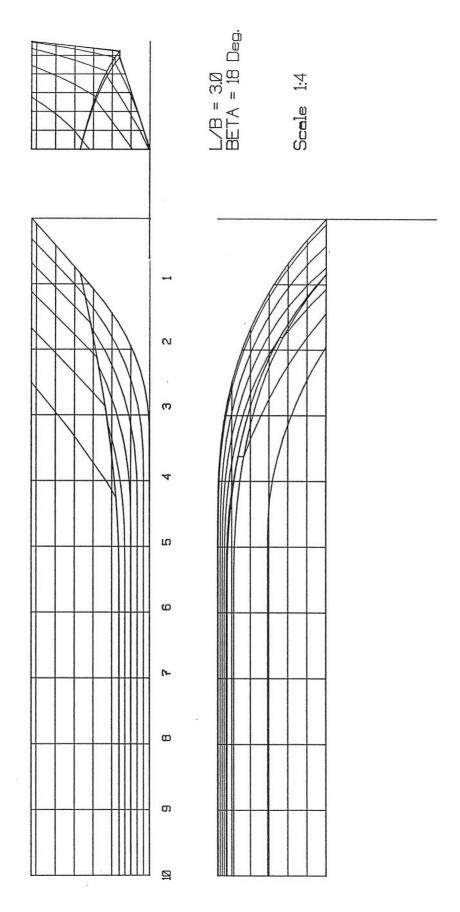
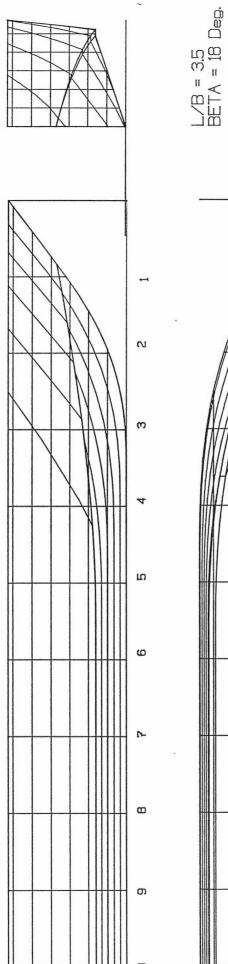


Figure A.5 Lines Plan L/B = 3.0; β = 18°

L/B = 3.0	BETA = 18 Deg.										
Station =	1.00 Xpositi	on = 0.06	90			Station =	4.00 Xpositi	on = 0.276	50		
Sheer Line	•	Height =	0.1250	Half-Breadth =	0.0550	Sheer Line	•	Height =	0.1250	Half-Breadth =	0.1142
Chine 1		Height =	0.0716	Half-Breadth =	0.0096	Chine 1		Height =	0.0371	Half-Breadth =	0.0978
Chine 2		Height =	0.0716	Half-Breadth =	0.0089	Chine 2		Height =	0.0371	Half-Breadth =	0.0914
Buttock	0.0000		******	Height =	0.1242	Waterline	0.0200	norgin	0.05/1	Half-Breadth =	0.0563
240000	******			nergue -	0.1212	Waterline	0.0400				
Station =	2.00 Xpositi	on = 0.138	20			Waterline	0.0600			Half-Breadth =	0.0985
Sheer Line	rioo apositi	Height =	0.1250	Half-Breadth =	0.0891					Half-Breadth =	0.1029
Chine 1		Height =	0.0575	Half-Breadth =		Waterline	0.0800			Half-Breadth =	0.1070
Chine 2		Height =	0.0575	Half-Breadth =	0.0557	Waterline	0.1000			Half-Breadth =	0.1104
Waterline	0.0200	neight -	0.0373	Half-Breadth =	0.0520	Waterline	0.1200			Half-Breadth =	0.1135
Waterline	0.0400				0.0023	Buttock	0.0000			Height =	0.0000
Waterline	0.0600			Half-Breadth =	0.0292	Buttock	0.0200			Height =	0.0065
Waterline	0.0800			Half-Breadth =	0.0573	Buttock	0.0400			Height =	0.0135
				Half-Breadth =	0.0686	Buttock	0.0600			Height =	0.0216
Waterline	0.1000			Half-Breadth =	0.0783	Buttock	0.0800			Height =	0.0313
Waterline	0.1200			Half-Breadth =	0.0870	Buttock	0.1000			Height =	0.0463
Buttock	0.0000			Height =	0.0184						
Buttock	0.0200			Height =	0.0331	Station =	5.00 Xpositi	on = 0.345	50		
Buttock	0.0400			Height =	0.0483	Sheer Line		Height =	0.1250	Half-Breadth =	0.1150
Buttock	0.0600			Height =	0.0645	Chine 1		Height =	0.0326	Half-Breadth =	0.1042
Buttock	0.0800			Height =	0.1038	Chine 2		Height =	0.0326	Half-Breadth =	0.0972
100 00						Waterline	0.0200			Half-Breadth =	0.0612
Station =	3.00 Xpositio	on = 0.207				Waterline	0.0400			Half-Breadth =	0.1052
Sheer Line		Height =	0.1250	Half-Breadth =	0.1074	Waterline	0.0600			Half-Breadth =	0.1077
Chine 1		Height =	0.0458	Half-Breadth =	0.0829	Waterline	0.0800			Half-Breadth =	0.1101
Chine 2		Height =	0.0458	Half-Breadth =	0.0775	Waterline	0.1000			Half-Breadth =	0.1123
Waterline	0.0200			Half-Breadth =	0.0364	Waterline	0.1200			Half-Breadth =	0.1125
Waterline	0.0400			Half-Breadth =	0.0687	Buttock	0.0000			Height =	0.0000
Waterline	0.0600			Half-Breadth =	0.0880	Buttock	0.0200			Height =	0.0065
Waterline	0.0800			Half-Breadth =	0.0948	Buttock	0.0400			Height =	0.0003
Waterline	0.1000			Half-Breadth =	0.1007	Buttock	0.0600			Height =	0.0131
Waterline	0.1200			Half-Breadth =	0.1061	Buttock	0.0800			Height =	0.0196
Buttock	0.0000			Height =	0.0010	Buttock	0.1000	d.			
Buttock	0.0200			Height =	0.0108	Buttock	0.1000			Height =	0.0326
Buttock	0.0400			Height =	0.0222	Station =	6.00 Xpositi	on = 0.41	40		
Buttock	0.0600			Height =	0.0345	Sheer Line	0.00 Aposici	Height =	0.1250	Half-Breadth =	0.1150
Buttock	0.0800			Height =	0.0458	Chine 1		Height =	0.1230	Half-Breadth =	
Buttock	0.1000			Height =	0.0976	Chine 2		Height =	0.0320		0.1050
				nerght -	0.0370	Waterline	0.0200	neight -	0.0320	Half-Breadth =	0.0980
						Waterline	0.0400			Half-Breadth =	0.0612
						Waterline	0.0600			Half-Breadth =	0.1059
						Waterline	0.0800			Half-Breadth = Half-Breadth =	0.1080 0.1102
						Waterline					
						Waterline	0.1000 0.1200			Half-Breadth =	0.1123
										Half-Breadth =	0.1145
						Buttock	0.0000			Height =	0.0000
						Buttock	0.0200			Height =	0.0065
						Buttock Buttock	0.0400			Height =	0.0131
						Buttock	0.0600			Height =	0.0196
							0.0800			Height =	0.0261
						Buttock	0.1000			Height =	0.0320





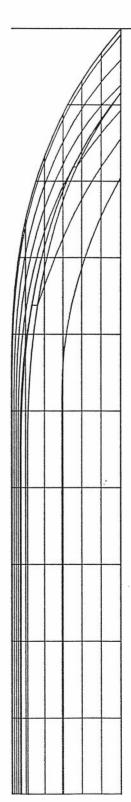


Figure A.6 Lines Plan L/B = 3.5; $\beta = 18^{\circ}$

L/B =3.5	BETA = 18 Deg.					Station =	4.00 Xpo	sition = 0.322			
•						Sheer Line		Height =		Half-Breadth =	0.1142
Station =	1.00 Xpositi	on = 0.08	A.F.			Chine 1		Height =	0.0371	Half-Breadth =	0.0978
Sheer Line	1.00 APOSILI			Grant and the state of		Chine 2		Height =	0.0371	Half-Breadth =	0.0914
		Height =	0.1250	Half-Breadth =	0.0550	Waterline	0.0200	•		Half-Breadth =	0.0562
Chine 1		Height =	0.0716	Half-Breadth =	0.0096	Waterline	0.0400			Half-Breadth =	0.0985
Chine 2		Height =	0.0716	Half-Breadth =	0.0089	Waterline	0.0600				
Buttock	0.0000	-		Height =	0.1243					Half-Breadth =	0.1029
				nerght -	0.1243	Waterline	0.0800			Half-Breadth =	0.1069
Station =	2.00 Xpositi	on = 0.16	10			Waterline	0.1000			Half-Breadth =	0.1105
Sheer Line	2.00 APOSICI	Height =			2 00000	Waterline	0.1200			Half-Breadth =	0.1135
Chine 1			0.1250	Half-Breadth =	0.0891	Buttock	0.0000			Height =	0.0000
		Height =	0.0575	Half-Breadth =	0.0557	Buttock	0.0200			Height =	0.0065
Chine 2		Height =	0.0575	Half-Breadth =	0.0520	Buttock	0.0400			Height =	0.0135
Waterline	0.0200			Half-Breadth =	0.0023	Buttock	0.0600			Height =	0.0216
Waterline	0.0400			Half-Breadth =	0.0291	Buttock	0.0800			Height =	0.0312
Waterline	0.0600			Half-Breadth =	0.0573	Buttock					
Waterline	0.0800			Half-Breadth =	0.0686	DULLOCK	0.1000			Height =	0.0466
Waterline	0.1000										
Waterline	0.1200			Half-Breadth =	0.0783	Station =	5.00 Xpo	sition = 0.40			
Buttock	0.0000			Half-Breadth =	0.0870	Sheer Line		Height =	0.1250	Half-Breadth =	0.1150
				Height =	0.0184	Chine 1		Height =	0.0326	Half-Breadth =	0.1042
Buttock	0.0200			Height =	0.0331	Chine 2		Height =	0.0326	Half-Breadth =	0.0972
Buttock	0.0400			Height =	0.0483	Waterline	0.0200			Half-Breadth =	0.0612
Buttock	0.0600			Height =	0.0645	Waterline	0.0400			Half-Breadth =	0.1052
Buttock	0.0800			Height =	0.1038	Waterline	0.0600				
				gv	0.1030					Half-Breadth =	0.1077
Station =	3.00 Xpositio	on = 0.241				Waterline	0.0800			Half-Breadth =	0.1101
Sheer Line	2.00 Whomici	Height =				Waterline	0.1000			Half-Breadth =	0.1123
Chine 1				Half-Breadth =	0.1074	Waterline	0.1200			Half-Breadth =	0.1145
		Height =	0.0458	Half-Breadth =	0.0829	Buttock	0.0000			Height =	0.0000
Chine 2	2	Height =	0.0458	Half-Breadth =	0.0775	Buttock	0.0200			Height =	0.0065
Waterline	0.0200			Half-Breadth =	0.0364	Buttock	0.0400			Height =	0.0131
Waterline	0.0400			Half-Breadth =	0.0686	Buttock	0.0600			Height =	0.0196
Waterline	0.0600			Half-Breadth =	0.0880	Buttock	0.0800			Height =	
Waterline	0.0800			Half-Breadth =	0.0947						0.0263
Waterline	0.1000			Half-Breadth =		Buttock	0.1000			Height =	0.0326
Waterline	0.1200				0.1008						
Buttock	0.0000			Half-Breadth =	0.1061	Station =	6.00 Xpo	sition = 0.48			
Buttock	0.0200			Height =	0.0010	Sheer Line		Height =	0.1250	Half-Breadth =	0.1150
Buttock				Height =	0.0108	Chine 1		Height =	0.0320	Half-Breadth =	0.1050
	0.0400			Height =	0.0222	Chine 2		Height =	0.0320	Half-Breadth =	0.0980
Buttock	0.0600			Height =	0.0345	Waterline	0.0200	77 ST \$ 55 ST		Half-Breadth =	0.0613
Buttock	0.0800			Height =	0.0458	Waterline	0.0400			Half-Breadth =	0.1059
Buttock	0.1000			Height =	0.0974	Waterline	0.0600			Half-Breadth =	0.1080
				3		Waterline	0.0800			Half-Breadth =	0.1102
											0.1102
						Waterline	0.1000			Half-Breadth =	
						Waterline	0.1200			Half-Breadth =	0.1145
						Buttock	0.0000			Height =	0.0000
						Buttock	0.0200			Height =	0.0065
						Buttock	0.0400			Height =	0.0131
						Buttock	0.0600			Height =	0.0196
						Buttock	0.0800			Height =	0.0261
						Buttock	0.1000			Height =	0.0320
						Duttoon	0.2000			norght -	0.0320

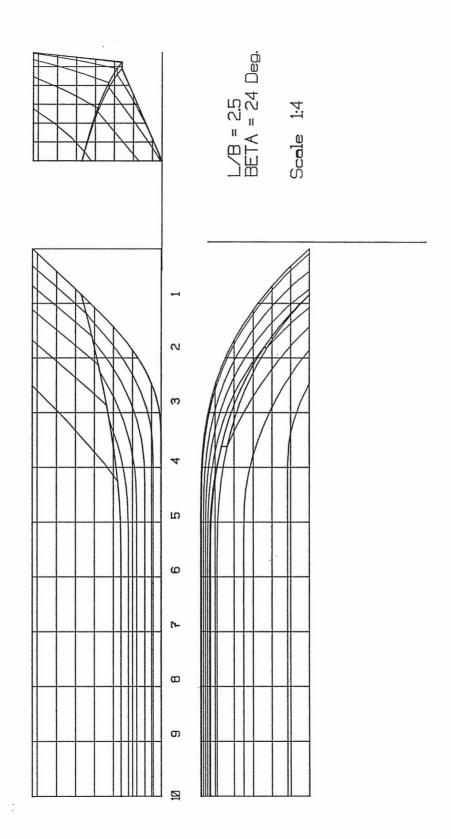


Figure A.7 Lines Plan L/B = 2.5; β = 24°

		- 0.77 -			
Station = Sheer Line Chine 1 Chine 2 Buttock	0.000	Xposition = 0.05 Height = Height = Height =	0.1350 0.0816 0.0816	Half-Breadth = Half-Breadth = Half-Breadth =	0.0550 0.0096 0.0089 0.1340
Station = Sheer Line Chine 1 Chine 2 Waterline Waterline Waterline Waterline Waterline Waterline Buttock Buttock Buttock Buttock Buttock Buttock	2.00 0.030 0.050 0.070 0.110 0.130 0.000 0.040 0.060 0.080	0 0 0 0 0 0 0 0 0	0.1350 0.0675 0.0675	Half-Breadth = Height = Height = Height = Height =	0.0891 0.0557 0.0520 0.0070 0.0310 0.0573 0.0686 0.0783 0.0870 0.0243 0.0408 0.0575 0.0745 0.1138
Station = Sheer Line Chine 1 Chine 2 Waterline Waterline Waterline Waterline Waterline Waterline Waterline Buttock	3.00 0.010 0.030 0.050 0.070 0.090 0.110 0.020 0.040 0.060 0.080 0.100	Height = 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.1350 0.0558 0.0558	Half-Breadth = Height =	0.1074 0.0829 0.0775 0.0138 0.0428 0.0699 0.0880 0.0947 0.1008 0.1061 0.0015 0.0141 0.0280 0.0427 0.0558 0.1074

Station =	4.00 Xposition =	0.2300		
Sheer Line	Heig		Half-Breadth =	0.1142
Chine 1	Heig		Half-Breadth =	0.0978
Chine 2	Heig		Half-Breadth =	0.0914
	19 (A.1.755);; ·	111 - 0.0471	Half-Breadth =	0.0233
Waterline	0.0100			
Waterline	0.0300		Half-Breadth =	0.0633
Waterline	0.0500		Half-Breadth =	0.0985
Waterline	0.0700		Half-Breadth =	0.1029
Waterline	0.0900		Half-Breadth =	0.1069
Waterline	0.1100		Half-Breadth =	0.1105
Waterline	0.1300		Half-Breadth =	0.1135
Buttock	0.0000		Height =	0.0000
Buttock	0.0200		Height =	0.0086
Buttock	0.0400		Height =	0.0176
Buttock	0.0600		Height =	0.0280
Buttock	0.0800		Height =	0.0400
Buttock	0.1000		Height =	0.0566
Station =	5.00 Xposition =	0.2875		
Sheer Line	5.00 Xposition = Heig		Half-Breadth =	0.1150
Chine 1	Heig		Half-Breadth =	0.1130
Chine 2	Heig		Half-Breadth =	0.1042
Waterline	0.0100	110 - 0.0420	Half-Breadth =	0.0233
Waterline	0.0300		Half-Breadth =	0.0699
Waterline	0.0500		Half-Breadth =	0.1052
Waterline	0.0700		Half-Breadth =	0.1032
Waterline	0.0900		Half-Breadth =	0.1101
Waterline	0.1100		Half-Breadth =	0.1123
Waterline	0.1300		Half-Breadth =	0.1145
Buttock	0.0000		Height =	0.0000
Buttock	0.0200		Height =	0.0086
Buttock	0.0400		Height =	0.0171
Buttock	0.0600		Height =	0.0257
Buttock	0.0800		Height =	0.0345
Buttock	0.1000		Height =	0.0426
Duttoon	012000			010120
Station =	6.00 Xposition =	0.3450		
Sheer Line		ht = 0.1350	Half-Breadth =	0.1150
Chine 1	Heig	ht = 0.0420	Half-Breadth =	0.1050
Chine 2		ht = 0.0420	Half-Breadth =	0.0980
Waterline	0.0100		Half-Breadth =	0.0233
Waterline	0.0300		Half-Breadth =	0.0700
Waterline	0.0500		Half-Breadth =	0.1059
Waterline	0.0700		Half-Breadth =	0.1080
Waterline	0.0900		Half-Breadth =	0.1102
Waterline	0.1100		Half-Breadth =	0.1123
Waterline	0.1300		Half-Breadth =	0.1145
Buttock	0.0000		Height =	0.0000
Buttock	0.0200		Height =	0.0086
Buttock	0.0400		Height =	0.0171
Buttock	0.0600		Height =	0.0257
Buttock	0.0800		Height =	0.0343
Buttock	0.1000		Height =	0.0420

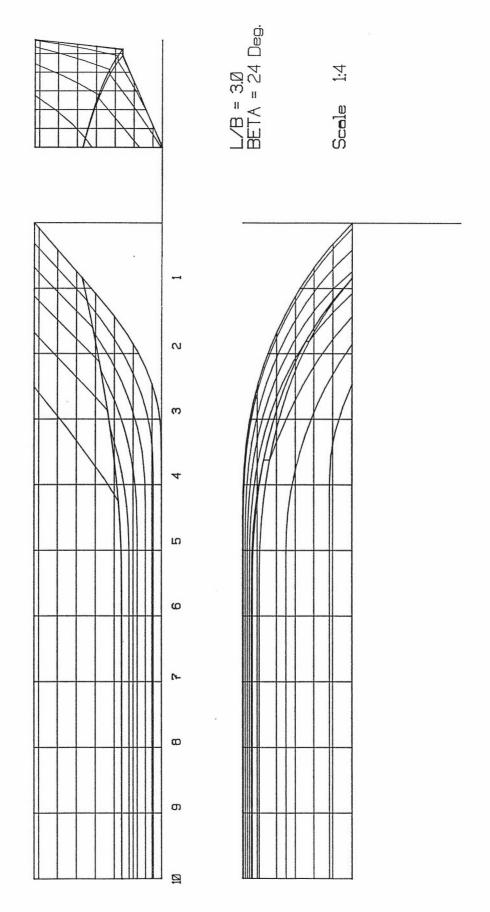
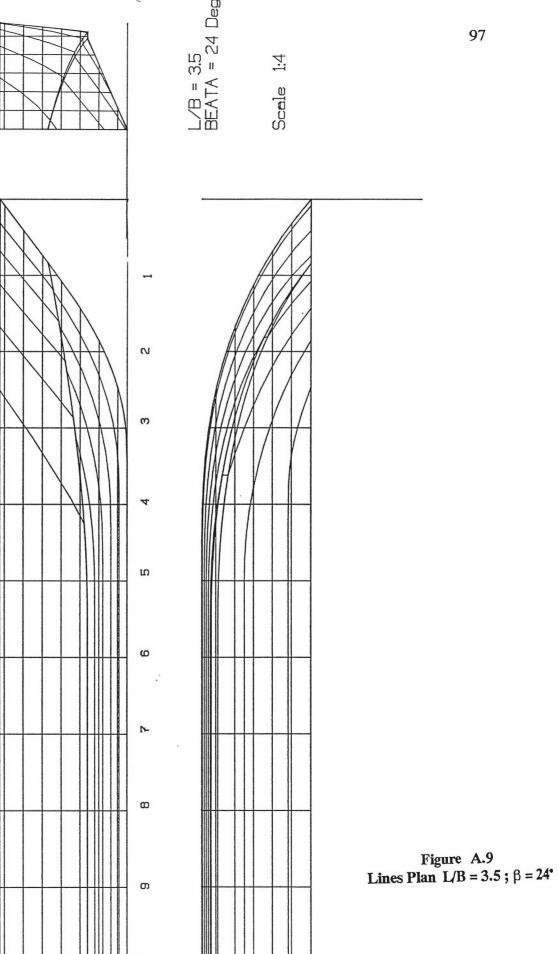


Figure A.8 Lines Plan L/B = 3.0; $\beta = 24^{\circ}$

	•										
Station =	1.00 Xpositi	on = 0.069	0			Station =	4.00 Xpositio	n = 0.276	٥		
Sheer Line		Height =	0.1350	Half-Breadth =	0.0550	Sheer Line	1100 Whorter	Height =		Walf Burnally -	0 1140
Chine 1		Height =		Half Bussill -	0 0000			neight =	0.1330	Half-Breadth =	
Chine 2		neight -		Half-Breadth =		Chine 1		Height =		Half-Breadth =	0.0978
		Height =	0.0816	Half-Breadth =		Chine 2		Height =	0.0471	Half-Breadth =	0.0914
Buttock	0.0000			Height =	0.1342	Waterline	0.0100			Half-Breadth =	0.0233
						Waterline	0.0300			Half-Breadth =	0.0633
Station =	2.00 Xpositi	on = 0.1380)			Waterline	0.0500		_	Half-Breadth =	0.0985
Sheer Line	•	Height =	0.1350	Half-Breadth =	0.0891	Waterline	0.0700		-	Half-Breadth =	0.1029
Chine 1		Height =	0.0675	Half-Breadth =	0.0557						
Chine 2		Height =	0.0075			Waterline	0.0900			Half-Breadth =	0.1069
Waterline		nergnt -	0.0675	Half-Breadth =	0.0520	Waterline	0.1100			Half-Breadth =	0.1105
	0.0300			Half-Breadth =	0.0070	Waterline	0.1300			Half-Breadth =	0.1135
Waterline	0.0500				0.0310	Buttock	0.0000			Height =	0.0000
Waterline	0.0700			Half-Breadth =	0.0573	Buttock	0.0200			Height =	0.0086
Waterline	0.0900			Half-Breadth =	0.0686	Buttock	0.0400			Height =	0.0176
Waterline	0.1100			Half-Breadth =	0.0783	Buttock	0.0600			Height =	0.0280
Waterline	0.1300			Half-Broadth -	0 0070	Buttock	0.0800			Boight -	0.0400
Buttock	0.0000			Height =	0.0070	Buttock	0.1000			Height = Height = Height = Height = Height =	0.0400
Buttock	0.0200			Height -	0.0243	DULLOCK	0.1000			neight =	0.0566
Buttock	0.0400			neight -	0.0408						
Buttock	0.0600			Height = Height = Height = Height = Height =	0.0575	Station =					
				Height =	0.0745	Sheer Line		Height =		Half-Breadth =	0.1150
Buttock	0.0800			Height =	0.1138	Chine 1		Height = ·		Half-Breadth =	0.1042
-1 11						Chine 2		Height =	0.0426	Half-Breadth =	0.0972
Station =	3.00 Xpositio					Waterline	0.0100			Half-Breadth =	0.0233
Sheer Line		Height =	0.1350	Half-Breadth =	0.1074	Waterline	0.0300			Half-Breadth =	0.0699
Chine 1		Height =	0.0558	Half-Breadth =	0.0829	Waterline	0.0500			Half-Breadth =	0.1052
Chine 2		Height =	0.0558	Half-Breadth =		Waterline	0.0700			Half-Breadth =	
Waterline	0.0100	•		Half-Breadth =							
Waterline	0.0300			Half-Breadth =		Waterline	0.0900			Half-Breadth =	0.1101
Waterline	0.0500					Waterline	0.1100			Half-Breadth =	
Waterline				Half-Breadth =		Waterline	0.1300			Half-Breadth =	0.1145
	0.0700			Half-Breadth =		Buttock	0.0000			Height = Height =	0.0000
Waterline	0.0900			Half-Breadth =	0.0947	Buttock	0.0200			Height =	0.0086
Waterline	0.1100			Half-Breadth =	0.1008	Buttock	0.0400	T		Height =	0.0171
Waterline	0.1300			Half-Breadth =	0.1061	Buttock	0.0600			Height =	0.0257
Buttock	0.0000			Height =	0.0015	Buttock	0.0800			Weight =	0.0237
Buttock	0.0200			Height =	0.0141		0.1000			Height = Height = Height = Height =	0.0335
Buttock	0.0400			Height :	0.0141	Buttock	0.1000			neight =	0.0426
Buttock	0.0600			neight -	0.0200						
Buttock	0.0800			neight =	0.0427	Station =	6.00 Xpositio			2.0	
				Height = Height = Height = Height = Height =	0.0558	Sheer Line		Height =	0.1350	Half-Breadth =	
Buttock	0.1000			Height =	0.1074	Chine 1		Height =	0.0420	Half-Breadth =	0.1050
						Chine 2		Height =	0.0420	Half-Breadth =	0.0980
						Waterline	0.0100			Half-Breadth =	0.0233
						Waterline	0.0300			Half-Breadth =	0.0700
						Waterline	0.0500			Half-Breadth =	
						Waterline	0.0700			Half-Breadth =	0.1080
						Waterline	0.0900			Half-Breadth =	0.1102
						Waterline	0.1100			Half-Breadth =	
							0.1300				
						Waterline				Half-Breadth =	
						Buttock	0.0000			Height =	0.0000
						Buttock	0.0200			Height =	0.0086
						Buttock	0.0400			Height =	0.0171
						Buttock	0.0600			Height = Height = Height =	0.0257
						Buttock	0.0800			Height = Height =	0.0343
						Buttock	0.1000			Height =	0.0420
										-	



						at	1 00 Vanalli	0 202	•		
L/R = 3.5	BETA = 24 Deg					Station =	4.00 Apositi	on = 0.322		Half-Breadth =	0.1142
1/2 0.0	, , , , , , , , , , , , , , , , , , ,					Sheer Line		Height =		Half-Breadth =	0.0978
Station =	1 00 Vacath		0.5			Chine 1		Height =			
	1.00 Apositi	ion = 0.08				Chine 2		Height =	0.0471	Half-Breadth =	0.0914
Sheer Line		Height =	0.1350	Half-Breadth =	0.0550	Waterline	0.0100			Half-Breadth =	0.0233
Chine 1		Height =		Half-Breadth =	0.0096	Waterline	0.0300			Half-Breadth =	0.0633
Chine 2		Height =	0.0816	Half-Breadth =	0.0089	Waterline	0.0500			Half-Breadth =	0.0985
Buttock	0.0000			Height =	0.1343	Waterline	0.0700			Half-Breadth =	0.1029
						Waterline	0.0900			Half-Breadth =	0.1069
Station =	2.00 Xpositi	on = 0.16	10			Waterline	0.1100			Half-Breadth =	0.1105
Sheer Line		Height =	0.1350	Half-Breadth =	0.0891	Waterline	0.1300			Half-Breadth =	0.1135
Chine 1		Height =	0.1535	Half-Breadth =	0.0557	Buttock	0.0000			Height =	0.0000
Chine 2		Height =		Half-Breadth =	0.0520	Buttock	0.0200			Height =	0.0086
Waterline	0.0300	nergne -	0.0013				0.0400			Height =	0.0176
				Half-Breadth =	0.0070	Buttock				Height =	0.0280
Waterline	0.0500			Half-Breadth =	0.0310	Buttock	0.0600				0.0200
Waterline	0.0700			Half-Breadth =	0.0573	Buttock	0.0800			Height =	0.0400
Waterline	0.0900			Half-Breadth =	0.0686	Buttock	0.1000			Height =	0.0566
Waterline	0.1100			Half-Breadth =	0.0783						
Waterline	0.1300			Half-Breadth =	0.0870	Station =	5.00 Xposit	ion = 0.402	25		
Buttock	0.0000			Height =	0.0243	Sheer Line	The second second	Height =		Half-Breadth =	
Buttock	0.0200			Height =	0.0408	Chine 1		Height =		Half-Breadth =	0.1042
Buttock	0.0400			Height =	0.0575	Chine 2		Height =		Half-Breadth =	0.0972
Buttock	0.0600			Height =	0.0745	Waterline	0.0100	zg		Half-Breadth =	0.0233
Buttock	0.0800			Height =	0.1138	Waterline	0.0300			Half-Breadth =	0.0699
Duttock	0.0000			nerduc -	0.1130		0.0500			Half-Breadth =	0.1052
Station =	3.00 Xpositi	on = 0.24	10			Waterline				Half-Breadth =	
	2.00 ybosici			#-16 n 111	0 1004	Waterline	0.0700				
Sheer Line		Height =		Half-Breadth =	0.1074	Waterline	0.0900			Half-Breadth =	0.1101
Chine 1		Height =		Half-Breadth =	0.0829	Waterline	0.1100			Half-Breadth =	0.1123
Chine 2	U HOWG	Height =	0.0558	Half-Breadth =	0.0775	Waterline	0.1300			Half-Breadth =	
Waterline	0.0100			Half-Breadth =	0.0138	Buttock	0.0000			Height =	0.0000
Waterline	0.0300			Half-Breadth =	0.0428	Buttock	0.0200			Height =	0.0086
Waterline	0.0500			Half-Breadth =	0.0699	Buttock	0.0400			Height =	0.0171
Waterline	0.0700			Half-Breadth =	0.0880	Buttock	0.0600			Height =	0.0257
Waterline	0.0900			Half-Breadth =	0.0947	Buttock	0.0800			Height =	0.0345
Waterline	0.1100			Half-Breadth =	0.1008	Buttock	0.1000			Height =	0.0426
Waterline	0.1300			Half-Breadth =	0.1061					•	
Buttock	0.0000			Height =	0.0015	Station =	6.00 Xposit	ion = 0.48	30		
Buttock	0.0200			Height =	0.0141	Sheer Line		Height =		Half-Breadth =	0.1150
Buttock	0.0400			Height =	0.0280	Chine 1		Height =		Half-Breadth =	0.1050
Buttock	0.0600			Height =	0.0427	Chine 2		Height =		Half-Breadth =	0.0980
Buttock	0.0800			Height =	0.0558		0.0100	nergic -	0.0420	Half-Breadth =	0.0233
	0.1000					Waterline				Half-Breadth =	0.0700
Buttock	0.1000			Height =	0.1074	Waterline	0.0300				0.1059
						Waterline	0.0500			Half-Breadth =	
						Waterline	0.0700			Half-Breadth =	0.1080
						Waterline	0.0900			Half-Breadth =	0.1102
						Waterline	0.1100			Half-Breadth =	0.1123
						Waterline	0.1300			Half-Breadth =	
						Buttock	0.0000			Height =	0.0000
						Buttock	0.0200			Height =	0.0086
						Buttock	0.0400			Height =	0.0171
						Buttock	0.0600			Height =	0.0257
						Buttock	0.0800			Height =	0.0343
							0.1000			Height =	0.0420
						Buttock	0.1000			nergiic -	210120

APPENDIX B SERIES RESULTS (TABLES AND FIGURES)

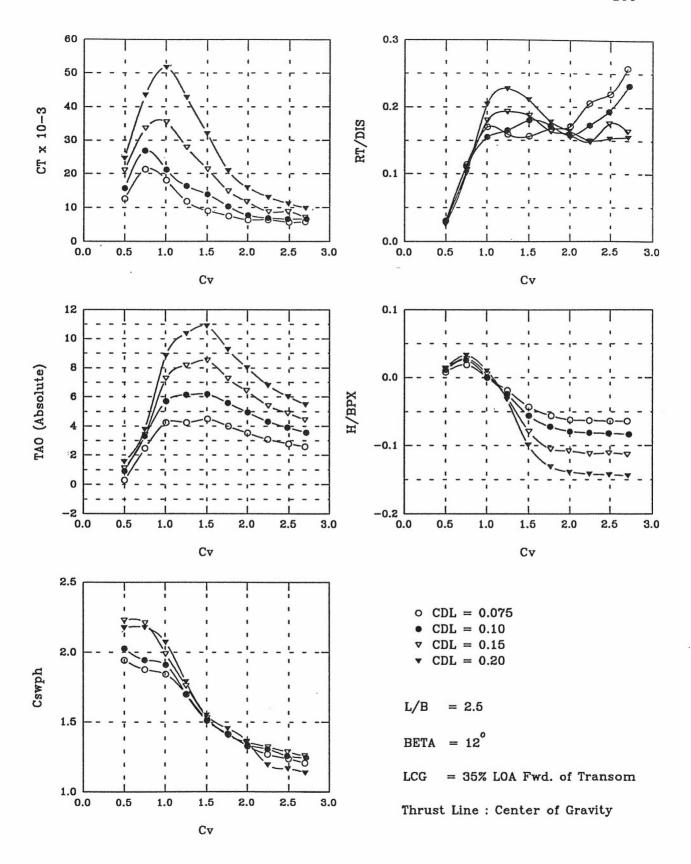


Figure B.1

	Model N L/B Rat Deadris	io se	12	.5 .00 deg		Length O Breath (Deck) B Chine) B	PX 21	.50 cm .00 cm			101	
	LCG Pos Displac	ement I)IS 91	.00 % I 6.0 gm .96 % E	ıs	20.13 cm	eff. C	DL 0	.0755				
	Static Water 1		.00 0	.15 deg		Density			/m3 Ki	n. Visc	ocity	0.9457E	-06 m2/s
	Vel m/s	RT gms	H	TAO deg	LC cm	LK	SWPH cm2	Cv	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cswph
	0.716	28.0	0.17	0.15	30.19	49.45	856.7	0.499	12.56501		0.008	0.30	1.943
	1.079 1.443	104.3	0.39 -0.01	2.33 4.10	30.76 31.63	46.63 44.56	827.4 812.2	0.752 1.006	21.28791 18.07777		0.019	2.48 4.25	1.876 1.842
	1.799	145.5	-0.41	4.10	27.31	42.55	749.1	1.254	11.79671		-0.019	4.25	1.699
	2.162	143.3	-0.90	4.33	23.00	39.39	668.8	1.507	9.01136		-0.043	4.48	1.517
	2.536	153.0	-1.19	3.84	19.55	38.53	622.6	1.767	7.51637		-0.056	3.99	1.412
	2.874		-1.29	3.38	16.39	38.24	585.6	2.003	6.36500		-0.062	3.53	1.328
	3.225 3.586	188.5 201.6	-1.33 -1.34	2.94	13.80 11.79	38.41 39.10	559.7 545.5	2.247 2.498	6.36847 5.65217		-0.063 -0.064		1.269 1.237
	3.871		-1.35	2.43	10.06			2.697	5.81487		-0.064		1.208
	Displac			6.0 gm .65 % B		Disp. Co.			.1002				
	Static		.00 0	.78 deg									
	Water T	emp.	22	.50 deg	C	Density	997	.658 кд	/m3 Ki	n. Visco	ocity	0.945/E	-06 m2/s
_	Vel m/s	RT gms	em Cm	TAO deg	LC cm	LK cm	SWPH cm2	Cv	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cswph
	0.716	36.6	0.24	0.13	32.77	50.60	893.0	0.499	15.72333	0.030	0.011	0.91	2.025
	1.071	134.5	0.54	2.53	33.64	47.04	858.4	0.746	26.87962	0.111	0.026	3.31	1.946
	1.442	189.1	0.02	4.92	34.50	44.85	842.5	1.005	21.21219	0.155	0.001	5.70	1.910
	1.794		-0.50	5.35	29.33	40.71	749.7	1.250	16.37837		-0.024	6.13	1.700
	2.159	218.7 209.1	-1.17 -1.50	5.41 4.81	24.44 21.10	37.66 37.15	665.6 624.4	1.504 1.758	13.86161 10.34138		-0.056 -0.072	6.19 5.59	1.509 1.416
	2.874	191.0	-1.66	4.16	18.69	36.22	588.7	2.002	7.72809		-0.079		1.335
	3.227	210.7	-1.70	3.54	17.25	36.51	576.3	2.248	6.90498		-0.081	4.32	1.307
	3.564	236.4	-1.73	3.13	14.38	37.38	554.8	2.483	6.59704	0.194	-0.082	3.91	1.258
	3.895	282.5	-1.74	2.79	12.94	38.35	549.8	2.714	6.65974	0.232	-0.083	3.57	1.247
	Displac			5.0 gm .35 % B		Disp. Coe 6.06 cm			.1503				
	Static Water T			.01 deg .50 deg		Density	997	.658 kg	/m3 Kii	n. Visco	ocity	0.9457E	-06 m2/s
	Vel	RT	н	TAO	LC	LK	SWPH	Cv	CT	RT/DIS	н/врх	TAO	Cswph
	m/s	gms	cm	deg	cm	cm	cm2		x10-3			Abs.	
	0.714	53.4	0.27	0.10	46.00	51.75	982.0	0.497	21.00190	0.029	0.013	1.11	2.227
	1.080	194.3	0.58	2.39	46.58	51.18	974.7	0.752	33.61171	0.106	0.028	3.40	2.210
	1.441	328.5	0.10	6.26	37.66	46.00	877.8	1.004	35.43981	0.180	0.005	7.27	1.990
	1.792	352.6	-0.60	7.15	31.63	41.11	775.6	1.249	27.84192		-0.029	8.16	1.759
	2.162		-1.66	7.50			674.8		21.28440		-0.079	8.51	1.530
	2.527		-2.20 -2.27	6.25 5.41	23.29 21.28		597.9	1.761 1.987	14.82909 11.74716		-0.105 -0.108	7.26 6.42	1.405 1.356
	3.231	271.0		4.39	19.55		582.5		8.76542		-0.112	5.40	1.321
	3.568	321.9		3.87		35.08		2.486	8.76935		-0.111		1.286
	3.869		-2.37	3.42				2.695	7.08450				1.258
	Displac	oment D	TC 242	20 ~~	~	Dian Co	see c	DL 0	.2004				
	VCG Pos			.96 % B		Disp. Coe 5.97 cm			.2004				
	Static Water T	trim TA	00 1	.46 deg		Density			/m3 Kii	n. Visco	ocity	0.9457E	-06 m2/s
	*** 1	D.M.	**	m> 0		***	GETTALL	C	O.M.	DE /DTG	tt /ppv	mao	Germb
_	Vel m/s	RT gms	H Cm	TAO deg	LC cm	CM	SWPH cm2	Cv	CT *10-3	RT/DIS	н/врх	TAO Abs.	Cswph
	0.713	61.0	0.30		40.25	51.75		0.496	24.61729			1.56	2.177
		244.8	0.69	2.32	40.54	51.75	960.5	0.748	43.45512			3.78	2.178
	1.074					4 57	011						
	1.437	496.8	0.21	7.39	40.83	47.15	914.1		51.72669		0.010	8.85	2.073
	1.437 1.791	496.8 551.1	0.21 -0.67	7.39 8.91	40.83 33.93	40.25	789.1	1.248	42.79681	0.227	-0.032	10.37	1.789
	1.437 1.791 2.150	496.8 551.1 514.3	0.21 -0.67 -2.09	7.39 8.91 9.44	40.83 33.93 28.46	40.25 35.36	789.1 684.1	1.248 1.498	42.79681 31.98117	0.227 0.211	-0.032 -0.099	10.37 10.90	1.789 1.551
	1.437 1.791	496.8 551.1 514.3 433.5	0.21 -0.67	7.39 8.91	40.83 33.93 28.46 25.30	40.25	789.1 684.1 641.0	1.248	42.79681	0.227 0.211 0.178	-0.032 -0.099 -0.131	10.37	1.789
	1.437 1.791 2.150 2.525	496.8 551.1 514.3 433.5	0.21 -0.67 -2.09 -2.75 -2.93	7.39 8.91 9.44 7.81	40.83 33.93 28.46 25.30 23.00	40.25 35.36 34.50	789.1 684.1 641.0 601.0	1.248 1.498 1.759	42.79681 31.98117 20.86532	0.227 0.211 0.178 0.164	-0.032 -0.099 -0.131 -0.139	10.37 10.90 9.27	1.789 1.551 1.453 1.363 1.195
	1.437 1.791 2.150 2.525 2.861 3.224 3.571	496.8 551.1 514.3 433.5 398.3 364.0 372.6	0.21 -0.67 -2.09 -2.75 -2.93 -2.99 -3.01	7.39 8.91 9.44 7.81 6.56 5.34 4.56	40.83 33.93 28.46 25.30 23.00 15.81 14.38	40.25 35.36 34.50 33.06 33.35 33.64	789.1 684.1 641.0 601.0 527.0 514.7	1.248 1.498 1.759 1.993 2.246 2.488	42.79681 31.98117 20.86532 15.92786 13.06921 11.16407	0.227 0.211 0.178 0.164 0.150 0.153	-0.032 -0.099 -0.131 -0.139 -0.142 -0.143	10.37 10.90 9.27 8.02 6.80 6.02	1.789 1.551 1.453 1.363 1.195
	1.437 1.791 2.150 2.525 2.861 3.224	496.8 551.1 514.3 433.5 398.3 364.0 372.6	0.21 -0.67 -2.09 -2.75 -2.93 -2.99	7.39 8.91 9.44 7.81 6.56 5.34	40.83 33.93 28.46 25.30 23.00 15.81 14.38	40.25 35.36 34.50 33.06 33.35	789.1 684.1 641.0 601.0 527.0 514.7	1.248 1.498 1.759 1.993 2.246	42.79681 31.98117 20.86532 15.92786 13.06921	0.227 0.211 0.178 0.164 0.150 0.153	-0.032 -0.099 -0.131 -0.139 -0.142 -0.143	10.37 10.90 9.27 8.02 6.80	1.789 1.551 1.453 1.363 1.195

Table B.1 L/B = 2.5 ; β = 12°; L_{cg} = 35%; Thrust Line : Centre of Gravity

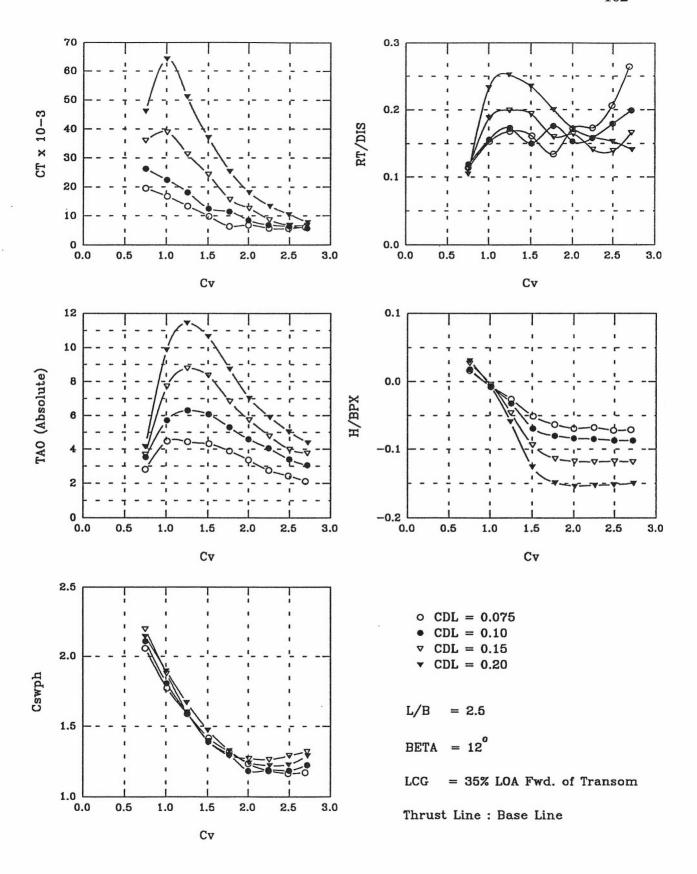


Figure B.2

Deadrise LCG Position 35.00 % LOA 20.13 cm @ Transom

Disp. Coeff. CDL 5.97 cm @ Base Line Displacement DIS 916.0 gms 0.0755

25.96 % B VCG Position 0.15 deg Static trim TAOo

Model No. T-2512

T./B Ratio

997.658 kg/m3 Kin. Viscocity 0.9457E-06 m2/s Water Temp. 22.50 deg C Density

103

Vel m/s	RT gms	H cm	TAO deg	LC cm	LK cm	SWPH Cm2	CV	CT x10-3	RT/DIS	н/врх	TAO Abs.	Cswph
1.075	104.0	0.34	2.66	37.38	48.88	907.5	0.749	19.49859	0.114	0.016	2.81	2.058
1.453	140.5	-0.14	4.32	29.90	43.13	781.0	1.012	16.76721	0.153	-0.007	4.47	1.771
1.801	154.1	-0.54	4.28	25.59	39.73	700.1	1.255	13.34903	0.168	-0.026	4.43	1.588
2.173	147.4	-1.08	4.17	20.99	37.26	624.4	1.514	9.82890	0.161	-0.051	4.32	1.416
2.533	122.4	-1.32	3.74	18.40	35.94	582.5	1.765	6.44159	0.134	-0.063	3.89	1.321
2.871	157.2	-1.46	3.21	15.41	35.42	544.9	2.000	6.88369	0.172	-0.069	3.36	1.236
3.232	158.6	-1.44	2.60	12.94	35.88	523.3	2.252	5.70342	0.173	-0.068	2.75	1.187
3.570	188.7	-1.51	2.29	10.64	37.38	514.7	2.488	5.65494	0.206	-0.072	2.44	1.167
3.865	241.4	-1.48	1.96	9.20	39.10	517.8	2.693	6.13830	0.264	-0.071	2.11	1.174

Disp. Coeff. CDL 0.1002 Displacement DIS 1216.0 gms 25.65 % B VCG Position 5.90 cm @ Base Line

0.78 deg Static trim TAOo Water Temp. 22.50 deg C Density 997.658 kg/m3 Kin. Viscocity 0.9457E-06 m2/s

_	Vel m/s	RT gms	H cm	TAO deg	LC cm	LK cm	SWPH cm2	Cv	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cswph
	1.078	144.3	0.39	2.74	40.25	48.88	929.9	0.751	26.26179	0.119	0.018	3.52	2.109
	1.446	189.2	-0.16	4.95	31.63	43.13	796.9	1.007	22.34358	0.156	-0.008	5.73	1.807
	1.801	210.0	-0.66	5.52	27.03	38.47	701.9	1.255	18.15075	0.173	-0.032	6.30	1.592
	2.166	182.8	-1.44	5.31	22.14	35.08	613.3	1.509	12.50151	0.150	-0.069	6.09	1.391
	2.532	214.3	-1.67	4.52	19.55	33.93	573.3	1.764	11.46661	0.176	-0.080	5.30	1.300
	2.870	186.0	-1.76	3.81	15.75	32.95	522.1	2.000	8.50261	0.153	-0.084	4.59	1.184
	3.227	191.7	-1.78	3.27	15.24	33.75	525.2	2.248	6.89459	0.158	-0.085	4.05	1.191
	3.582	217.6	-1.82	2.61	12.94	35.94	523.9	2.496	6.36454	0.179	-0.087	3.39	1.188
	3.900	241.7	-1.82	2.27	11.79	38.70	541.2	2.717	5.77623	0.199	-0.087	3.05	1,227

Displacement DIS 1825.0 gms VCG Position 26.35 % B Disp. Coeff. CDL 0.1503 6.06 cm @ Base Line Static trim TAOo 1.01 deg

Water Temp. 22.50 deg C Density 997.658 kg/m3 Kin. Viscocity 0.9457E-06 m2/s

Vel m/s	RT gms	H cm	TAO deg	LC cm	LK cm	SWPH cm2	Cv	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cswph
1.072	204.2	0.56	2.67	46.00	50.03	968.6	0.747	36.06066	0.112	0.027	3.68	2.196
1.446	342.9	-0.09	6.71	35.65	42.55	827.5	1.007	38.97839	0.188	-0.004	7.72	1.876
1.793	362.4	-0.96	7.77	28.75	37.09	705.6	1.249	31.40461	0.199	-0.046	8.78	1.600
2.158	353.7	-1.97	7.35	24.44	33.06	616.4	1.504	24.22852	0.194	-0.094	8.36	1.398
2.539	292.4	-2.39	5.82	21.56	31.63	570.2	1.769	15.64102	0.160	-0.114	6.83	1.293
2.882	298.6	-2.48	4.73	20.13	32.20	560.9	2.008	12.60404	0.164	-0.118	5.74	1.272
3.240	257.3	-2.49	3.77	18.97	33.12	558.5	2.257	8.63247	0.141	-0.119	4.78	1.266
3.590	253.6	-2.47	2.97	17.25	35.94	570.2	2.501	6.78858	0.139	-0.118	3.98	1.293
3.898	302.5	-2.50	2.75	13.80	40.60	583.2	2.716	6.71438	0.166	-0.119	3.76	1.322

Displacement DIS 2432.0 gms Disp. Coeff. CDL 0.2004 VCG Position 25.96 % B 5.97 cm @ Base Line

Static trim TAOo 1.46 deg 22.50 deg C 997.658 kg/m3 Kin. Viscocity 0.9457E-06 m2/s Water Temp. Density

	Vel m/s	RT gms	em Cm	TAO deg	LC cm	CM CM	SWPH cm2	Cv	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cswph
-	1.073 1.440 1.787 2.156 2.535 2.884 3.248 3.579	255.8 566.2 611.7 570.7 486.4 418.2 386.9 371.3	0.65 -0.15 -1.24 -2.64 -3.13 -3.23 -3.21 -3.20	3.58	30.88 26.45 23.00 20.58 19.55 18.40	49.74 43.13 38.06 34.16 31.63 30.53 30.82 32.20	736.3 649.6 585.6 548.0 540.0 542.4	1.502 1.767 2.009 2.263 2.493	46.21377 64.27564 51.13760 37.17763 25.40903 18.04750 13.35836 10.51205	0.233 0.252 0.235 0.200 0.172 0.159 0.153	-0.059 -0.126 -0.149 -0.154 -0.153 -0.152	4.15 9.87 11.45 10.66 8.74 7.03 5.91 5.04	2.144 1.895 1.670 1.473 1.328 1.243 1.224
	3.908	343.0	-3.15	2.93	18.40	34.85	570.8	2.723	7.73849	0.141	-0.150	4.39	1.294

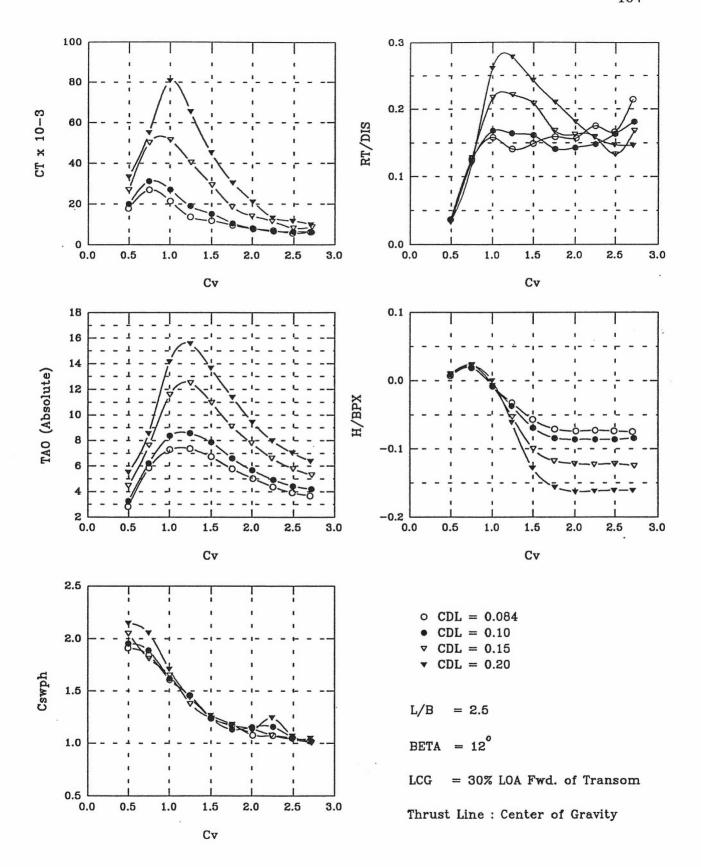


Figure B.3

LCG Position 30.00 % LOA 17.25 cm @ Transom

Displacement DIS 1016.0 gms Disp. Coeff. CDL 0.0837 VCG Position 26.00 % B 5.98 cm @ Base Line

Static trim TAOO 2.44 deg
Water Temp. 21.00 deg C Density 997.994 kg/m3 Kin. Viscocity 0.9798E-06 m2/s

105

Vel m/s	RT gms	H Cm	TAO deg	LC cm	LK cm	SWPH cm2	Cv	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cswph
0.705	38.0	0.15	0.38	30.19	48.30	842.7	0.492	17.81203	0.037	0.007	2.82	1.911
1.070	127.9	0.39	3.42	33.06	43.41	813.6	0.746	26.98876	0.126	0.019	5.86	1.845
1.441	160.7	-0.17	4.86	26.45	39.68	708.7	1.004	21.46666	0.158	-0.008	7.30	1.607
1.788	143.5	-0.67	4.93	24.15	35.77	642.2	1.246	13.73863	0.141	-0.032	7.37	1.456
2.152	151.6	-1.21	4.29	18.69	32.20	545.5	1.499	11.79434	0.149	-0.057	6.73	1.237
2.521	161.6	-1.50	3.34	15.81	32.49	517.8	1.757	9.65560	0.159	-0.071	5.78	1.174
2.885	159.3	-1.55	2.59	12.94	31.34	474.6	2.010	7.92556	0.157	-0.074	5.03	1.076
3.236	177.8	-1.53	1.93	12.36	31.74	472.8	2.254	7.05998	0.175	-0.073	4.37	1.072
3.567	168.7	-1.56	1.47	10.06	33.06	462.3	2.485	5.63939	0.166	-0.074	3.91	1.048
3.878	217.9	-1.57	1.23	7.19	34.85	450.6	2.702	6.31920	0.214	-0.075	3.67	1.022

Displacement DIS 1216.0 gms Disp. Coeff. CDL 0.1001 VCG Position 25.52 % B 5.87 cm @ Base Line Static trim TAOo 2.83 deg

Static trim TAOO 2.83 deg
Water Temp. 21.00 deg C Density 997.994 kg/m3 Kin. Viscocity 0.9798E-06 m2/s

Vel m/s	RT gms	H Cm	TAO deg	LC	LK cm	SWPH cm2	Cv	СТ ж10-3	RT/DIS	H/BPX	TAO Abs.	Cswph
0.714	44.6	0.18	0.44	31.63	48.88	862.1	0.497	19.99125	0.037	0.009	3.27	1.955
1.067	150.5	0.40	3.38	35.36	43.30	832.9	0.743	31.21819	0.124	0.019	6.21	1.889
1.442	204.6	-0.17	5.56	27.89	38.81	714.8	1.004	27.08033	0.168	-0.008	8.39	1.621
1.786	199.1	-0.77	5.74	25.30	34.79	644.1	1.244	19.05171	0.164	-0.037	8.57	1.460
2.158	196.3	-1.45	5.05	19.26	31.63	545.5	1.503	15.19123	0.161	-0.069	7.88	1.237
2.522	171.5	-1.76	3.77	16.39	30.19	499.3	1.757	10.61922	0.141	-0.084	6.60	1.132
2.872	173.9	-1.81	2.84	15.81	31.63	508.5	2.001	8.15296	0.143	-0.086	5.67	1.153
3.240	179.4	-1.80	2.10	14.38	33.18	509.8	2.257	6.58938	0.148	-0.086	4.93	1.156
3.580	198.2	-1.80	1.60	10.35	33.06	465.4	2.494	6.53341	0.163	-0.086	4.43	1.055
3.901	219.7	-1.76	1.36	8.63	33.35	450.0	2.718	6.30675	0.181	-0.084	4.19	1.020

Displacement DIS 1825.0 gms Disp. Coeff. CDL 0.1503 VCG Position 25.96 % B 5.97 cm @ Base Line Static trim TAOO 4.02 deg

Water Temp. 21.00 deg C Density 997.994 kg/m3 Kin. Viscocity 0.9798E-06 m2/s

	m/s	gms	cm.	deg	cm	CM TK	cm2	CV	x10-3	RT/DIS	H/BPX	Abs.	Cswpn
-	0.712	62.8	0.21	0.45	35.94	49.45	904.0	0.496	26.94083	0.034	0.010	4.47	2.050
	1.070	234.3	0.48	3.61	32.54	42.55	799.6	0.746	50.30636	0.128	0.023	7.63	1.813
	1.438	395.3	-0.15	7.59	30.48	37.66	728.2	1.002	51.59458	0.217	-0.007	11.61	1.651
	1.796	403.0	-1.11	8.49	25.01	31.63	607.1	1.251	40.46749	0.221	-0.053	12.51	1.377
	2.161	379.2	-2.11	6.96	21.56	29.33	545.5	1.505	29.27465	0.208	-0.100	10.98	1.237
	2.510	307.0	-2.48	5.10	19.26	28.75	514.7	1.749	18.61902	0.168	-0.118	9.12	1.167
	2.863	295.7	-2.57	3.78	18.11	28.75	502.4	1.994	14.11892	0.162	-0.122	7.80	1.139
	3.214	289.4	-2.58	2.58	15.53	28.75	474.6	2.240	11.60240	0.159	-0.123	6.60	1.076
	3.579	242.9	-2.55	1.77	13.86	28.75	456.8	2.494	8.16212	0.133	-0.122	5.79	1.036
	3.905	305.9	-2.63	1.27	12.65	28.75	443.8	2.721	8.88589	0.168	-0.125	5.29	1.006

Displacement DIS 2432.0 gms Disp. Coeff. CDL 0.2003 VCG Position 25.65 % B 5.90 cm @ Base Line Static trim TAOo 5.00 deg

Water Temp. 21.00 deg C Density 997.994 kg/m3 Kin. Viscocity 0.9798E-06 m2/s

m/s	gms	Cm H	deg	Cm Cm	Cm LK	cm2	CV	x10-3	RT/DIS	H/BPX	Abs.	Cswpn
0.709	80.8	0.22	0.53	40.25	50.60	948.0	0.494	33.35146	0.033	0.010	5.53	2.150
1.064	288.6	0.46	3.56	41.69	46.00	906.7	0.742	55.21972	0.119	0.022	8.56	2.056
1.429	634.0	0.01	9.14	32.20	38.53	754.1	0.996	80.89526	0.261	0.000	14.14	1.710
1.786	675.6	-1.29	10.57	26.45	32.77	634.8	1.245	65.56350	0.278	-0.061	15.57	1.439
2.145	591.8	-2.68	8.67	23.00	29.04	557.8	1.494	45.34174	0.243	-0.128	13.67	1.265
2.520	510.8	-3.28	6.41	20.70	27.89	520.9	1.756	30.36225	0.210	-0.156	11.41	1.181
2.874	439.4	-3.41	4.45	18.69	27.31	493.1	2.003	21.20628	0.181	-0.163	9.45	1.118
3.219	385.4	-3.40	2.99	23.29	27.89	548.6	2.243	13.32799	0.158	-0.162	7.99	1.244
3.567	358.1	-3.39	2.03	15.81	28.18	471.5	2.485	11.73298	0.147	-0.161	7.03	1.069
3.883	354.5	-3.38	1.38	14.38	28.75	462.3	2.705	9.99966	0.146	-0.161	6.38	1.048

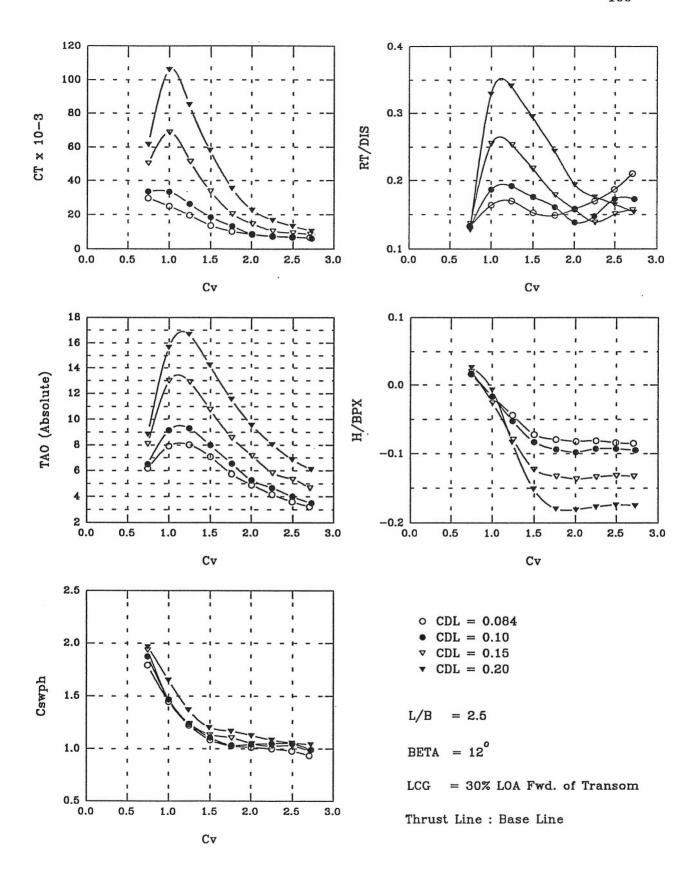


Figure B.4

					~							
	No. T-25				T							
L/B Ra			2.5	_	Length O	veral]	LOA 57	.50 cm				
Deadri	se	12	2.00 deg	I	Breath (Chinal I	3 23	.00 cm			10'	7
TCG Po	sition	30	00 % T	OA.	17.25 C			.00 cm				·
LCG TO	SICION	50	7.00 6 L	IOA.	17.25	m 6 IIC	ansom					
Displac	cement I	DIS 101	16.0 qm	ıs	Disp. Co	eff. (CDL 0	.0837				
VCG Pos	cement I	26	.00 % B	3	5.98 cm							
Static	trim TA	10o 2	.44 deg	ſ								
Water '	Temp.	21	.00 deg	C	Density	997	7.994 kg	/m3 Ki	n. Visc	ocity	0.9798E	-06 m2/s
11 (1000)					1070		_					
Vel	RT	H	TAO	LC	LK	SWPH	Cv	CT	RT/DIS	H/BPX		Cswph
m/s		cm			cm	cm2		x10-3			Abs.	
					42 12		0.742				6.18	1.789
1.066 1.436	135.5	0.33 -0.36	3.74		43.13 35.08		0.742 1.000	29.74020 24.96678				1.447
1.790		-0.93	5.59		30.19		1.247	19.65450				1.223
2.156		-1.52	4.65		28.18	477.7	1.502	13.71887				1.083
2.528		-1.67			27.89	453.1	1.761	10.24793				1.027
2.878		-1.73			29.33		2.005	8.53538	0.158	-0.082	4.90	1.013
3.232					30.48	440.7	2.252	7.37959	0.170	-0.081	4.17	0.999
3.577		-1.76	1.17		31.63	431.5	2.492	7.37959 6.75502	0.187	-0.084	3.61	0.978
3.884		-1.77	0.78		32.20		2.706	6.72025	0.210	-0.085	3.22	0.936
Displac	cement D	IS 121	.6.0 qm	s	Disp. Co. 5.87 cm	eff. C	DL 0	.1001				
VCG Pos	sition	25	.52 % B		5.87 cm	@ Base	Line					
Static	trim TA	00 2	.83 deg									
Water ?	remp.	21	.00 deg	C	Density	997	.994 kg	/m3 Ki	n. Visc	ocity	0.9798E	-06 m2/s
							172			=		
Vel ·	RT	H	TAO	LC cm	LK	SWPH	Cv	CT	RT/DIS	H/BPX	TAO	Cswph
m/s	gms	cm	deg	cm	cm	cm2		x10-3			Abs.	
1.066		0.35				825.7	0.743	33.64467				1.872
1.436		-0.35			35.08	647.1	1.000	33.51771				1.467
1.788		-1.09			29.90		1.246	26.25798				1.237
2.157		-1.74			27.31	487.0	1.502	18.57147				1.104
2.530		-1.97			27.31	456.1	1.763	13.14401	0.161	-0.094	6.55	1.034
2.875		-2.05	2.43			459.2	2.003	8.72374	0.139	-0.098	5.26	1.041
3.229		-1.95			29.90	462.3	2.249	7.34256	0.148	-0.093	4.67	1.048
3.582	210.3	-1.96	1.17	10.64	32.49	462.3	2.249	6.96735	0.148	-0.093	4.67	1.048
	210.3			10.64	29.90 32.49 32.49	462.3	2.249 2.496 2.729	6.96735 6.16051	0.148 0.173 0.173	-0.093 -0.093 -0.095	4.67 4.00 3.50	1.048
3.582 3.917	210.3 210.4	-1.96 -1.99	1.17 0.67	10.64 8.34	32.49 32.49	462.3 437.6	2.729	6.16051	0.148 0.173 0.173	-0.093 -0.093 -0.095	4.67 4.00 3.50	1.048
3.582 3.917 Displace	210.3 210.4 cement D	-1.96 -1.99 ors 182	1.17 0.67	10.64 8.34	32.49 32.49 Disp. Coe	462.3 437.6 ≘ff. C	2.729 DL 0	6.96735 6.16051	0.148 0.173 0.173	-0.093 -0.093 -0.095	4.67 4.00 3.50	1.048
3.582 3.917 Displac VCG Pos	210.3 210.4 cement D	-1.96 -1.99 OIS 182 25	1.17 0.67 5.0 gm	10.64 8.34	32.49 32.49	462.3 437.6	2.729 DL 0	6.16051	0.148 0.173 0.173	-0.093 -0.093 -0.095	4.67 4.00 3.50	1.048
3.582 3.917 Displac VCG Pos Static	210.3 210.4 cement D sition trim TA	-1.96 -1.99 OIS 182 25	1.17 0.67 5.0 gm .96 % B	10.64 8.34	32.49 32.49 Disp. Cos 5.97 cm	462.3 437.6 eff. C	2.729 CDL 0 Line	6.16051 .1503	0.173	-0.095	3.50	0.992
3.582 3.917 Displac	210.3 210.4 cement D sition trim TA	-1.96 -1.99 OIS 182 25	1.17 0.67 5.0 gm .96 % B	10.64 8.34	32.49 32.49 Disp. Cos 5.97 cm	462.3 437.6 eff. C	2.729 CDL 0 Line	6.16051	0.173	-0.095	3.50	0.992
3.582 3.917 Displac VCG Pos Static Water 5	210.3 210.4 cement D sition trim TA Cemp.	-1.96 -1.99 DIS 182 25 00 4 21	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg	10.64 8.34 s	32.49 32.49 Disp. Coe 5.97 cm	462.3 437.6 eff. C @ Base	2.729 CDL 0 Line .994 kg	6.16051 .1503 /m3 Ki:	0.173	-0.095	3.50 0.9798E	0.992 -06 m2/s
3.582 3.917 Displac VCG Pos Static Water 5	210.3 210.4 cement D sition trim TA Temp.	-1.96 -1.99 DIS 182 25 00 4 21	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg	10.64 8.34 s	32.49 32.49 Disp. Coo 5.97 cm Density	462.3 437.6 eff. C @ Base 997 SWPH	2.729 CDL 0 Line .994 kg	6.16051 .1503 /m3 Ki:	0.173	-0.095	3.50 0.9798E TAO	0.992
3.582 3.917 Displac VCG Pos Static Water 5 Vel m/s	210.3 210.4 cement D sition trim TA Temp. RT gms	-1.96 -1.99 DIS 182 25 .00 4 21 H	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg	10.64 8.34 s C LC cm	32.49 32.49 Disp. Coc 5.97 cm Density LK cm	462.3 437.6 eff. C @ Base 997 SWPH cm2	2.729 EDL 0 Line 7.994 kg	6.16051 .1503 /m3 Ki: CT x10-3	0.173 n. Visco RT/DIS	-0.095 ocity H/BPX	3.50 0.9798E	0.992 -06 m2/s Cswph
3.582 3.917 Displac VCG Pos Static Water T	210.3 210.4 cement D sition trim TA Temp. RT gms	-1.96 -1.99 DIS 182 25 .00 4 21 H cm	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg TAO deg	10.64 8.34 s C LC cm	32.49 32.49 Disp. Coc 5.97 cm Density LK cm	462.3 437.6 eff. C @ Base 997 SWPH cm2	2.729 CDL 0 Line 7.994 kg	6.16051 .1503 /m3 Ki: CT x10-3	0.173 n. Visco	-0.095 ocity H/BPX	3.50 0.9798E TAO Abs.	0.992 -06 m2/s Cswph
3.582 3.917 Displace VCG Pos Static Water 5 Vel m/s	210.3 210.4 cement D sition trim TA Temp. RT gms	-1.96 -1.99 OIS 182 25 .00 4 21 H cm	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg TAO deg	10.64 8.34 s C LC cm	32.49 32.49 Disp. Coc 5.97 cm Density LK cm	462.3 437.6 eff. C @ Base 997 SWPH Cm2 853.0	2.729 CDL 0 Line 7.994 kg Cv	6.16051 .1503 /m3 Ki: CT x10-3 50.36994	0.173 n. Visco	-0.095 Deity H/BPX 0.020	3.50 0.9798E TAO Abs. 8.09	0.992 -06 m2/s Cswph
3.582 3.917 Displac VCG Pos Static Water T Vel m/s 	210.3 210.4 cement D sition trim TA Temp. RT gms 	-1.96 -1.99 DIS 182 25 OO 4 21 H Cm -0.41 -0.55	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg TAO deg 	10.64 8.34 s C LC cm 35.94 27.03	32.49 32.49 Disp. Coc 5.97 cm Density LK cm 44.85 33.06	462.3 437.6 eff. 0 @ Base 997 SWPH cm2 853.0 644.1	2.729 CDL 0 c Line 7.994 kg Cv 0.745 1.001	6.16051 .1503 /m3 Ki: CT x10-3 50.36994 68.85185	0.173 n. Visco RT/DIS 0.137 0.255	-0.095 Deity H/BPX -0.020 -0.026	3.50 0.9798E TAO Abs. 8.09 13.01	0.992 -06 m2/s Cswph 1.934 1.460
3.582 3.917 Displace VCG Pos Statice Water 1 Vel m/s 1.069 1.437 1.799	210.3 210.4 cement D sition trim TA Temp. RT gms 	-1.96 -1.99 OIS 182 25 OO 4 21 H Cm -0.41 -0.55 -1.66	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg TAO deg	10.64 8.34 s C LC cm 35.94 27.03 22.43	32.49 32.49 Disp. Cox 5.97 cm Density LK cm 44.85 33.06 28.46	462.3 437.6 eff. C @ Base 997 SWPH Cm2 	2.729 CDL 0 Line 7.994 kg Cv 0.745 1.001 1.253	6.16051 .1503 /m3 Ki: CT x10-3 50.36994 68.85185 51.39265	0.173 n. Visco RT/DIS 0.137 0.255 0.253	-0.095 Decity H/BPX -0.020 -0.026 -0.079	3.50 0.9798E TAO Abs. 8.09 13.01 12.89	0.992 -06 m2/s Cswph 1.934 1.460 1.237
3.582 3.917 Displac VCG Pos Static Water T Vel m/s 	210.3 210.4 cement D sition trim TA Temp. RT gms 249.6 465.8 461.5 397.3	-1.96 -1.99 OIS 182 25 OO 4 21 H cm -0.41 -0.55 -1.66 -2.57	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg TAO deg 	10.64 8.34 s C LC cm 35.94 27.03 22.43 19.55	32.49 32.49 Disp. Com 5.97 cm Density LK cm 44.85 33.06 28.46 27.03	462.3 437.6 eff. C @ Base 997 SWPH cm2 	2.729 CDL 0 c Line 7.994 kg Cv 0.745 1.001	6.16051 .1503 /m3 Ki: CT x10-3 50.36994 68.85185	0.173 n. Visco RT/DIS 0.137 0.255 0.253 0.218	-0.095 Decity H/BPX -0.020 -0.026 -0.079 -0.123	3.50 0.9798E TAO Abs. 8.09 13.01 12.89	0.992 -06 m2/s Cswph 1.934 1.460
3.582 3.917 Displace VCG Pos Static Water 5 Vel m/s 	210.3 210.4 cement D sition trim TA Temp. RT gms 	-1.96 -1.99 DIS 182 25 .00 4 21 H cm -0.41 -0.55 -1.66 -2.57 -2.80	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg TAO deg 	10.64 8.34 s C LC cm 35.94 27.03 22.43 19.55 18.11	32.49 32.49 Disp. Coc 5.97 cm Density LK cm 	462.3 437.6 eff. C @ Base 997 SWPH cm2 853.0 644.1 545.5 499.3 487.0	2.729 CDL 0 c Line 7.994 kg Cv 0.745 1.001 1.253 1.498 1.764	6.16051 .1503 /m3 Ki:	0.173 n. Visco RT/DIS 0.137 0.255 0.253 0.218 0.179	-0.095 Decity H/BPX -0.020 -0.026 -0.079 -0.123 -0.133	3.50 0.9798E TAO Abs. 8.09 13.01 12.89 10.77 8.57	0.992 -06 m2/s Cswph 1.934 1.460 1.237 1.132 1.104
3.582 3.917 Displace VCG Pos Statice Water 5 Vel m/s 	210.3 210.4 cement D sition trim TA Temp. RT gms 249.6 465.8 461.5 397.3 325.8 286.3	-1.96 -1.99 OIS 182 25 .00 4 21 H cm -0.55 -1.66 -2.57 -2.80 -2.89	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg TAO deg 	10.64 8.34 s C LC cm 35.94 27.03 22.43 19.55 18.11 16.39	32.49 32.49 Disp. Coc 5.97 cm Density LK cm 	462.3 437.6 eff. C @ Base 997 SWPH cm2 853.0 644.1 545.5 499.3 487.0 462.3	2.729 CDL 0 c Line 7.994 kg Cv 0.745 1.001 1.253 1.498 1.764 2.011	6.16051 .1503 /m3 Ki: CT x10-3	0.173 n. Visco RT/DIS 0.137 0.255 0.253 0.218 0.179 0.157	-0.095 Deity H/BPX -0.020 -0.026 -0.079 -0.123 -0.133 -0.137	3.50 0.9798E TAO Abs. 8.09 13.01 12.89 10.77 8.57	0.992 -06 m2/s Cswph 1.934 1.460 1.237 1.132 1.104
3.582 3.917 Displace VCG Pos Static Water 5 Vel m/s 	210.3 210.4 cement D sition trim TA Temp. RT gms 	-1.96 -1.99 DIS 182 25 .00 4 21 H cm -0.41 -0.55 -1.66 -2.57 -2.80	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg TAO deg 	10.64 8.34 s C LC cm 35.94 27.03 22.43 19.55 18.11 16.39 14.66	32.49 32.49 Disp. Coc 5.97 cm Density LK cm 	462.3 437.6 eff. C @ Base 997 SWPH Cm2 853.0 644.1 545.5 499.3 487.0 462.3 453.1	2.729 EDL 0 E Line 7.994 kg Cv 0.745 1.001 1.253 1.498 1.764 2.011 2.256	6.16051 .1503 /m3 Ki:	0.173 n. Visco RT/DIS 0.137 0.255 0.253 0.218 0.179 0.157 0.139	-0.095 Docity H/BPX -0.020 -0.026 -0.079 -0.123 -0.133 -0.137	3.50 0.9798E TAO Abs. 8.09 13.01 12.89 10.77 8.57 7.15 5.83	0.992 -06 m2/s Cswph 1.934 1.460 1.237 1.132 1.104 1.048
3.582 3.917 Displace VCG Pos Static Water 1 Vel m/s 	210.3 210.4 cement D sition trim TA Temp. RT gms 	-1.96 -1.99 OIS 182 25 OO 4 21 H Cm -0.41 -0.55 -1.66 -2.57 -2.80 -2.89	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg TAO deg 	10.64 8.34 s C LC cm 	32.49 32.49 Disp. Cox 5.97 cm Density LK cm 44.85 33.06 28.46 27.03 27.31 26.74 27.60	462.3 437.6 eff. C @ Base 997 SWPH Cm2 853.0 644.1 545.5 499.3 487.0 462.3 453.1 453.1	2.729 EDL 0 E Line 7.994 kg Cv 0.745 1.001 1.253 1.498 1.764 2.011 2.256	6.16051 .1503 /m3 Ki CT x10-3 50.36994 68.85185 51.39265 33.82472 20.51271 14.62116 10.49231	0.173 n. Visco RT/DIS 0.137 0.255 0.253 0.218 0.179 0.157 0.139 0.151	-0.095 H/BPX -0.020 -0.026 -0.079 -0.123 -0.133 -0.134 -0.132	3.50 0.9798E TAO Abs. 8.09 13.01 12.89 10.77 8.57 7.15 5.83 5.33	0.992 -06 m2/s Cswph 1.934 1.460 1.237 1.132 1.104 1.048 1.027
3.582 3.917 Displace VCG Pos Static Water T Vel m/s 	210.3 210.4 cement D sition trim TA Temp. RT gms 	-1.96 -1.99 OIS 182 25 OO 4 21 H Cm -0.41 -0.55 -1.66 -2.57 -2.80 -2.89 -2.78	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg TAO deg 	10.64 8.34 s C LC cm 	32.49 32.49 Disp. Coc 5.97 cm Density LK cm 	462.3 437.6 eff. C @ Base 997 SWPH Cm2 853.0 644.1 545.5 499.3 487.0 462.3 453.1 453.1	2.729 CDL 0 c Line 7.994 kg Cv 0.745 1.001 1.253 1.498 1.764 2.011 2.256 2.500	6.16051 .1503 /m3 Ki: CT x10-3	0.173 n. Visco RT/DIS 0.137 0.255 0.253 0.218 0.179 0.157 0.139 0.151	-0.095 H/BPX -0.020 -0.026 -0.079 -0.123 -0.133 -0.134 -0.132	3.50 0.9798E TAO Abs. 8.09 13.01 12.89 10.77 8.57 7.15 5.83 5.33	0.992 -06 m2/s Cswph 1.934 1.460 1.237 1.132 1.104 1.048 1.027 1.027
3.582 3.917 Displace VCG Pos Static Water T Vel m/s 1.069 1.437 1.799 2.151 2.532 2.886 3.238 3.589 3.889	210.3 210.4 cement D sition trim TA Temp. RT gms 	-1.96 -1.99 OIS 182 25 OO 4 21 H Cm 0.41 -0.55 -1.66 -2.57 -2.80 -2.89 -2.89 -2.79	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg TAO deg 	10.64 8.34 s C LC cm 35.94 27.03 22.43 19.55 18.11 16.39 14.66 13.51 12.36	32.49 32.49 Disp. Coc 5.97 cm Density LK cm 	462.3 437.6 eff. C @ Base 997 SWPH cm2 	2.729 CDL 0 c Line 7.994 kg Cv 0.745 1.001 1.253 1.498 1.764 2.011 2.256 2.500 2.710	6.16051 .1503 /m3 Ki: CT x10-3	0.173 n. Visco RT/DIS 0.137 0.255 0.253 0.218 0.179 0.157 0.139 0.151	-0.095 H/BPX -0.020 -0.026 -0.079 -0.123 -0.133 -0.134 -0.132	3.50 0.9798E TAO Abs. 8.09 13.01 12.89 10.77 8.57 7.15 5.83 5.33	0.992 -06 m2/s Cswph 1.934 1.460 1.237 1.132 1.104 1.048 1.027 1.027
3.582 3.917 Displace VCG Pos Static Water T Vel m/s 	210.3 210.4 cement D sition trim TA Pemp. RT gms 	-1.96 -1.99 OIS 182 25 OO 4 21 H CM -0.55 -1.66 -2.57 -2.80 -2.89 -2.80 -2.78 -2.79 OIS 243	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg TAO deg 	10.64 8.34 s C LC cm 35.94 27.03 22.43 19.55 18.11 16.39 14.66 13.51 12.36	32.49 32.49 Disp. Coc 5.97 cm Density LK cm 	462.3 437.6 eff. C @ Base 997 SWPH Cm2 853.0 644.1 545.5 499.3 487.0 462.3 453.1 453.1 453.1	2.729 CDL 0 c Line 7.994 kg Cv 0.745 1.001 1.253 1.498 1.764 2.011 2.256 2.500 2.710 CDL 0	6.16051 .1503 /m3 Ki: CT x10-3 50.36994 68.85185 51.39265 33.82472 20.51271 14.62116 10.49231 9.25454 8.63207	0.173 n. Visco RT/DIS 0.137 0.255 0.253 0.218 0.179 0.157 0.139 0.151	-0.095 H/BPX -0.020 -0.026 -0.079 -0.123 -0.133 -0.134 -0.132	3.50 0.9798E TAO Abs. 8.09 13.01 12.89 10.77 8.57 7.15 5.83 5.33	0.992 -06 m2/s Cswph 1.934 1.460 1.237 1.132 1.104 1.048 1.027 1.027
3.582 3.917 Displace VCG Pos Static Water T Vel m/s 	210.3 210.4 cement D sition trim TA Pemp. RT gms 	-1.96 -1.99 OIS 182 25 OO 4 21 H Cm -0.41 -0.55 -1.66 -2.57 -2.80 -2.89 -2.89 -2.78 -2.79 OIS 243 25	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg TAO deg 4.07 8.99 8.87 6.75 4.55 3.13 1.81 1.31 0.64 2.0 gm	10.64 8.34 s C LC cm 35.94 27.03 22.43 19.55 18.11 16.39 14.66 13.51 12.36	32.49 32.49 Disp. Cox 5.97 cm Density LK cm 44.85 33.06 28.46 27.03 27.31 26.74 27.60 28.75 27.89	462.3 437.6 eff. C @ Base 997 SWPH Cm2 	2.729 CDL 0 c Line 7.994 kg Cv 0.745 1.001 1.253 1.764 2.011 2.256 2.500 2.710 CDL 0 c Line	6.16051 .1503 /m3 Ki: CT x10-350.36994 68.85185 51.39265 33.82472 20.51271 14.62116 10.49231 9.25454 8.63207	0.173 n. Visco RT/DIS 0.137 0.255 0.253 0.218 0.179 0.157 0.139 0.157	-0.095 H/BPX -0.020 -0.026 -0.079 -0.123 -0.133 -0.137 -0.134 -0.132	3.50 0.9798E TAO Abs. 8.09 13.01 12.89 10.77 8.57 7.15 5.83 5.83 4.66	0.992 -06 m2/s Cswph 1.934 1.460 1.237 1.132 1.104 1.048 1.027 1.027
3.582 3.917 Displace VCG Pos Static Water T Vel m/s 	210.3 210.4 cement D sition trim TA Temp. RT gms 	-1.96 -1.99 OIS 182 25 OO 4 21 H Cm -0.41 -0.55 -1.66 -2.57 -2.80 -2.89 -2.89 -2.78 -2.79 OIS 243	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg TAO deg 	10.64 8.34 s C LC cm 35.94 27.03 19.55 18.11 16.39 14.66 13.51 12.36	32.49 32.49 Disp. Cox 5.97 cm Density LK cm 44.85 33.06 28.46 27.03 27.31 26.74 27.60 28.75 27.89	462.3 437.6 eff. C @ Base 997 SWPH Cm2 853.0 644.1 545.5 499.3 487.0 462.3 453.1 453.1 453.1 453.1	2.729 CDL 0 c Line 7.994 kg Cv 0.745 1.001 1.253 1.764 2.011 2.256 2.500 2.710 CDL 0 c Line	6.16051 .1503 /m3 Ki: CT x10-3 50.36994 68.85185 51.39265 33.82472 20.51271 14.62116 10.49231 9.25454 8.63207	0.173 n. Visco RT/DIS 0.137 0.255 0.253 0.218 0.179 0.157 0.139 0.157	-0.095 H/BPX -0.020 -0.026 -0.079 -0.123 -0.133 -0.137 -0.134 -0.132	3.50 0.9798E TAO Abs. 8.09 13.01 12.89 10.77 8.57 7.15 5.83 5.83 4.66	0.992 -06 m2/s Cswph 1.934 1.460 1.237 1.132 1.104 1.048 1.027 1.027
3.582 3.917 Displace VCG Pos Statice Water T Vel m/s 	210.3 210.4 cement D sition trim TA Temp. RT gms 	-1.96 -1.99 OIS 182 25 OO 4 21 H Cm -0.41 -0.55 -1.66 -2.57 -2.80 -2.89 -2.89 -2.78 -2.79 OIS 243	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg TAO deg 	10.64 8.34 s C LC cm 35.94 27.03 19.55 18.11 16.39 14.66 13.51 12.36	32.49 32.49 Disp. Com 5.97 cm Density LK cm 	462.3 437.6 eff. C @ Base 997 SWPH Cm2 853.0 644.1 545.5 499.3 487.0 462.3 453.1 453.1 453.1 453.1	2.729 CDL 0 c Line 7.994 kg Cv 0.745 1.001 1.253 1.764 2.011 2.256 2.500 2.710 CDL 0 c Line	6.16051 .1503 /m3 Ki: CT x10-350.36994 68.85185 51.39265 33.82472 20.51271 14.62116 10.49231 9.25454 8.63207	0.173 n. Visco RT/DIS 0.137 0.255 0.253 0.218 0.179 0.157 0.139 0.157	-0.095 H/BPX -0.020 -0.026 -0.079 -0.123 -0.133 -0.137 -0.134 -0.132	3.50 0.9798E TAO Abs. 8.09 13.01 12.89 10.77 8.57 7.15 5.83 5.83 4.66	0.992 -06 m2/s Cswph 1.934 1.460 1.237 1.132 1.104 1.048 1.027 1.027
3.582 3.917 Displace VCG Pos Static Water T Vel m/s 	210.3 210.4 cement D sition trim TA Temp. RT gms 	-1.96 -1.99 OIS 182 25 OO 4 21 H Cm -0.41 -0.55 -1.66 -2.57 -2.80 -2.89 -2.89 -2.78 -2.79 OIS 243	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg TAO deg 	10.64 8.34 s C LC cm 35.94 27.03 19.55 18.11 16.39 14.66 13.51 12.36	32.49 32.49 Disp. Com 5.97 cm Density LK cm 	462.3 437.6 eff. C @ Base 997 SWPH Cm2 853.0 644.1 545.5 499.3 487.0 462.3 453.1 453.1 453.1 453.1	2.729 CDL 0 c Line 7.994 kg Cv 0.745 1.001 1.253 1.764 2.011 2.256 2.500 2.710 CDL 0 c Line	6.16051 .1503 /m3 Ki: CT x10-350.36994 68.85185 51.39265 33.82472 20.51271 14.62116 10.49231 9.25454 8.63207	0.173 n. Visco RT/DIS 0.137 0.255 0.253 0.218 0.179 0.157 0.139 0.157	-0.095 Decity H/BPX -0.020 -0.026 -0.079 -0.133 -0.137 -0.134 -0.132 -0.133	3.50 0.9798E TAO Abs. 8.09 13.01 12.89 10.77 8.57 7.15 5.83 5.83 4.66	0.992 -06 m2/s Cswph 1.934 1.460 1.237 1.132 1.104 1.048 1.027 1.027
3.582 3.917 Displace VCG Pos Static Water T Vel m/s 	210.3 210.4 cement D sition trim TA Temp. RT gms 	-1.96 -1.99 OIS 182 25 OO 4 21 H Cm 0.41 -0.55 -1.66 -2.57 -2.80 -2.89 -2.80 -2.78 -2.79 OIS 243 25 OO 51	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg TAO deg 4.07 8.99 8.87 6.75 4.55 3.13 1.81 1.31 0.64 2.0 gm .65 % B .00 deg	10.64 8.34 s C LC cm 35.94 27.03 22.43 19.55 18.11 16.39 14.66 13.51 12.36 s	32.49 32.49 Disp. Coc 5.97 cm Density LK cm 44.85 33.06 28.46 27.03 27.31 26.74 27.60 28.75 27.89 Disp. Coc 5.90 cm	462.3 437.6 eff. C @ Base 997 SWPH cm2 853.0 644.1 545.5 499.3 487.0 462.3 453.1 453.1 431.5 eff. C @ Base	2.729 CDL 0 Line 7.994 kg CV 0.745 1.001 1.253 1.498 1.764 2.011 2.256 2.500 2.710 CDL 0 Line 7.994 kg	6.16051 .1503 /m3 Ki: CT x10-3 50.36994 68.85185 51.39265 33.82472 20.51271 14.62116 10.49231 9.25454 8.63207 .2003	0.173 n. Visco RT/DIS 0.137 0.255 0.253 0.218 0.179 0.157 0.157	-0.095 Decity H/BPX -0.020 -0.026 -0.079 -0.133 -0.137 -0.134 -0.132 -0.133	3.50 0.9798E TAO Abs. 8.09 13.01 12.89 10.77 8.57 7.15 5.83 5.33 4.66	0.992 -06 m2/s Cswph 1.934 1.460 1.237 1.132 1.104 1.048 1.027 0.978
3.582 3.917 Displace VCG Possible VCG Possi	210.3 210.4 cement D sition trim TA Temp. RT gms 	-1.96 -1.99 OIS 182 25 OO 4 21 H CM -0.55 -1.66 -2.57 -2.80 -2.89 -2.78 -2.79 OIS 243 25 OO 51 H CM	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg TAO deg 	10.64 8.34 s C LC cm 35.94 27.03 22.43 19.55 18.11 16.39 14.66 13.51 12.36 s	32.49 32.49 Disp. Coc 5.97 cm Density LK cm 44.85 33.06 28.46 27.03 27.31 26.74 27.60 28.75 27.89 Disp. Coc 5.90 cm Density LK	462.3 437.6 eff. C @ Base 997 SWPH Cm2 	2.729 CDL 0 c Line 7.994 kg CV 0.745 1.001 1.253 1.498 1.764 2.011 2.256 2.500 2.710 CDL 0 c Line 7.994 kg	6.16051 .1503 /m3 Ki: CT x10-3 -50.36994 68.85185 51.39265 33.82472 20.51271 14.62116 10.49231 9.25454 8.63207 .2003 /m3 Ki: CT x10-3	0.173 n. Visco RT/DIS 0.137 0.255 0.253 0.218 0.179 0.157 0.139 0.157	-0.095 Decity H/BPX -0.026 -0.079 -0.123 -0.133 -0.134 -0.132 -0.133	3.50 0.9798E TAO Abs. 8.09 13.01 12.89 10.77 8.57 7.15 5.83 5.33 4.66	0.992 -06 m2/s Cswph 1.934 1.460 1.237 1.132 1.104 1.048 1.027 1.027 0.978 -06 m2/s Cswph
3.582 3.917 Displace VCG Pos Static Water 1 Vel m/s 1.069 1.437 1.799 2.151 2.532 2.886 3.238 3.589 3.889 Displace VCG Pos Static Water 1	210.3 210.4 cement D sition trim TA Temp. RT gms 249.6 461.5 397.3 325.8 461.5 397.3 253.5 274.7 286.6 cement D sition trim TA	-1.96 -1.99 PIS 182 25 OO 4 21 H CM 0.41 -0.55 -1.66 -2.57 -2.80 -2.89 -2.78 -2.79 PIS 243 25 OO 5 21	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg TAO deg 4.07 8.99 8.87 6.75 4.55 3.13 1.81 1.31 0.64 2.0 gm .65 % B .00 deg	10.64 8.34 s C LC cm 35.94 27.03 22.43 19.55 18.11 16.39 14.66 13.51 12.36 s	32.49 32.49 Disp. Coc 5.97 cm Density LK cm 44.85 33.06 28.46 27.03 27.31 26.74 27.60 28.75 27.89 Disp. Coc 5.90 cm Density	462.3 437.6 eff. C @ Base 997 SWPH Cm2 	2.729 EDL 0 E Line 7.994 kg Cv 0.745 1.001 1.253 1.498 1.764 2.011 2.256 2.500 2.710 EDL 0 E Line 7.994 kg	6.16051 .1503 /m3 Ki: CT x10-3 50.36994 68.85185 51.39265 33.82472 20.51271 14.62116 10.49231 9.25454 8.63207 .2003 /m3 Ki:	0.173 n. Visco RT/DIS 0.137 0.255 0.253 0.218 0.179 0.157 0.139 0.157	-0.095 Decity H/BPX -0.026 -0.079 -0.123 -0.133 -0.134 -0.132 -0.133	3.50 0.9798E TAO Abs. 8.09 13.01 12.89 10.77 8.57 7.15 5.83 5.33 4.66	0.992 -06 m2/s Cswph 1.934 1.460 1.237 1.132 1.104 1.048 1.027 0.978
3.582 3.917 Displace VCG Possible VCG Possi	210.3 210.4 cement D sition trim TA Temp. RT gms 	-1.96 -1.99 OIS 182 25 OO 4 21 H Cm -0.41 -0.55 -1.66 -2.57 -2.80 -2.89 -2.80 -2.78 -2.79 OIS 243 25 OO 5 21 H Cm -0.56	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg TAO deg 	10.64 8.34 s C LC cm 35.94 27.03 19.55 18.11 16.39 14.66 13.51 12.36 s	32.49 32.49 Disp. Coc 5.97 cm Density LK cm 44.85 33.06 28.46 27.03 27.31 26.74 27.60 28.75 27.89 Disp. Coc 5.90 cm Density LK	462.3 437.6 eff. C @ Base 997 SWPH Cm2 853.0 644.1 545.5 499.3 487.0 462.3 453.1 453.1 453.1 453.1 453.1 867.1	2.729 CDL 0 c Line 7.994 kg CV 0.745 1.001 1.253 1.498 1.764 2.011 2.256 2.500 2.710 CDL 0 c Line 7.994 kg	6.16051 .1503 /m3 Ki: CT x10-3 50.36994 68.85185 51.39265 33.82472 20.51271 14.62116 10.49231 9.25454 8.63207 .2003 /m3 Ki: CT x10-3 61.58997	0.173 n. Visco RT/DIS 0.137 0.255 0.253 0.218 0.179 0.157 0.157 n. Visco RT/DIS	-0.095 Decity H/BPX -0.026 -0.079 -0.123 -0.133 -0.134 -0.132 -0.133	3.50 0.9798E TAO Abs. 8.09 13.01 12.89 10.77 8.57 7.15 5.83 5.33 4.66 0.9798E TAO Abs. 8.85	0.992 -06 m2/s Cswph 1.934 1.460 1.237 1.132 1.104 1.048 1.027 1.027 0.978 -06 m2/s Cswph
3.582 3.917 Displace VCG Pos Static Water 1 Vel m/s 	210.3 210.4 cement D sition trim TA Temp. RT gms 	-1.96 -1.99 OIS 182 25 OO 4 21 H Cm -0.41 -0.55 -1.66 -2.57 -2.80 -2.89 -2.78 -2.79 OIS 243 25 OO 5 H Cm -0.16 -1.75	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg TAO deg 	10.64 8.34 s C LC cm 35.94 27.03 22.43 19.55 18.11 16.39 14.66 13.51 12.36 s C	32.49 32.49 Disp. Coc 5.97 cm Density LK cm 44.85 33.06 28.46 27.03 27.31 26.74 27.60 28.75 27.89 Disp. Coc 5.90 cm Density LK	462.3 437.6 eff. C @ Base 997 SWPH Cm2 853.0 444.1 545.5 499.3 487.0 462.3 487.0 6 Base 997 SWPH Cm2 867.1 727.4 604.0	2.729 EDL 0 E Line 7.994 kg Cv 0.745 1.001 1.253 1.498 1.764 2.011 2.256 2.500 2.710 EDL 0 E Line 7.994 kg Cv 0.745 0.995 0.995 0.995	6.16051 .1503 /m3 Ki: CT x10-3 50.36994 68.85185 51.39265 33.82472 20.51271 14.62116 10.49231 9.25454 8.63207 .2003 /m3 Ki: CT x10-3 61.58997	0.173 n. Visco RT/DIS 0.137 0.255 0.253 0.218 0.179 0.157 0.139 0.151 0.157 n. Visco RT/DIS 0.128 0.329 0.341	-0.095 Docity H/BPX -0.020 -0.026 -0.079 -0.133 -0.137 -0.134 -0.132 -0.133 Docity H/BPX -0.026 -0.007 -0.083	3.50 0.9798E TAO Abs. 8.09 13.01 12.89 10.77 7.15 5.83 5.33 4.66 0.9798E TAO Abs. 8.85 15.67 16.69	0.992 -06 m2/s Cswph 1.934 1.460 1.237 1.132 1.104 1.048 1.027 0.978 -06 m2/s Cswph 1.966 1.649 1.370
3.582 3.917 Displace VCG Pos Statice Water T Vel m/s 	210.3 210.4 cement D sition trim TA Temp. RT gms 	-1.96 -1.99 OIS 182 25 OO 4 21 H CM -0.55 -1.66 -2.57 -2.80 -2.89 -2.80 -2.78 -2.79 OIS 243 25 OO 5 21 H CM -0.56 -0.16	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg TAO deg 	10.64 8.34 s C LC cm 35.94 27.03 22.43 19.55 18.11 16.39 14.66 13.51 12.36 s C	32.49 32.49 Disp. Coc 5.97 cm Density LK cm 44.85 33.06 28.46 27.03 27.31 26.74 27.60 28.75 27.89 Disp. Coc 5.90 cm Density LK cm	462.3 437.6 eff. C @ Base 997 SWPH Cm2 853.0 444.1 545.5 499.3 487.0 462.3 487.0 6 Base 997 SWPH Cm2 867.1 727.4 604.0	2.729 CDL 0 Line 7.994 kg Cv 0.745 1.001 1.253 1.498 1.764 2.011 2.256 2.500 2.710 CDL 0 Line 7.994 kg	6.16051 .1503 /m3 Ki CT x10-3 50.36994 68.85185 51.39265 33.82472 20.51271 14.62116 10.49231 9.25454 8.63207 .2003 /m3 Ki CT x10-3 61.58997 106.06650	0.173 n. Visco RT/DIS 0.137 0.255 0.253 0.218 0.179 0.157 0.139 0.151 0.157 n. Visco RT/DIS 0.128 0.329 0.341	-0.095 Deity H/BPX -0.026 -0.079 -0.123 -0.134 -0.132 -0.133 Deity H/BPX -0.026 -0.007	3.50 0.9798E TAO Abs. 8.09 13.01 12.89 10.77 7.15 5.83 5.33 4.66 0.9798E TAO Abs. 8.85 15.67	0.992 -06 m2/s Cswph 1.934 1.460 1.237 1.132 1.104 1.048 1.027 1.027 0.978 Cswph 1.966 1.649 1.370 1.202
3.582 3.917 Displace VCG Pos Statice Water 7 Vel m/s 	210.3 210.4 cement D sition trim TA Temp. RT gms 	-1.96 -1.99 OIS 182 25 OO 4 21 H Cm -0.41 -0.55 -1.66 -2.57 -2.80 -2.89 -2.78 -2.79 OIS 243 25 OO 5 H Cm -0.16 -1.75	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg TAO deg 	10.64 8.34 s C LC cm 35.94 27.03 22.43 19.55 18.11 16.39 14.66 13.51 12.36 s C	32.49 32.49 Disp. Coc 5.97 cm Density LK cm 44.85 33.06 28.46 27.03 27.31 26.74 27.60 28.75 27.89 Disp. Coc 5.90 cm Density LK cm	462.3 437.6 eff. C @ Base 997 SWPH Cm2 853.0 444.1 545.5 499.3 487.0 462.3 487.0 6 Base 997 SWPH Cm2 867.1 727.4 604.0	2.729 CDL 0 2 Line 7.994 kg Cv 0.745 1.001 1.253 1.498 1.764 2.011 2.256 2.500 2.710 CDL 0 2.10e Cv CV 0.745 0.994 kg Cv 0.745 0.996 1.239 1.490	6.16051 .1503 /m3 Ki: CT x10-3 -50.36994 68.85185 51.39265 33.82472 20.51271 14.62116 10.49231 9.25454 8.63207 .2003 /m3 Ki: CT x10-3 -61.58997 106.06650 85.32388	0.173 n. Visco RT/DIS 0.137 0.255 0.253 0.218 0.179 0.157 0.139 0.151 0.157 n. Visco RT/DIS 0.128 0.329 0.341 0.295	-0.095 Decity H/BPX -0.026 -0.079 -0.123 -0.133 -0.137 -0.134 -0.132 -0.133 Decity H/BPX -0.006 -0.007 -0.008 -0.007	3.50 0.9798E TAO Abs. 8.09 13.01 12.89 10.77 7.15 5.83 5.33 4.66 0.9798E TAO Abs. 8.85 15.67 16.69	0.992 -06 m2/s Cswph 1.934 1.460 1.237 1.132 1.104 1.048 1.027 1.027 0.978 Cswph 1.966 1.649 1.370 1.202 1.167
3.582 3.917 Displace VCG Pos Static Water 1 1.069 1.437 1.799 2.151 2.532 2.886 3.238 3.589 3.889 Displace VCG Pos Static Water 1 Vel m/s	210.3 210.4 cement D sition trim TA Temp. RT gms 	-1.96 -1.99 OIS 182 25 OO 4 21 H Cm -0.41 -0.55 -1.66 -2.57 -2.80 -2.89 -2.78 -2.79 OIS 243 25 OO 21 H Cm -0.56 -0.16 -1.75 -3.16	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg TAO deg 	10.64 8.34 s C LC cm 35.94 27.03 22.43 19.55 18.11 16.39 14.66 13.51 12.36 s C C m	32.49 32.49 Disp. Coc 5.97 cm Density LK cm 44.85 33.06 28.46 27.03 27.31 26.74 27.60 28.75 27.89 Disp. Coc 5.90 cm Density LK cm	462.3 437.6 eff. C @ Base 997 SWPH Cm2 853.0 644.1 545.5 499.3 487.0 462.3 453.1 453	2.729 CDL 0 2 Line 7.994 kg Cv 0.745 1.001 1.253 1.498 1.764 2.011 2.256 2.500 2.710 CDL 0 2 Line 7.994 kg Cv 0.745 0.996 1.239 1.490 1.757 2.004	6.16051 .1503 /m3 Ki CT x10-3 50.36994 68.85185 51.39265 33.82472 20.51271 14.62116 10.49231 9.25454 8.63207 .2003 /m3 Ki CT x10-3 61.58997 106.06650 85.32388 58.21661 35.61149 22.65710	0.173 n. Visco RT/DIS 0.137 0.255 0.253 0.218 0.179 0.157 n. Visco RT/DIS 0.128 0.329 0.341 0.295 0.244 0.194	-0.095 Docity H/BPX -0.026 -0.079 -0.123 -0.133 -0.137 -0.134 -0.132 -0.133 Docity H/BPX -0.007 -0.083 -0.151 -0.180 -0.181	3.50 0.9798E TAO Abs. 8.09 13.01 12.89 10.77 7.15 5.83 5.33 4.66 0.9798E TAO Abs. 8.85 15.67 16.69 14.25 11.56 9.55	0.992 -06 m2/s Cswph 1.934 1.460 1.237 1.132 1.104 1.048 1.027 0.978 -06 m2/s Cswph 1.966 1.649 1.370 1.202 1.167 1.125
3.582 3.917 Displace VCG Pos Static Water 1 1.069 1.437 1.799 2.151 2.532 2.886 3.238 3.589 3.889 Displace VCG Pos Static Water 1 Vel m/s	210.3 210.4 cement D sition trim TA Pemp. RT gms 	-1.96 -1.99 OIS 182 25 OO 4 21 H Cm -0.55 -1.66 -2.57 -2.80 -2.89 -2.78 -2.79 OIS 243 25 OO 21 H Cm -0.56 -0.16 -1.75 -3.16 -3.78	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg TAO deg 	10.64 8.34 s C LC cm 35.94 27.03 22.43 19.55 18.11 16.39 14.66 13.51 12.36 s C C m	32.49 32.49 Disp. Coc 5.97 cm Density LK cm 	462.3 437.6 eff. C @ Base 997 SWPH Cm2 853.0 644.1 545.5 499.3 487.0 462.3 453.1 453	2.729 CDL 0 Line 7.994 kg CV 0.745 1.001 1.253 1.498 1.764 2.011 2.256 2.500 2.710 CDL 0 Line 7.994 kg CV	6.16051 .1503 /m3 Ki: CT x10-3	0.173 n. Visco RT/DIS 0.137 0.255 0.253 0.218 0.179 0.157 n. Visco RT/DIS 0.128 0.329 0.341 0.295 0.244 0.194	-0.095 H/BPX -0.020 -0.026 -0.079 -0.133 -0.133 -0.133 -0.133 -0.133 -0.133 -0.133	3.50 0.9798E TAO Abs. 8.09 13.01 12.89 10.77 7.15 5.83 5.33 4.66 0.9798E TAO Abs. 8.85 15.67 16.69 14.25 11.56	0.992 -06 m2/s Cswph 1.934 1.460 1.237 1.132 1.104 1.048 1.027 0.978 -06 m2/s Cswph 1.966 1.649 1.370 1.202 1.167 1.125 1.083
3.582 3.917 Displace VCG Pos Static Water 1 1.069 1.437 1.799 2.151 2.532 2.886 3.238 3.589 3.889 Displace VCG Pos Static Water 1 Vel m/s	210.3 210.4 cement D sition trim TA Temp. RT gms 	-1.96 -1.99 OIS 182 25 OO 4 21 H CM -2.57 -2.80 -2.89 -2.80 -2.78 -2.79 OIS 243 25 OO 51 H CM	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg TAO deg 	10.64 8.34 s C LC cm 35.94 27.03 22.43 19.55 18.11 16.39 14.66 13.51 12.36 s C LC cm	32.49 32.49 Disp. Coc 5.97 cm Density LK cm 44.85 33.06 28.46 27.03 27.31 26.74 27.60 28.75 27.89 Disp. Coc 5.90 cm Density LK cm	462.3 437.6 eff. C @ Base 997 SWPH Cm2 853.0 644.1 545.5 499.3 487.0 462.3 453.1 454.1 454	2.729 CDL 0 2 Line 7.994 kg Cv 0.745 1.001 1.253 1.498 1.764 2.011 2.256 2.500 2.710 CDL 0 2 Line 7.994 kg Cv 0.745 0.996 1.239 1.490 1.757 2.004	6.16051 .1503 /m3 Ki CT x10-3 50.36994 68.85185 51.39265 33.82472 20.51271 14.62116 10.49231 9.25454 8.63207 .2003 /m3 Ki CT x10-3 61.58997 106.06650 85.32388 58.21661 35.61149 22.65710	0.173 n. Visco RT/DIS 0.137 0.255 0.253 0.218 0.179 0.157 0.139 0.151 0.157 n. Visco RT/DIS 0.329 0.341 0.295 0.244 0.176	-0.095 Docity H/BPX -0.026 -0.079 -0.123 -0.137 -0.134 -0.132 -0.133 Docity H/BPX -0.026 -0.007 -0.083 -0.151 -0.180 -0.181 -0.177	3.50 0.9798E TAO Abs. 8.09 13.01 12.89 10.77 7.15 5.83 5.33 4.66 0.9798E TAO Abs. 8.85 15.67 16.69 14.25 11.56 9.55	0.992 -06 m2/s Cswph 1.934 1.460 1.237 1.132 1.104 1.048 1.027 1.027 0.978 -06 m2/s Cswph 1.966 1.649 1.370 1.202 1.167 1.125 1.083 1.055
3.582 3.917 Displace VCG Pos Static Water 1 1.069 1.437 1.799 2.151 2.532 2.886 3.238 3.589 3.889 Displace VCG Pos Static Water 1 Vel m/s	210.3 210.4 cement D sition trim TA Temp. RT gms 	-1.96 -1.99 OIS 182 25 OO 4 21 H CM 0.41 -0.55 -1.66 -2.57 -2.80 -2.89 -2.78 -2.79 OIS 243 25 OO 51 H CM -0.16 -1.75 -3.16 -3.78 -3.78 -3.72	1.17 0.67 5.0 gm .96 % B .02 deg .00 deg TAO deg 	10.64 8.34 s C LC cm 35.94 27.03 22.43 19.55 18.11 16.39 14.66 13.51 12.36 s C LC cm 37.38 31.63 25.88 22.14 20.70 18.97 17.25 16.10	32.49 32.49 Disp. Cox 5.97 cm Density LK cm 44.85 33.06 28.46 27.03 27.31 26.74 27.60 28.75 27.89 Disp. Cox 5.90 cm Density LK cm 45.14 36.51 30.48 27.31 27.31 27.31	462.3 437.6 eff. C @ Base 997 SWPH Cm2 	2.729 CDL 0 2 Line 7.994 kg Cv 0.745 1.001 1.253 1.498 1.764 2.011 2.256 2.500 2.710 CDL 0 2 Line 7.994 kg Cv 0.745 0.996 1.239 1.490 1.757 2.004 2.251	6.16051 .1503 /m3 Ki CT x10-3 50.36994 68.85185 51.39265 33.82472 20.51271 14.62116 10.49231 9.25454 8.63207 .2003 /m3 Ki CT x10-3 61.58997 106.06650 85.32388 58.21661 35.61149 22.65710 16.84490	0.173 n. Visco RT/DIS 0.137 0.255 0.253 0.218 0.179 0.157 0.139 0.151 0.157 n. Visco RT/DIS 0.128 0.329 0.341 0.295 0.244 0.194 0.176 0.165	-0.095 Docity H/BPX -0.020 -0.026 -0.079 -0.133 -0.137 -0.134 -0.132 -0.133 Docity H/BPX -0.026 -0.007 -0.083 -0.151 -0.180 -0.181 -0.177 -0.174	3.50 0.9798E TAO Abs. 8.09 13.01 12.89 10.77 8.57 7.15 5.83 5.33 4.66 0.9798E TAO Abs. 8.85 15.67 16.69 14.25 11.56 9.55 8.05	0.992 -06 m2/s Cswph 1.934 1.460 1.237 1.132 1.104 1.048 1.027 0.978 -06 m2/s Cswph 1.966 1.649 1.370 1.202 1.167 1.125 1.083

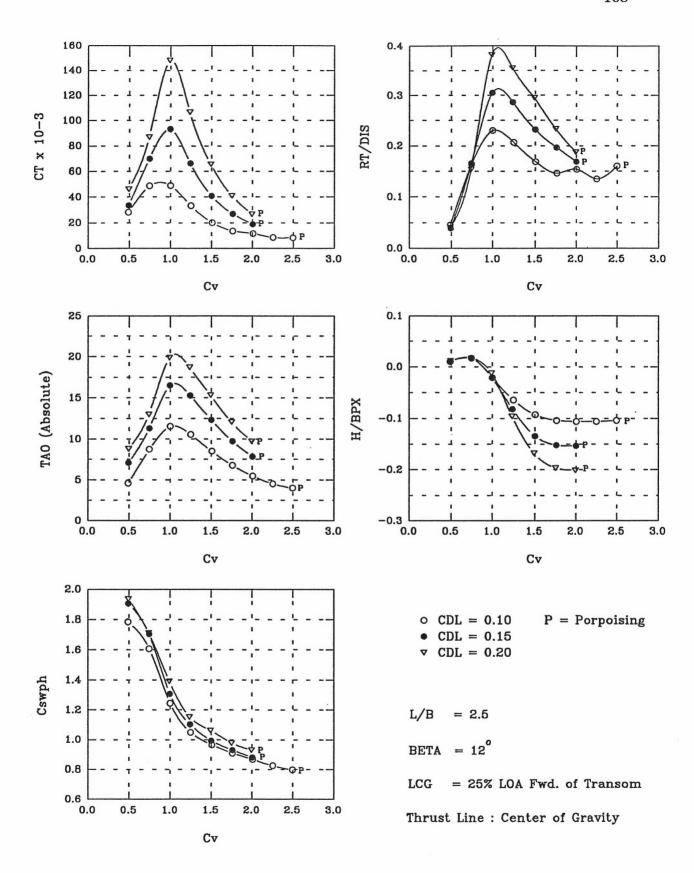


Figure B.5

						~							
	Model N	No. T-25	12										
	L/B Rat			.5		Length O	veral T	ΩA 57	.50 cm				
	Deadris			.00 deg		Breath (.00 cm				
	DOGGE ZE			.ou acg		Breath (.00 cm			109)
	LCG Pos	zition	25	.00 % I	O2	14.38 C			00 Cm				
	LCG FO	SICION	23	.00 8 1	OA	14.30 C	m e ira	пвощ					
	Dienlac	cement D	TG 121	6.0 gm	e e	Disp. Co	off C	DL 0	.1001				
	VCG Pos			.04 % B		6.68 cm			.1001				
		trim TA		.75 deg		O.OO CM	e base	Dine					
	Water 1			.00 deg		Density	997	.994 kg	/m2 Ki	n. Visc	ocity	0 97988	-06 m2/s
	water .	cmp.	2.1	.ou deg	•	Density	331	. , , , , , , , , , , , , , , , , , , ,	/ M.J.	n. VIBC	ocicy	0.57502	-00 MZ/B
	Vel	RT	H	TAO	LC	LK	SWPH	Cv	CT	RT/DIS	H/BPX	TAO	Cswph
	m/s	qms	cm	deg	cm	cm	cm2	•	x10-3			Abs.	
_													
	0.700	55.4	0.21	0.84	27.31	46.00	786.7	0.488	28.24616	0.046	0.010	4.59	1.784
	1.068	199.7	0.35	4.97	28.75	37.38	708.7	0.744	48.58704	0.164		8.72	1.607
	1.432		-0.45	7.80	21.85	29.33		0.998	48.85535		-0.021	11.55	1.244
	1.792	251.3	-1.34	6.81	17.54	25.59		1.249	33.26605		-0.064	10.56	1.048
	2.163		-1.95	4.75	14.66	25.01		1.507	20.28635		-0.093	8.50	0.964
	2.525		-2.19	3.01	12.94	24.44		1.759	13.66265		-0.104	6.76	0.909
	2.878		-2.22	1.72	11.50	24.15		2.005	11.64585		-0.104	5.47	0.867
												4.52	
	3.232		-2.22	0.77	9.78	24.15		2.252	8.52508		-0.106		0.825
	3.582		-2.19	0.25	8.63	24.15	331.3	2.496	8.46018	0.160	-0.104	4.00	0.797
	** Porp	orsing											
	D4 1		Ta 100		_	n: a-	- 66 0	DT 0	1502				
		cement D				Disp. Co			.1503				
	VCG Pos			.61 % B		6.35 cm	e Base	Line					
		trim TA		.97 deg									06-01-
	Water 1	remp.	21	.00 deg	C	Density	997	.994 kg	/m3 K1	n. Visco	ocity	0.9/98E	-06 m2/s
	377	D.M.	**	mao	***	TT	CMDII	Cv	C/M	DM/DTC	H/BPX	TAO	Carmb
	Vel m/s	RT	H	TAO	LC	LK	SWPH	CV	CT x10-3	KI/DIS	H/ DPA	Abs.	Cswph
	m/s	gms	cm	deg	cm	cm	cm2		X10-2			ADS.	
	0.708	72.0	0.23	1.10	33.06	46.00	840.7	0.493	33.59923	0 030	0.011	7.07	1.906
								0.741			0.017	11.31	1.704
	1.064	303.8	0.36	5.34	31.63	38.81	751.4		70.18169			16.51	1.307
	1.426		-0.45	10.54	24.44	29.33		0.994	93.22369		-0.021		
	1.781		-1.73	9.31	20.13	25.30		1.241	66.31448		-0.082	15.28	1.104
	2.156		-2.82	6.37	17.25	23.58		1.502	40.91587		-0.134	12.34	0.992
	2.523		-3.19	3.76	15.24	23.00	409.9	1.758			-0.152	9.73	0.929
	2.872	309.3	-3.20	1.87	13.22	23.00	388.3	2.001	18.97946	0.169	-0.153	7.84	0.881
	** Porp	oising											
		cement D				Disp. Co			.2003				
	VCG Pos			.78 % B		6.39 cm	# Base	Line					
		trim TA		.65 deg									
	Water T	Temp.	21	.50 deg	C	Density	997	.885 kg	/m3 Ki	n. Visco	ocity	0.9682E	-06 m2/s
		60/607	122	1.000000000		14000	1000000000	ALC: NO.					12-10-10-10-10-10-10-10-10-10-10-10-10-10-
	Vel	RT	H	TAO	LC	LK	SWPH	Cv	CT	RT/DIS	H/BPX	TAO	Cswph
	m/s	gms	cm	deg	CM	CM	cm2		x10-3			Abs.	
-													
		99.6	0.26	1.18	34.50	46.00	854.4	0.491	46.20199	0.041	0.012	8.83	1.937
	0.704					39.10	754.4	0.737	87.05890	0.154	0.017	13.01	1.711
	1.058	373.7	0.36	5.36	31.63								
	1.058 1.417	373.7 928.9	-0.25	12.24	26.45	30.76	613.3	0.988			-0.012	19.89	1.391
	1.058 1.417 1.771	373.7 928.9 864.2	-0.25 -2.01	12.24 11.04	26.45 21.56	30.76 25.88	613.3 508.5	1.234	106.58160	0.355	-0.096	18.69	1.153
	1.058 1.417 1.771 2.140	373.7 928.9 864.2 716.6	-0.25 -2.01 -3.54	12.24 11.04 7.66	26.45 21.56 19.26	30.76 25.88 24.44	613.3 508.5 468.5	1.234 1.491	106.58160 65.68763	0.355 0.295	-0.096 -0.168	18.69 15.31	1.153 1.062
	1.058 1.417 1.771	373.7 928.9 864.2	-0.25 -2.01	12.24 11.04	26.45 21.56	30.76 25.88	613.3 508.5 468.5	1.234 1.491 1.748	106.58160 65.68763 40.97174	0.355 0.295 0.233	-0.096 -0.168 -0.197	18.69	1.153 1.062 0.978
	1.058 1.417 1.771 2.140	373.7 928.9 864.2 716.6	-0.25 -2.01 -3.54	12.24 11.04 7.66	26.45 21.56 19.26	30.76 25.88 24.44	613.3 508.5 468.5	1.234 1.491	106.58160 65.68763	0.355 0.295 0.233	-0.096 -0.168	18.69 15.31	1.153 1.062
	1.058 1.417 1.771 2.140 2.509	373.7 928.9 864.2 716.6 565.9 456.8	-0.25 -2.01 -3.54 -4.14	12.24 11.04 7.66 4.42	26.45 21.56 19.26 16.96	30.76 25.88 24.44 23.29	613.3 508.5 468.5 431.5	1.234 1.491 1.748	106.58160 65.68763 40.97174	0.355 0.295 0.233	-0.096 -0.168 -0.197	18.69 15.31 12.07	1.153 1.062 0.978

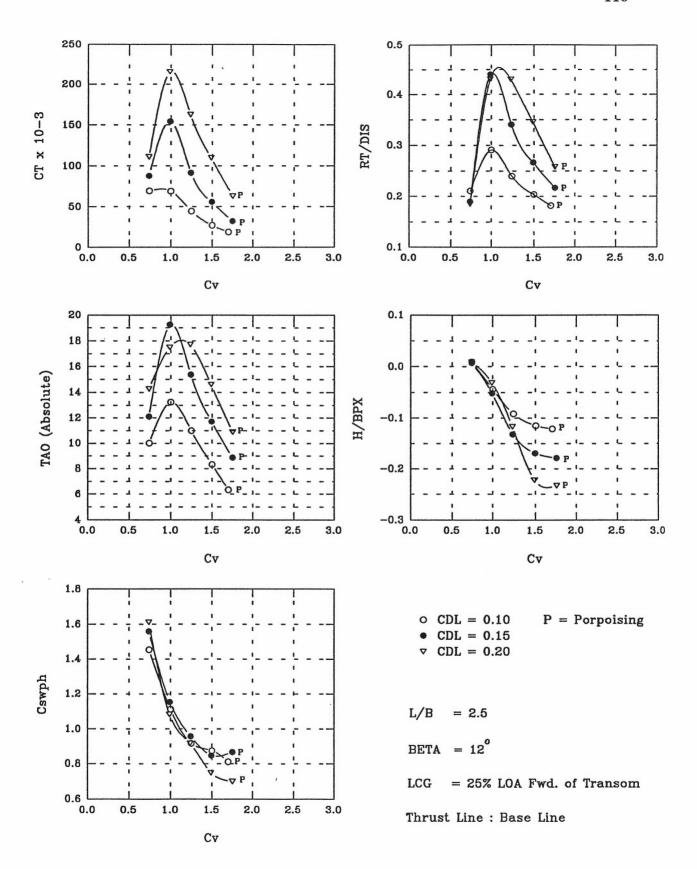


Figure B.6

		~				
Model No. T-2512 L/B Ratio Deadrise	2.5 12.00 deg	Breath (D	eck) B 23	7.50 cm 3.00 cm		111
LCG Position	25.00 % LOA	14.38 cm	f Transom			
Displacement DIS VCG Position Static trim TAOC Water Temp.	29.04 % B		<pre>@ Base Line</pre>).1002 [/m3 Ki]	n. Viscocity	0.9682E-06 m2/s
Vel RT m/s gms	H TAO LC cm deg cm	LK Cm	SWPH Cv	CT x10-3	RT/DIS H/BPX	TAO Cswph
1.065 256.3 1.433 353.5 - 1.789 292.1 - 2.158 248.3 - 2.526 221.7 - ** Porpoising	0.92 9.48 20.13 1.94 7.24 15.81 2.42 4.58 14.09	33.93 25.59 21.85 21.85 21.85	641.0 0.742 490.0 0.999 403.7 1.246 385.3 1.503 357.5 1.700	69.02124 44.45838 27.21386	0.240 -0.092 0.204 -0.115	13.23 1.111 10.99 0.916 8.33 0.874
VCG Position Static trim TAO		6.35 cm	<pre>@ Base Line</pre>		n. Viscocity	0.9682E-06 m2/s
m/s gms	H TAO LC cm deg cm	LK cm	SWPH CV cm2	CT x10-3	RT/DIS · H/BPX	TAO Cswph
	0.16 6.14 28.75 1.07 13.28 21.56 2.78 9.42 17.54 3.55 5.77 14.66	35.36 25.88 21.85	687.2 0.739 508.5 0.989 422.2 1.239 372.9 1.495	88.03172 154.35010 91.68023 55.81160	0.190 0.007 0.440 -0.051 0.341 -0.132 0.267 -0.169 0.217 -0.179	12.11 1.558 19.25 1.153 15.39 0.957 11.74 0.846
VCG Position Static trim TAOo	7.65 deg	6.39 cm	<pre>@ Base Line</pre>	.2003 /m3 Kir	n. Viscocity	0.9682E-06 m2/s
	H TAO LC cm deg cm	LK cm	SWPH Cv cm2	CT x10-3	RT/DIS H/BPX	TAO Cswph
1.059 449.5 1.415 1048.3 - 1.770 1046.6 - 2.135 840.5 -	0.19 6.62 30.19 0.66 9.84 20.13 2.46 10.08 16.67	36.22 24.44 20.99 20.13	710.2 0.738 477.7 0.986 403.7 1.233	111.07100 215.62240 162.66910 109.92790	0.185 0.009 0.431 -0.031 0.430 -0.117 0.346 -0.222 0.258 -0.233	17.49 1.083 17.73 0.916 14.61 0.748

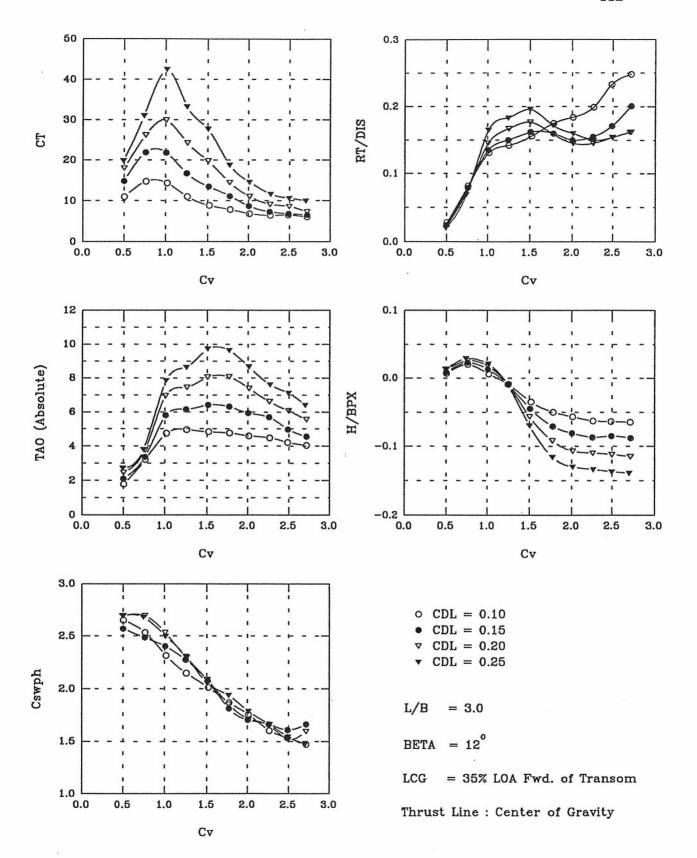


Figure B.7

					~							
	No. T-30											
L/B Ra			.0		Length C			.00 cm				
Deadri	.se	12	.00 deg		Breath (.00 cm			113	3
LCG Po	sition	35	.00 % L	OA	Breath (24.15 c			CIII				
200 20	2202011				2.1.20	(110	III OM					
Displa	cement D	IS 121	6.0 gm	s	Disp. Co			.10				
	sition		.74 % B		5.69 cm	l @ Base	Line					
	trim TA		.60 deg		D		CEO 1	/ m:				06 0/-
Water	Temp.	22	.50 deg	C	Density	997	.658 Kg	/m3 Ki	n. Visc	ocity	0.945/E	-06 m2/s
Vel	RT	H	TAO	LC	LK	WSPH	CSP	CT	RT/DIS	H/BPX	TAO	Cwsph
m/s	gms	cm	deg	cm	cm	cm2		x10-3			Total	<u>F</u>
0.725	34.3	0.15	0.17	53.68	61.69	1169.0		10.952970		0.007	1.77	2.651
1.093 1.461	100.1 158.9	0.42	1.62 3.15	48.30 41.40	58.65 54.51	1117.1 1019.0	1.018	14.753810 14.361430		0.020	3.22 4.75	2.533 2.311
1.806		-0.19	3.36	36.22	52.30		1.258	11.014900		-0.009	4.96	2.146
2.183	189.3	-0.74	3.23	32.78	50.03		1.521	8.797648		-0.035	4.83	2.013
2.550	212.8	-1.05	3.17	29.33	47.54		1.776	7.812627	0.175	-0.050	4.77	1.868
2.886		-1.20	3.00	25.88	46.23		2.011	6.819765		-0.057		1.753
3.254		-1.31	2.89	21.74	44.16		2.267	6.363119		-0.063		1.602
3.568 3.898		-1.35 -1.37	2.62	19.87 17.94	43.33 42.57		2.486	6.460609 6.005923		-0.064 -0.065	4.22	1.536 1.471
3.070	301.0	-1.37	2.44	17.54	42.57	040.7	2.710	0.003923	0.240	-0.003	4.04	1.4/1
Displa	cement D	IS 182	5.0 gm	s	Disp. Co	eff. C	DL 0	.15				
	sition		.61 % B		5.66 cm	@ Base	Line					
	trim TA		.95 deg						2 NEWS-0			
Water	Temp.	22	.50 deg	С	Density	997	.658 kg	/m3 Ki	n. Visco	ocity	0.9457E	-06 m2/s
Vel	RT	н	TAO	LC	LK	WSPH	CSP	CT	PT/DTS	H/BPX	TAO	Cwsph
m/s	gms	cm	deg	cm	CM	cm2	CDI	x10-3	KI/DIS	II/ DE A	Total	Cwspn
0.717	43.8	0.19	0.15	45.54	62.10	1133.1		14.806400			2.10	2.569
1.086	144.1	0.49	1.42	45.20	59.00	1096.4		21.929040			3.37	2.486
1.447	246.5	0.26	3.85	44.85	55.89	1059.3		21.851360		0.013	5.80	2.402
1.795 2.170	274.1 295.4	-0.20 -0.95	4.20	40.71	53.48 49.68		1.251 1.512	16.708870 13.478110		-0.009 -0.045	6.15 6.41	2.271 2.075
2.543	292.5	-1.48	4.36	30.36	44.16		1.771	11.140990		-0.071	6.31	1.811
2.875		-1.70	3.98	26.91	43.13		2.003	8.664077		-0.081	5.93	1.702
3.244	283.0	-1.83	3.74	25.53	42.78	732.3	2.260	7.223189	0.155	-0.087	5.69	1.661
3.244 3.574	313.0	-1.79	3.03	23.32	42.78	708.6	2.490	6.799475	0.171	-0.085	4.98	1.607
3.244	313.0		3.03	23.32		708.6			0.171	-0.085	4.98	
3.244 3.574 3.901	313.0 366.2	-1.79 -1.84	3.03 2.61	23.32 22.43	42.78 45.89	708.6 732.3	2.490 2.718	6.799475 6.463918	0.171	-0.085	4.98	1.607
3.244 3.574 3.901 Displa	313.0 366.2 cement D	-1.79 -1.84	3.03 2.61 2.0 gm	23.32 22.43	42.78 45.89 Disp. Co	708.6 732.3 eff. C	2.490 2.718 DL 0	6.799475	0.171	-0.085	4.98	1.607
3.244 3.574 3.901 Displa	313.0 366.2 cement D	-1.79 -1.84 FIS 243	3.03 2.61 2.0 gm .52 % B	23.32 22.43	42.78 45.89	708.6 732.3 eff. C	2.490 2.718 DL 0	6.799475 6.463918	0.171	-0.085	4.98	1.607
3.244 3.574 3.901 Displa	313.0 366.2 cement D sition trim TA	-1.79 -1.84 OIS 243 24 00 2	3.03 2.61 2.0 gm .52 % B	23.32 22.43 s	42.78 45.89 Disp. Co	708.6 732.3 eff. C	2.490 2.718 DL 0	6.799475 6.463918	0.171 0.201	-0.085 -0.088	4.98 4.56	1.607
3.244 3.574 3.901 Displa VCG Po Static Water	313.0 366.2 cement D sition trim TA Temp.	-1.79 -1.84 IS 243 24 00 2 22	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg	23.32 22.43 s	42.78 45.89 Disp. Co 5.64 cm	708.6 732.3 eff. C	2.490 2.718 DL 0 Line	6.799475 6.463918 2.20	0.171 0.201	-0.085 -0.088	4.98 4.56	1.607 1.661 -06 m2/s
3.244 3.574 3.901 Displa VCG Po Static Water	313.0 366.2 cement D sition trim TA Temp.	-1.79 -1.84 IS 243 24 00 2 22	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg	23.32 22.43 s	42.78 45.89 Disp. Co 5.64 cm Density	708.6 732.3 eff. C Base 997 WSPH	2.490 2.718 DL 0	6.799475 6.463918 2.20 2/m3 Kin	0.171 0.201	-0.085 -0.088	4.98 4.56 0.9457E	1.607 1.661
3.244 3.574 3.901 Displa VCG Po Static Water	313.0 366.2 cement D sition trim TA Temp.	-1.79 -1.84 IS 243 24 00 2 22	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg	23.32 22.43 s	42.78 45.89 Disp. Co 5.64 cm	708.6 732.3 eff. C	2.490 2.718 DL 0 Line	6.799475 6.463918 2.20	0.171 0.201	-0.085 -0.088	4.98 4.56	1.607 1.661 -06 m2/s
3.244 3.574 3.901 Displa VCG Po Static Water Vel m/s	313.0 366.2 cement D sition trim TA Temp. RT gms	-1.79 -1.84 IS 243 24 Oo 2 22 H cm	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg TAO deg	23.32 22.43 s C LC cm	42.78 45.89 Disp. Co 5.64 cm Density LK cm	708.6 732.3 eff. C Base 997 WSPH cm2	2.490 2.718 DL 0 Line .658 kg	6.799475 6.463918 2.20 2/m3 King CT x10-3	0.171 0.201 n. Visco	-0.085 -0.088 Deity H/BPX	4.98 4.56 0.9457E TAO Total	1.607 1.661 -06 m2/s Cwsph
3.244 3.574 3.901 Displa VCG Po Static Water	313.0 366.2 cement D sition trim TA Temp.	-1.79 -1.84 IS 243 24 00 2 22	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg	23.32 22.43 s	42.78 45.89 Disp. Co 5.64 cm Density	708.6 732.3 eff. C Base 997 WSPH	2.490 2.718 DL 0 Line .658 kg	6.799475 6.463918 2.20 2/m3 Kin	0.171 0.201	-0.085 -0.088 Deity H/BPX	4.98 4.56 0.9457E	1.607 1.661 -06 m2/s
3.244 3.574 3.901 Displa VCG Po Static Water Vel m/s	313.0 366.2 cement D sition trim TA Temp. RT gms 56.1 187.5 353.4	-1.79 -1.84 IS 243 24 OO: 2 22 H cm 	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg TAO deg 	23.32 22.43 s C LC cm 62.10 62.10 52.79	42.78 45.89 Disp. Co 5.64 cm Density LK cm 62.10 62.10 56.24	708.6 732.3 reff. C @ Base 997 WSPH cm2 	2.490 2.718 DL 0 Line .658 kg CSP 0.501 0.758 1.005	6.799475 6.463918 6.20 6/m3 Ki: CT x10-3 17.996400 26.227330 29.926020	0.171 0.201 n. Visco RT/DIS 0.023 0.077 0.145	-0.085 -0.088 Decity H/BPX 0.013 0.026 0.018	4.98 4.56 0.9457E TAO Total 	1.607 1.661 -06 m2/s Cwsph
3.244 3.574 3.901 Displa VCG Po Static Water Vel m/s 0.719 1.088 1.442 1.805	313.0 366.2 cement D sition trim TA Temp. RT gms 	-1.79 -1.84 IS 2433 24 OO 2 22 H cm 0.26 0.56 0.37 -0.21	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg TAO deg 0.15 1.48 4.65 5.15	23.32 22.43 s C LC cm -62.10 62.10 62.10 52.79 44.85	42.78 45.89 Disp. Co 5.64 cm Density LK cm 62.10 62.10 56.24 51.06	708.6 732.3 reff. C @ Base 997 WSPH cm2 1188.0 1188.0 1117.1 1011.2	2.490 2.718 DL 0 Line .658 kg CSP 0.501 0.758 1.005 1.258	6.799475 6.463918 2.20 2.7 x10-3 26.227330 29.926020 24.269700	0.171 0.201 n. Visco RT/DIS 0.023 0.077 0.145 0.167	-0.085 -0.088 Decity H/BPX 0.013 0.026 0.018 -0.010	4.98 4.56 0.9457E TAO Total 	1.607 1.661 -06 m2/s Cwsph
3.244 3.574 3.901 Displa VCG Po Static Water Vel m/s 0.719 1.088 1.442 1.805 2.159	313.0 366.2 cement D sition trim TA Temp. RT gms 	-1.79 -1.84 IS 243 24 OO 2 22 H cm 	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg TAO deg 	23.32 22.43 s C LC cm 62.10 62.10 52.79 44.85 37.95	42.78 45.89 Disp. Co 5.64 cm Density LK cm 62.10 62.10 56.24 51.06 48.30	708.6 732.3 reff. C 0 @ Base 997 WSPH cm2 1188.0 1117.1 1011.2 920.2	2.490 2.718 DL 0 Line .658 kg CSP 0.501 0.758 1.005 1.258	6.799475 6.463918 220 26/m3 Kin x10-3 17.996400 26.227330 29.926020 24.269700 19.788930	0.171 0.201 n. Visco RT/DIS 0.023 0.077 0.145 0.167 0.177	-0.085 -0.088 Deity H/BPX 0.013 0.026 0.018 -0.010 -0.057	4.98 4.56 0.9457E TAO Total 2.45 3.78 6.95 7.45 8.06	1.607 1.661 -06 m2/s Cwsph 2.694 2.533 2.293 2.087
3.244 3.574 3.901 Displa VCG Po Static Water Vel m/s 0.719 1.088 1.442 1.805 2.159 2.537	313.0 366.2 cement D sition trim TA Temp. RT gms 	-1.79 -1.84 IS 243 24 OO 2 22 H Cm 	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg TAO deg 0.15 1.48 4.65 5.15 5.76 5.77	23.32 22.43 s C LC cm 62.10 62.10 52.79 44.85 37.95 33.12	42.78 45.89 Disp. Co 5.64 cm Density LK cm 62.10 62.10 56.24 51.06 48.30 43.13	708.6 732.3 reff. C @ Base 997 WSPH cm2 1188.0 1117.1 1011.2 920.2 817.1	2.490 2.718 DL 0 Line .658 kg CSP 0.501 0.758 1.005 1.258 1.504	6.799475 6.463918 .20 /m3 Kin x10-3 	0.171 0.201 n. Visco RT/DIS 0.023 0.077 0.145 0.167 0.177 0.159	-0.085 -0.088 Decity H/BPX -0.013 0.026 0.018 -0.010 -0.057 -0.092	4.98 4.56 0.9457E TAO Total 	1.607 1.661 -06 m2/s Cwsph
3.244 3.574 3.901 Displa VCG Po Static Water Vel m/s 	313.0 366.2 cement D sition trim TA Temp. RT gms 	-1.79 -1.84 IS 243 24 OO 2 22 H Cm -0.26 0.56 0.37 -0.21 -1.19 -1.94 -2.25	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg TAO deg 	23.32 22.43 s C LC cm 62.10 62.10 52.79 44.85 37.95 33.12 28.98	42.78 45.89 Disp. Co 5.64 cm Density LK cm 62.10 62.10 56.24 51.06 48.30 43.13	708.6 732.3 reff. C @ Base 997 WSPH cm2 1188.0 1117.1 1011.2 920.2 817.1	2.490 2.718 DL 0 Line .658 kg CSP 0.501 0.758 1.005 1.258 1.504	6.799475 6.463918 .20 /m3 Kin x10-3 	0.171 0.201 n. Visco RT/DIS 0.023 0.077 0.145 0.167 0.179 0.145	-0.085 -0.088 Decity H/BPX 0.013 0.026 0.018 -0.010 -0.057 -0.092 -0.107	4.98 4.56 0.9457E TAO Total 2.45 3.78 6.95 7.45 8.06 8.07 7.39	1.607 1.661 -06 m2/s Cwsph
3.244 3.574 3.901 Displa VCG Po Static Water Vel m/s 	313.0 366.2 cement D sition trim TA Temp. RT gms 	-1.79 -1.84 IS 243 24 OO 2 22 H cm -0.26 0.56 0.37 -0.21 -1.19 -1.94 -2.25 -2.32	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg TAO deg 	23.32 22.43 s C LC cm 62.10 52.79 44.85 37.95 33.12 28.98 27.60	42.78 45.89 Disp. Co 5.64 cm Density LK cm 62.10 62.10 56.24 51.06 48.30 43.13 41.40 40.36	708.6 732.3 Peff. C Base 997 WSPH Cm2 1188.0 1117.1 1011.2 920.2 817.1 17.4 17.4 17.4 17.8	2.490 2.718 DL 0 Line .658 kg CSP 0.501 0.758 1.005 1.258 1.767 2.012 2.261	6.799475 6.463918 6.20 6/m3 Kin x10-3 17.996400 26.227330 29.926020 24.269700 19.788930 14.460920 11.021820 9.065616	0.171 0.201 n. Visco RT/DIS 0.023 0.077 0.145 0.167 0.159 0.145 0.145	-0.085 -0.088 Deity H/BPX 0.013 0.026 0.018 -0.010 -0.057 -0.092 -0.107	4.98 4.56 0.9457E TAO Total 	1.607 1.661 -06 m2/s Cwsph
3.244 3.574 3.901 Displa VCG Po Static Water Vel m/s 	313.0 366.2 cement D sition trim TA Temp. RT gms 	-1.79 -1.84 IS 243 24 OO 2 22 H Cm -0.26 0.56 0.37 -0.21 -1.19 -1.94 -2.25 -2.32 -2.35	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg TAO deg 0.15 1.48 4.65 5.15 5.76 5.77 5.09 4.31 3.76	23.32 22.43 s C LC cm 62.10 62.10 52.79 33.12 28.98 27.60 24.15	42.78 45.89 Disp. Co 5.64 cm Density LK cm 62.10 62.10 56.24 51.06 48.30 43.13 41.40 40.36 38.30	708.6 732.3 reff. C @ Base 997 WSPH cm2 1188.0 1117.1 1011.2 920.2 817.1 754.4 728.6 669.4	2.490 2.718 DL 0 Line .658 kg CSP 0.501 0.758 1.005 1.258 1.767 2.012 2.261 2.496	6.799475 6.463918 .20 /m3 Kin x10-3 	0.171 0.201 n. Visco RT/DIS 0.023 0.077 0.145 0.167 0.159 0.145 0.145	-0.085 -0.088 Deity H/BPX 0.013 0.026 0.018 -0.010 -0.057 -0.092 -0.107	4.98 4.56 0.9457E TAO Total 	1.607 1.661 -06 m2/s Cwsph
3.244 3.574 3.901 Displa VCG Po Static Water Vel m/s 0.719 1.088 1.442 1.805 2.159 2.537 2.888 3.245 3.582	313.0 366.2 cement D sition trim TA Temp. RT gms 	-1.79 -1.84 IS 243 24 OO 2 22 H Cm -0.26 0.56 0.37 -0.21 -1.19 -1.94 -2.25 -2.32 -2.35	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg TAO deg 0.15 1.48 4.65 5.15 5.76 5.77 5.09 4.31 3.76	23.32 22.43 s C LC cm 62.10 62.10 52.79 33.12 28.98 27.60 24.15	42.78 45.89 Disp. Co 5.64 cm Density LK cm 62.10 62.10 56.24 51.06 48.30 43.13 41.40 40.36 38.30	708.6 732.3 reff. C @ Base 997 WSPH cm2 1188.0 1117.1 1011.2 920.2 817.1 754.4 728.6 669.4	2.490 2.718 DL 0 Line .658 kg CSP 0.501 0.758 1.005 1.258 1.767 2.012 2.261 2.496	6.799475 6.463918 6.20 6/m3 Kin x10-3 17.996400 26.227330 29.926020 24.269700 19.788930 14.460920 11.021820 9.065616	0.171 0.201 n. Visco RT/DIS 0.023 0.077 0.145 0.167 0.159 0.145 0.145	-0.085 -0.088 Deity H/BPX 0.013 0.026 0.018 -0.010 -0.057 -0.092 -0.107	4.98 4.56 0.9457E TAO Total 	1.607 1.661 -06 m2/s Cwsph
3.244 3.574 3.901 Displa VCG Po Static Water Vel m/s 	313.0 366.2 cement D sition trim TA Temp. RT gms 	-1.79 -1.84 IS 243 24 OO 2 22 H CM -0.26 0.37 -0.21 -1.19 -1.94 -2.25 -2.32 -2.35 IS 304	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg TAO deg 	23.32 22.43 s C LC cm 62.10 52.79 44.85 37.95 33.12 28.98 27.60 24.15	42.78 45.89 Disp. Co 5.64 cm Density LK cm 62.10 62.10 56.24 51.06 48.30 43.13 41.40 40.36	708.6 732.3 reff. C @ Base 997 WSPH cm2 1188.0 1117.1 1011.2 920.2 817.1 754.4 728.6 669.4	2.490 2.718 DL 0 Line .658 kg CSP 0.501 0.758 1.005 1.258 1.767 2.012 2.261 2.496	6.799475 6.463918 2.20 2.20 2.20 2.20 2.20 2.20 2.20 2.2	0.171 0.201 n. Visco RT/DIS 0.023 0.077 0.145 0.167 0.159 0.145 0.145	-0.085 -0.088 Deity H/BPX 0.013 0.026 0.018 -0.010 -0.057 -0.092 -0.107 -0.110	4.98 4.56 0.9457E TAO Total 	1.607 1.661 -06 m2/s Cwsph
3.244 3.574 3.901 Displa VCG Po Static Water Vel m/s 	313.0 366.2 cement D sition trim TA Temp. RT gms 	-1.79 -1.84 IS 2433 24 OO 2 22 H CM 0.26 0.56 0.37 -0.21 -1.19 -1.94 -2.25 -2.32 -2.35 IS 304	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg TAO deg 	23.32 22.43 s C LC cm 62.10 62.10 52.79 44.85 37.95 33.12 28.98 27.60 24.15	42.78 45.89 Disp. Co 5.64 cm Density LK cm 62.10 62.10 56.24 51.06 48.30 43.13 41.40 40.36 38.30 Disp. Co 5.91 cm	708.6 732.3 Peff. C @ Base 997 WSPH Cm2 1188.0 1117.1 1011.2 920.2 817.1 754.4 728.6 669.4	2.490 2.718 DL 0 Line .658 kg CSP 0.501 0.758 1.005 1.258 1.767 2.012 2.261 2.496	6.799475 6.463918 2.20 2.27 2.10-3 2.27330 29.926020 24.269700 19.788930 14.460920 11.021820 9.065616 8.561684	0.171 0.201 n. Visco RT/DIS 0.023 0.077 0.145 0.167 0.179 0.145 0.145	-0.085 -0.088 Decity H/BPX 0.013 0.026 0.018 -0.010 -0.057 -0.092 -0.107 -0.110 -0.112	4.98 4.56 0.9457E TAO Total 	1.607 1.661 -06 m2/s Cwsph
3.244 3.574 3.901 Displa VCG Po Static Water Vel m/s 	313.0 366.2 cement D sition trim TA Temp. RT gms 	-1.79 -1.84 IS 2433 24 OO 2 22 H CM 0.26 0.56 0.37 -0.21 -1.19 -1.94 -2.25 -2.32 -2.35 IS 304	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg TAO deg 	23.32 22.43 s C LC cm 62.10 62.10 52.79 44.85 37.95 33.12 28.98 27.60 24.15	42.78 45.89 Disp. Co 5.64 cm Density LK cm 62.10 62.10 56.24 51.06 48.30 43.13 41.40 40.36 38.30 Disp. Co 5.91 cm	708.6 732.3 Peff. C @ Base 997 WSPH Cm2 1188.0 1117.1 1011.2 920.2 817.1 754.4 728.6 669.4	2.490 2.718 DL 0 Line .658 kg CSP 0.501 0.758 1.005 1.258 1.767 2.012 2.261 2.496	6.799475 6.463918 2.20 2.20 2.20 2.20 2.20 2.20 2.20 2.2	0.171 0.201 n. Visco RT/DIS 0.023 0.077 0.145 0.167 0.179 0.145 0.145	-0.085 -0.088 Decity H/BPX 0.013 0.026 0.018 -0.010 -0.057 -0.092 -0.107 -0.110 -0.112	4.98 4.56 0.9457E TAO Total 	1.607 1.661 -06 m2/s Cwsph
3.244 3.574 3.901 Displa VCG Po Static Water Vel m/s 	313.0 366.2 cement D sition trim TA Temp. RT gms 	-1.79 -1.84 IS 2433 24 OO 2 22 H Cm -0.26 0.56 0.37 -0.21 -1.19 -1.94 -2.25 -2.32 -2.35 IS 304 25 OO 2 22	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg TAO deg 	23.32 22.43 s C LC cm 62.10 62.10 52.79 44.85 37.95 33.12 28.98 27.60 24.15	42.78 45.89 Disp. Co 5.64 cm Density LK cm 62.10 62.10 56.24 51.06 48.30 43.13 41.40 40.36 38.30 Disp. Co 5.91 cm	708.6 732.3 reff. C @ Base 997 WSPH cm2 1188.0 1188.0 1117.1 1011.2 920.2 817.1 754.4 728.6 669.4 reff. C	2.490 2.718 DL 0 Line .658 kg CSP 0.501 0.758 1.005 1.258 1.504 1.767 2.012 2.261 2.496 DL 0 Line	6.799475 6.463918 220 24.267330 29.926020 24.269700 19.788930 14.460920 11.021820 9.065616 8.561684	0.171 0.201 n. Visco RT/DIS 0.023 0.077 0.145 0.167 0.177 0.159 0.145 0.145	-0.085 -0.088 Decity H/BPX 0.013 0.026 0.018 -0.010 -0.057 -0.092 -0.107 -0.110 -0.112	4.98 4.56 0.9457E TAO Total 2.45 3.78 6.95 7.45 8.06 8.07 7.39 6.61 6.06	1.607 1.661 -06 m2/s Cwsph
3.244 3.574 3.901 Displa VCG Po Static Water Vel m/s 	313.0 366.2 cement D sition trim TA Temp. RT gms 56.1 187.5 353.4 406.7 431.6 352.6 352.6 374.0 cement D sition trim TA	-1.79 -1.84 IS 243 24 OO 2 22 H Cm -0.26 0.37 -0.21 -1.19 -1.94 -2.25 -2.32 -2.35 IS 304 25 OO 2 22 H	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg TAO deg 	23.32 22.43 s C LC cm 62.10 62.10 52.79 44.85 37.95 33.12 28.98 27.60 24.15	42.78 45.89 Disp. Co 5.64 cm Density LK cm 62.10 62.10 56.24 51.06 48.30 43.13 41.40 40.36 38.30 Disp. Co 5.91 cm	708.6 732.3 Peff. C @ Base 997 WSPH Cm2 1188.0 1117.1 1011.2 920.2 817.1 754.4 728.6 669.4	2.490 2.718 DL 0 Line .658 kg CSP 0.501 0.758 1.005 1.258 1.767 2.012 2.261 2.496	6.799475 6.463918 2.20 2.27 2.10-3 2.27330 29.926020 24.269700 19.788930 14.460920 11.021820 9.065616 8.561684	0.171 0.201 n. Visco RT/DIS 0.023 0.077 0.145 0.167 0.177 0.159 0.145 0.145	-0.085 -0.088 Decity H/BPX 0.013 0.026 0.018 -0.010 -0.057 -0.092 -0.107 -0.110 -0.112	4.98 4.56 0.9457E TAO Total 2.45 3.78 6.95 7.45 8.06 8.07 7.39 6.61 6.06	1.607 1.661 -06 m2/s Cwsph
3.244 3.574 3.901 Displa VCG Po Static Water Vel m/s 	313.0 366.2 cement D sition trim TA Temp. RT gms 	-1.79 -1.84 IS 2433 24 OO 2 22 H cm -0.26 0.56 0.37 -0.21 -1.19 -1.94 -2.25 -2.32 -2.35 IS 304 25 OO 2 22 H cm	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg TAO deg 	23.32 22.43 s C LC cm 62.10 52.79 44.85 37.95 33.12 28.98 27.60 24.15 s	42.78 45.89 Disp. Co 5.64 cm Density LK cm 62.10 62.10 62.10 56.24 51.06 48.30 43.13 41.40 40.36 38.30 Disp. Co 5.91 cm Density	708.6 732.3 Peff. Co. Base 997 WSPH Cm2 1188.0 1117.1 1011.2 920.2 817.1 754.4 728.6 669.4 Peff. Co. Base 997 WSPH Cm2	2.490 2.718 DL 0 Line .658 kg CSP 0.501 0.758 1.005 1.258 1.504 1.767 2.012 2.261 2.261 2.496 DL 0 Line .658 kg	6.799475 6.463918 6.20 6/m3 Kin 20 20 21 21 22 24 22 24 22 24 22 24 22 24 22 24 22 24 22 24 22 24 22 24 22 24 22 24 22 24 22 23 23 23 23 23 23 23 23 23 23 23 23	0.171 0.201 n. Visco RT/DIS 0.023 0.077 0.145 0.167 0.159 0.145 0.154	-0.085 -0.088 Decity H/BPX 0.013 0.026 0.018 -0.010 -0.057 -0.092 -0.107 -0.112	4.98 4.56 0.9457E TAO Total 	1.607 1.661 -06 m2/s Cwsph
3.244 3.574 3.901 Displa VCG Po Static Water Vel m/s 	313.0 366.2 cement D sition trim TA Temp. RT gms 	-1.79 -1.84 IS 243 24 OO 2 22 H CM 0.26 0.37 -0.21 -1.19 -1.94 -2.25 -2.32 -2.35 IS 304 25 OO 2 22 H CM 0.27	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg TAO deg 0.15 1.48 4.65 5.15 5.76 5.77 5.09 4.31 3.76 2.0 gm .70 % B .54 deg .50 deg	23.32 22.43 s C LC cm 62.10 62.10 52.79 44.85 37.95 33.12 28.98 27.60 24.15 s	42.78 45.89 Disp. Co 5.64 cm Density LK cm 62.10 62.10 56.24 51.06 48.30 43.13 41.40 40.36 38.30 Disp. Co 5.91 cm LK cm	708.6 732.3 Peff. C @ Base 997 WSPH Cm2 1188.0 1117.1 1011.2 920.2 817.1 754.4 728.6 669.4 Peff. C @ Base 997 WSPH Cm2	2.490 2.718 DL 0 Line .658 kg CSP 0.501 0.758 1.005 1.258 1.005 1.228 1.001 2.2261 2.496 DL 0 ELine .658 kg	6.799475 6.463918 2.20 2.20 2.20 2.20 2.20 2.20 2.20 2.2	0.171 0.201 n. Visco RT/DIS 0.023 0.077 0.145 0.167 0.159 0.145 0.145 0.154	-0.085 -0.088 Deity H/BPX 0.013 0.026 0.018 -0.010 -0.057 -0.092 -0.107 -0.112 Deity H/BPX	4.98 4.56 0.9457E TAO Total 2.45 3.78 6.95 7.45 8.06 8.07 7.39 6.61 6.06 0.9457E TAO Total	1.607 1.661 -06 m2/s Cwsph 2.694 2.533 2.087 1.853 1.711 1.652 1.518 -06 m2/s Cwsph
3.244 3.574 3.901 Displa VCG Po Static Water Vel m/s 	313.0 366.2 cement D sition trim TA Temp. RT gms 56.1 187.5 353.4 406.7 431.6 352.6 353.6 374.0 cement D sition trim TA Temp.	-1.79 -1.84 IS 243 24 OO 2 22 H CM -0.26 0.37 -0.21 -1.19 -1.94 -2.25 -2.32 -2.35 IS 304 25 OO 2 22 H CM	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg TAO deg 0.15 1.48 4.65 5.15 5.76 5.77 5.09 4.31 3.76 2.0 gm .70 % B .54 deg .50 deg	23.32 22.43 s C LC cm 62.10 62.10 52.79 44.85 37.95 33.12 28.98 27.60 24.15 s	42.78 45.89 Disp. Co 5.64 cm Density LK cm 62.10 62.10 56.24 51.06 48.30 43.13 41.40 40.36 38.30 Disp. Co 5.91 cm Density LK cm	708.6 732.3 reff. C @ Base 997 WSPH cm2 1188.0 1117.1 1011.2 920.2 817.1 754.4 728.6 669.4 reff. C @ Base 997 WSPH cm2	2.490 2.718 DL 0 Line .658 kg CSP 0.501 0.758 1.005 1.258 1.504 1.767 2.012 2.261 2.496 DL 0 Line .658 kg	6.799475 6.463918 2.20 2.20 2.20 2.20 2.20 2.20 2.20 2.2	0.171 0.201 n. Visco RT/DIS 0.023 0.077 0.145 0.167 0.177 0.159 0.145 0.145 0.154	-0.085 -0.088 Deity H/BPX 0.013 0.026 0.018 -0.010 -0.057 -0.092 -0.107 -0.112 Deity H/BPX 0.013 0.029	4.98 4.56 0.9457E TAO Total 2.45 3.78 6.95 7.45 8.06 8.07 7.39 6.61 6.06 0.9457E TAO Total 2.72 3.80	1.607 1.661 -06 m2/s Cwsph 2.694 2.533 2.293 2.087 1.853 1.711 1.652 1.518 -06 m2/s Cwsph Cwsph
3.244 3.574 3.901 Displa VCG Po Static Water Vel m/s 	313.0 366.2 cement D sition trim TA Temp. RT gms 56.1 187.5 353.4 406.7 431.6 386.6 352.6 353.6 374.0 cement D sition trim TA Temp.	-1.79 -1.84 IS 243 24 OO 2 22 H CM -0.26 0.37 -0.21 -1.19 -1.94 -2.25 -2.32 -2.35 IS 304 25 OO 2 22 H CM -0.27 0.60 0.43	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg TAO deg 	23.32 22.43 s C LC cm 62.10 52.79 44.85 33.12 28.98 27.60 24.15 s C LC cm	42.78 45.89 Disp. Co 5.64 cm Density LK CM 62.10 62.10 56.24 51.06 48.30 43.13 41.40 40.36 38.30 Disp. Co 5.91 cm Density LK CM	708.6 732.3 Peff. C 8 Base 997 WSPH Cm2 1188.0 1117.1 1011.2 920.2 817.1 754.4 728.6 669.4 Peff. C 8 Base 997 WSPH Cm2 1188.0 1188.0 1101.1 1101.2	2.490 2.718 DL 0 Line .658 kg CSP 0.501 0.758 1.005 1.258 1.767 2.012 2.261 2.496 DL 0 Line .658 kg CSP	6.799475 6.463918 6.20 6/m3 Kin 7x10-3 17.996400 26.227330 29.926020 24.269700 19.788930 14.460920 11.021820 9.065616 8.561684 6.25 6/m3 Kin 7x10-3 19.830990 31.051030 42.469430	0.171 0.201 n. Visco RT/DIS 0.023 0.077 0.145 0.167 0.159 0.145 0.145 0.154 n. Visco RT/DIS	-0.085 -0.088 Deity H/BPX 0.013 0.026 0.018 -0.010 -0.057 -0.092 -0.110 -0.112 Deity H/BPX	4.98 4.56 0.9457E TAO Total 2.45 3.78 6.95 7.45 8.06 8.07 7.39 6.61 6.06 0.9457E TAO Total 2.72 3.80 7.85	1.607 1.661 -06 m2/s Cwsph
3.244 3.574 3.901 Displa VCG Po Static Water Vel m/s 	313.0 366.2 cement D sition trim TA Temp. RT gms 	-1.79 -1.84 IS 243 24 OO 2 22 H cm -0.26 0.56 0.37 -0.21 -1.19 -1.94 -2.25 -2.32 -2.35 IS 304 25 OO 2 22 H cm 0.27 0.60 0.43 -0.21	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg TAO deg 	23.32 22.43 s C LC cm 62.10 62.10 62.79 44.85 33.12 28.98 27.60 24.15 s C LC cm 62.10 64.10 64.1	42.78 45.89 Disp. Co 5.64 cm Density LK cm 62.10 63.13 41.40 40.36 38.30 Disp. Co 55.91 cm 62.10 63.10 64.41 56.93 51.75	708.6 732.3 reff. C	2.490 2.718 DL 0 Line .658 kg CSP 0.501 0.758 1.005 1.258 1.767 2.012 2.261 2.496 DL 0 Line .658 kg CSP	6.799475 6.463918 6.20 6/m3 Kin 7.996400 26.227330 29.926020 24.269700 19.788930 14.460920 11.021820 9.065616 8.561684 6.25 6/m3 Kin 7.25 7.25 7.25 7.25 7.25 7.25 7.25 7.25	0.171 0.201 n. Visco RT/DIS 0.023 0.077 0.145 0.167 0.159 0.145 0.145 0.154 n. Visco RT/DIS	-0.085 -0.088 Deity H/BPX 0.013 0.026 0.018 -0.010 -0.057 -0.092 -0.110 -0.112 Deity H/BPX 0.013 0.029 0.013 0.021 0.013	4.98 4.56 0.9457E TAO Total 	1.607 1.661 -06 m2/s Cwsph 2.694 2.533 2.293 2.087 1.853 1.711 1.652 1.518 -06 m2/s Cwsph Cwsph
3.244 3.574 3.901 Displa VCG Po Static Water Vel m/s 	313.0 366.2 cement D sition trim TA Temp. RT gms 	-1.79 -1.84 IS 243 24 OO 2 22 H CM -0.26 0.37 -0.21 -1.19 -1.94 -2.25 -2.32 -2.35 IS 304 25 OO 2 22 H CM -0.27 0.60 0.43	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg TAO deg 	23.32 22.43 s C LC cm 62.10 62.10 62.79 44.85 37.95 33.12 28.98 27.60 24.15 s C LC cm	42.78 45.89 Disp. Co 5.64 cm Density LK CM 62.10 62.10 56.24 51.06 48.30 43.13 41.40 40.36 38.30 Disp. Co 5.91 cm Density LK CM	708.6 732.3 eff. C 8 Base 997 WSPH Cm2 1188.0 1117.1 1011.2 920.2 817.1 754.4 728.6 669.4 eff. C 8 Base 997 WSPH Cm2 1188.0 1101.8 1017.9 905.6 854.5	2.490 2.718 DL 0 Line .658 kg CSP 0.501 0.758 1.005 1.767 2.012 2.261 2.496 DL 0 Line .658 kg CSP	6.799475 6.463918 220 24.269730 29.926020 24.269730 19.788930 14.460920 11.021820 9.065616 8.561684 2.25 27.700880 31.051030 42.469430 31.051030 42.469430 31.051030 42.469430 31.752880	0.171 0.201 n. Visco RT/DIS 0.023 0.077 0.145 0.167 0.154 0.145 0.154 n. Visco RT/DIS	-0.085 -0.088 -0.088 -0.013 0.026 0.013 -0.010 -0.057 -0.092 -0.107 -0.112	4.98 4.56 0.9457E TAO Total 	1.607 1.661 -06 m2/s Cwsph 2.694 2.533 2.293 2.087 1.853 1.711 1.652 1.518 -06 m2/s Cwsph 2.694 2.694 2.694 2.694 2.308
3.244 3.574 3.901 Displa VCG Po Static Water Vel m/s 	313.0 366.2 cement D sition trim TA Temp. RT gms 56.1 187.5 353.4 406.7 431.6 352.6 353.6 374.0 cement D sition trim TA Temp. RT gms	-1.79 -1.84 IS 243 24 OO 2 22 H CM -0.26 0.37 -0.21 -1.19 -1.94 -2.25 -2.32 -2.35 IS 304 25 OO 2 22 H CM -0.21 -1.47 -2.44 -2.73	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg TAO deg 	23.32 22.43 s C LC cm 62.10 52.79 44.85 37.95 33.12 28.98 27.60 24.15 s C LC cm 62.10 63.10 64.1	42.78 45.89 Disp. Co 5.64 cm Density LK cm 62.10 62.10 62.10 62.10 64.30 43.13 41.40 40.36 38.30 Disp. Co 5.91 cm Density LK cm	708.6 732.3 reff. C	2.490 2.718 DL 0 Line .658 kg CSP 0.501 0.758 1.005 1.258 1.767 2.012 2.261 2.496 DL 0 Line .658 kg CSP	6.799475 6.463918 6.20 6/m3 Kin 7x10-3 17.996400 26.227330 29.926020 24.269700 19.788930 14.460920 11.021820 9.065616 8.561684 6.25 6/m3 Kin 7x10-3 19.830990 31.051030 42.469430 33.239190 27.700880 14.752880 14.609270	0.171 0.201 n. Visco RT/DIS 0.023 0.077 0.145 0.167 0.159 0.145 0.154 n. Visco RT/DIS 0.020 0.069 0.165 0.183 0.196 0.172 0.160	-0.085 -0.088 -0.088 -0.088 -0.013 0.026 0.018 -0.010 -0.057 -0.092 -0.110 -0.112 -0.112 -0.013 0.029 0.021 -0.070 -0.070 -0.070 -0.130	4.98 4.56 0.9457E TAO Total 2.45 3.78 6.95 7.45 8.06 8.07 7.39 6.61 6.06 0.9457E TAO Total 2.72 3.80 7.85 8.63 9.73 9.64 8.67	1.607 1.661 -06 m2/s Cwsph -2.694 2.533 2.293 2.087 1.853 1.711 1.652 1.518 -06 m2/s Cwsph -2.694 2.680 2.498 2.308 2.054 1.938 1.783
3.244 3.574 3.901 Displa VCG Po Static Water Vel m/s 	313.0 366.2 cement D sition trim TA Temp. RT gms 	-1.79 -1.84 IS 243 24 OO 2 22 H Cm -0.26 0.37 -0.21 -1.19 -1.94 -2.25 -2.32 -2.35 IS 304 25 OO 2 22 H Cm -0.27 0.60 0.43 -0.21 -1.47 -2.44 -2.73 -2.82	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg TAO deg 	23.32 22.43 s C LC cm 62.10 52.79 44.85 33.12 28.98 27.60 24.15 s C LC cm 62.10 148.99 44.85 38.30 34.78 38.30 34.78 38.30	42.78 45.89 Disp. Co 5.64 cm Density LK cm 62.10 62.10 56.24 51.06 48.30 43.13 41.40 40.36 38.30 Disp. Co 5.91 cm Density LK cm	708.6 732.3 reff. C	2.490 2.718 DL 0 Line .658 kg CSP 0.501 0.758 1.005 1.258 1.767 2.012 2.261 2.496 DL 0 Line .658 kg CSP 0.492 0.739 1.012 1.252 1.505 1.768 2.010 2.269	6.799475 6.463918 6.20 6/m3 Kin 710-3 17.996400 26.227330 29.926020 24.269700 19.788930 14.460920 11.021820 9.065616 8.561684 6.25 6/m3 Kin 727 19.830990 27.700880 14.469430 33.239190 27.700880 14.609270 11.582590	0.171 0.201 n. Visco RT/DIS 0.023 0.077 0.145 0.167 0.159 0.145 0.154 n. Visco RT/DIS 0.020 0.069 0.165 0.172 0.183 0.196 0.172 0.160 0.150	-0.085 -0.088 -0.088 Deity H/BPX 0.013 0.026 0.018 -0.010 -0.057 -0.092 -0.110 -0.112 Deity H/BPX 0.013 0.029 0.021 -0.070 -0.070 -0.070 -0.116 -0.130 -0.013 -0.013	4.98 4.56 0.9457E TAO Total 	1.607 1.661 -06 m2/s Cwsph 2.694 2.533 2.293 2.087 1.853 1.711 1.652 1.518 -06 m2/s Cwsph 2.694 2.694 2.680 2.498 2.308 2.054 1.938 1.783 1.660
3.244 3.574 3.901 Displa VCG Po Static Water Vel m/s 	313.0 366.2 cement D sition trim TA Temp. RT gms 	-1.79 -1.84 IS 243 24 OO 2 22 H cm -0.26 0.56 0.37 -0.21 -1.19 -1.94 -2.25 -2.32 -2.35 IS 304 25 OO 2 22 H cm	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg TAO deg 	23.32 22.43 s C LC cm 62.10 62.10 62.79 44.85 33.12 28.98 27.60 24.15 s C LC cm 62.10 61.41 48.99 44.85 38.30 34.78 31.19 28.98 27.89 28.98 28.98	42.78 45.89 Disp. Co 5.64 cm Density LK cm 62.10 62.10 62.10 62.4 51.06 48.30 43.13 41.40 40.36 38.30 Disp. Co 5.91 cm Density LK cm	708.6 732.3 reff. C	2.490 2.718 DL 0 Line .658 kg CSP 0.501 0.758 1.005 1.258 1.767 2.012 2.261 2.496 ELine .658 kg CSP 0.492 0.739 1.012 1.252 1.505 1.768 2.010 2.269 2.495	6.799475 6.463918 6.20 6/m3 Kin 7.996400 26.227330 29.926020 24.269700 19.788930 14.460920 11.021820 9.065616 8.561684 6.25 6/m3 Kin 7.700880 18.752880 14.609270 11.582590 10.591270	0.171 0.201 n. Visco RT/DIS 0.023 0.077 0.145 0.167 0.159 0.145 0.145 0.154 n. Visco RT/DIS 0.020 0.069 0.165 0.183 0.196 0.172 0.160 0.150 0.154	-0.085 -0.088 -0.088 -0.013 0.026 0.018 -0.010 -0.057 -0.092 -0.110 -0.112 -0.112 -0.013 0.029 0.021 -0.013 0.029 0.021 -0.010 -0.070 -0.130 -0.134 -0.137	4.98 4.56 0.9457E TAO Total 	1.607 1.661 -06 m2/s Cwsph 2.694 2.533 2.293 2.087 1.853 1.711 1.652 1.518 -06 m2/s Cwsph 2.694 2.694 2.698 2.308 2.054 1.938 1.783 1.660 1.543
3.244 3.574 3.901 Displa VCG Po Static Water Vel m/s 	313.0 366.2 cement D sition trim TA Temp. RT gms 	-1.79 -1.84 IS 243 24 OO 2 22 H Cm -0.26 0.37 -0.21 -1.19 -1.94 -2.25 -2.32 -2.35 IS 304 25 OO 2 22 H Cm -0.27 0.60 0.43 -0.21 -1.47 -2.44 -2.73 -2.82	3.03 2.61 2.0 gm .52 % B .30 deg .50 deg TAO deg 	23.32 22.43 s C LC cm 62.10 62.10 52.79 44.85 33.12 28.98 27.60 24.15 s C LC cm	42.78 45.89 Disp. Co 5.64 cm Density LK CM 62.10 62.10 56.24 51.06 48.30 43.13 41.40 40.36 38.30 Disp. Co 5.91 cm LK cm 	708.6 732.3 eff. C @ Base 997 WSPH cm2 1188.0 117.1 1011.2 920.2 817.1 754.4 728.6 669.4 eff. C @ Base 997 WSPH cm2 1188.0 1182.1 1101.8 1017.9 905.6 854.5 786.1 732.2 680.5 647.2	2.490 2.718 DL 0 Line .658 kg CSP 0.501 0.758 1.005 1.258 1.767 2.012 2.261 2.496 ELine .658 kg CSP 0.492 0.739 1.012 1.252 1.505 1.768 2.010 2.269 2.495	6.799475 6.463918 220 24.26330 29.926020 24.269700 19.788930 14.460920 11.021820 9.065616 8.561684 2.25 27 X10-3 19.830990 31.051030 42.469430 33.239190 27.700880 18.752880 14.609270 11.582590 10.591270 9.939482	0.171 0.201 n. Visco RT/DIS 0.023 0.077 0.145 0.167 0.159 0.145 0.154 n. Visco RT/DIS 0.020 0.069 0.165 0.172 0.160 0.150 0.154 0.154	-0.085 -0.088 -0.088 -0.018 -0.010 -0.057 -0.092 -0.107 -0.112 -0.112 -0.112 -0.010 -0.013	4.98 4.56 0.9457E TAO Total 	1.607 1.661 -06 m2/s Cwsph 2.694 2.533 2.293 2.087 1.853 1.711 1.652 1.518 -06 m2/s Cwsph 2.694 2.694 2.680 2.498 2.308 2.054 1.938 1.783 1.660

Table B.7 L/B = 3.0 ; β = 12°; L_{cg} = 35%; Thrust Line : Centre of Gravity

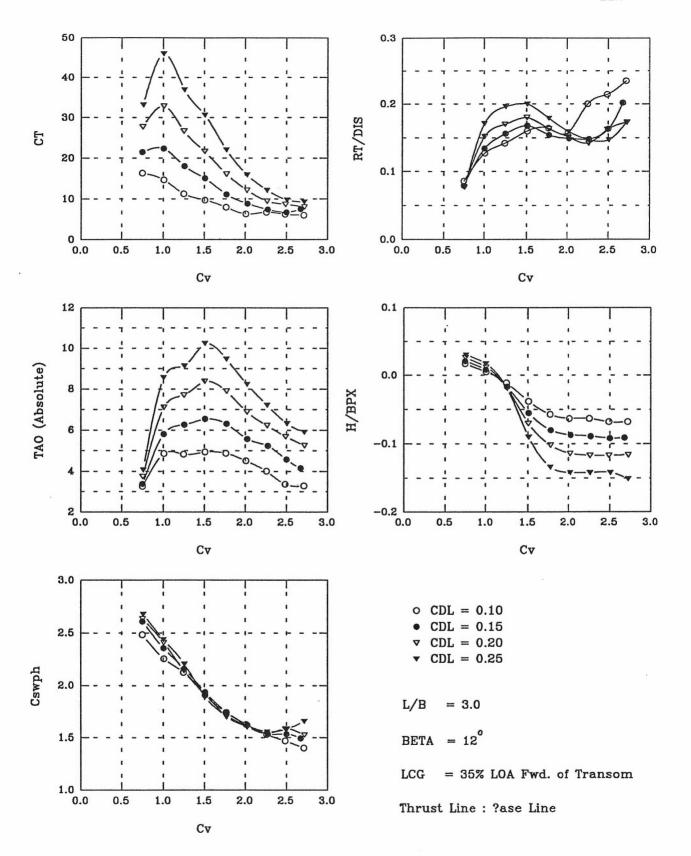


Figure B.8

					~							
	No. T-30	012			Length (Breath Breath 24.15							
L/B Ra		3	.0		Length (Overal I	OA 69	.00 cm				
Deadri	se	12	.00 deg	ſ	Breath	(Deck) I	3 23	3.00 cm			11:	5
7.00 D					Breath	(Chine) H	3PX 21	.00 cm			11.)
LCG Po	sition	35	.00 % I	.OA	24.15	cm @ Tra	ansom					
Dianla	goment I	TC 121	c 0		Diam G		, , , , , , , , , , , , , , , , , , ,	. 10				
ACC D	reition	715 121	74 9 B	ıs	Disp. Co	peri. (DL (.10				
Statio	trim T	100 1	60 dec	,	3.69 CI	u e Base	rine					
Water	Temp.	22	.50 deg	C	Dengity	997	658 kg	y/m3 Ki	n Visc	ocity	0 94572	-06 m2/a
	-cmp		.so acy		Density	,,,	.030 K	17 M.S	n. 1150	ocicy	0.34372	-00 M2/8
Vel	RT	H	TAO	LC	LK	WSPH	CSP	CT	RT/DIS	H/BPX	TAO	Cwsph
m/s	RT gms	cm	deq	cm	LK cm	cm2		CT x10-3	-		Total	•
			1.66	46.58	57.96	1095.6	0.748	16.337790	0.086	0.017	3.26	2.484
	155.0				53.82							
1.791	172.3	-0.22	3.23	35.88	51.75	937.3	1.248	11.268600	0.142	-0.011	4.83	2.125
2.164	194.9	-0.79	3.34	30.77	47.82	842.3	1.508	9.715542	0.160	-0.038	4.94	1.910
2.535	199.4	-1.20	3.28	26.77	44.85	767.8	1.766	7.947016	0.164	-0.057	4.88	1.741
2.883	190.5	-1.31	2.91	23.18	43.75	/1/.5	2.009	9.715542 7.947016 6.279883 6.746351	0.157	-0.063	4.51	1.627
3.240	243.2	-1.33	2.41	19.87	43.13	6/5.3	2.257	6.746351	0.200	-0.063	4.01	1.531
3.569 3.895								6.209010				
3.033	200.3	-1.44	1.00	15.55	42.09	017.0	2.713	6.009213	0.235	-0.068	3.20	1.401
Dienla	cement I	TC 192	5 0 cm	C	Dien Co	off (DL 0	15				
VCG PC	eition	24	61 9 B	5	Disp. Co	ell.	Tine	.13				
Statio	trim TZ	00 1	.95 ded		J.00 C	i e base	TITHE					
Water	Temp.	22	.00 deg	C	Dengity	997	.772 kg	y/m3 Ki	n. Visc	ocity	0.95688	-06 m2/g
	z omp t		· · · · · · · · · · · · · · · · · · ·	•	Demorel	,,,,	*****	7 2.2		00101	0.75002	00 212/5
Vel	RT	н	TAO	LC	T.K	WSPH	CSP	CT	RT/DIS	H/BPX	TAO	Cwsph
m/s	gms	cm	deg	cm	LK cm	cm2		CT x10-3			Total	
1.074	144.9	0.45	1.43	50.54	61.14	1149.6	0.748	21.491320	0.079	0.021	3.38	2.607
1.439	244.6	0.17	3.86	44.16	54.51	1039.4	1.003	22.346270	0.134	0.008	5.81	2.357
	284.0	-0.37	4.32	38.30	51.06	952.7	1.256	18.038100	0.156	-0.017	6.27	2.160
2.166	305.9	-1.15	4.60	33.47	46.23	854.0	1.509	15.012550	0.168	-0.055	6.55	1.937
2.544	280.6	-1.69	4.36	29.33	42.44	769.2	1.773	11.081860	0.154	-0.080	6.31	1.744
2.907	271.9	-1.83	3.62	25.96	40.76	715.2	2.025	8.847587	0.149	-0.087	5.57	1.622
3.262	270 0	. 1 07	3 20	24 15	30 00	676 8	2 272	7 272140	0 140	0 000	E 24	1.535
	270.0	-1.07	3.23	24.13	30.33	0,0.0	2.213	1.3/2140	0.140	-0.089	3.24	1.333
3.588	297.3	-1.94	2.62	22.43	40.71	676.8	2.500	6.710089	0.148	-0.092	4.57	1.535
	297.3 369.3	-1.94 -1.90	2.62	22.43 21.39	40.71	676.8 658.3	2.500 2.673	6.710089 7.493907	0.163	-0.089 -0.092 -0.091	4.57	1.535
3.588 3.837								11.081860 8.847587 7.372148 6.710089 7.493907	0.148 0.163 0.202	-0.089 -0.092 -0.091	4.57 4.15	1.535
3.588 3.837								6.710089 7.493907	0.148 0.163 0.202	-0.089 -0.092 -0.091	4.57 4.15	1.535 1.493
3.588 3.837 Displa	cement D	IS 243	2.0 gm .52 % B	s					0.148 0.163 0.202	-0.089 -0.092 -0.091	4.57	1.535 1.493
3.588 3.837 Displa VCG Po	cement D sition trim TA	24 24 00 2	2.0 gm .52 % B	s	Disp. Co 5.64 cm	eff. C Base	DL 0	.20				
3.588 3.837 Displa VCG Po	cement D sition trim TA	24 24 00 2	2.0 gm .52 % B	s	Disp. Co 5.64 cm	eff. C Base	DL 0					
3.588 3.837 Displa VCG Po Static Water	cement D sition trim TA Temp.	243 24 00 2 22	2.0 gm .52 % B .30 deg .00 deg	s C	Disp. Co 5.64 cm Density	peff. C n @ Base 997	DL 0 Line	.20 /m3 Ki	n. Visc	ocity	0.9568E	-06 m2/s
3.588 3.837 Displa VCG Po Statio Water Vel	cement D sition trim TA Temp.	OIS 243 24 000 2 22	2.0 gm .52 % B .30 deg .00 deg	s C LC	Disp. Co 5.64 cm Density	eff. Con Base 997 WSPH	EDL 0 Line .772 kg	.20 /m3 Ki	n. Visc	ocity	0.9568E	-06 m2/s
3.588 3.837 Displa VCG Po Static Water Vel m/s	cement D sition trim TA Temp. RT gms	OIS 243. 00 2 22 H cm	2.0 gm .52 % B .30 deg .00 deg TAO deg	c LC cm	Disp. Co 5.64 cm Density LK cm	eff. C n @ Base 997 WSPH cm2	EDL 0 Line .772 kg	.20 /m3 Ki: CT x10-3	n. Visco RT/DIS	ocity H/BPX	0.9568E TAO Total	-06 m2/s Cwsph
3.588 3.837 Displa VCG Po Static Water Vel m/s	cement D sition trim TA Temp. RT gms	OIS 243. 00 2 22 H cm	2.0 gm .52 % B .30 deg .00 deg TAO deg	C LC cm	Disp. Co 5.64 cm Density LK cm	eff. C n @ Base 997 WSPH cm2	CSP	.20 /m3 Ki CT x10-3	n. Visco RT/DIS	ocity H/BPX	0.9568E TAO Total	-06 m2/s Cwsph
3.588 3.837 Displa VCG Po Static Water Vel m/s 1.078	cement D sition trim TA Temp. RT gms	OIS 243 24 000 2 22 H cm	2.0 gm .52 % B .30 deg .00 deg TAO deg	C LC CM	Disp. Co 5.64 cm Density LK cm	eff. C 997 WSPH Cm2	CSP	.20 /m3 Ki: x10-3 27.746540	n. Visco	H/BPX	0.9568E TAO Total 3.75	-06 m2/s Cwsph
3.588 3.837 Displa VCG Po Static Water Vel m/s	cement D sition trim TA Temp. RT gms 	OS 243. 24 OO 2 22 H cm 0.54 0.26	2.0 gm .52 % B .30 deg .00 deg TAO deg 1.45	C LC CM 55.20 46.23	Disp. Co 5.64 cm Density LK cm 59.34 55.20	997 WSPH Cm2 1160.5	CSP 0.751 1.005	.20 /m3 Ki: CT x10-3	n. Visco RT/DIS 0.078 0.152	H/BPX 0.026 0.012	0.9568E TAO Total 3.75 7.11	-06 m2/s Cwsph
3.588 3.837 Displa VCG Po Statio Water Vel m/s 1.078 1.443	cement D sition trim TA Temp. RT gms 190.3 369.6 413.6	OS 243. 24 OO 2 22 H cm 0.54 0.26	2.0 gm .52 % B .30 deg .00 deg TAO deg 1.45 4.81 5.41	C IC CM 55.20 46.23 40.32	Disp. Cc 5.64 cm Density LK cm 59.34 55.20 48.43	997 WSPH cm2 1160.5 1062.9 945.2	CSP 0.751 1.005 1.250	.20 /m3 Ki: x10-3 27.746540	n. Visco RT/DIS 0.078 0.152 0.170	0.026 0.012 -0.017	0.9568E TAO Total 3.75 7.11 7.71	-06 m2/s Cwsph 2.632 2.410 2.143
3.588 3.837 Displa VCG Po Statio Water Vel m/s 	cement D sition trim TA Temp. RT gms	OS 243. OO 2 22 H Cm 0.54 0.26 -0.37	2.0 gm .52 % B .30 deg .00 deg TAO deg 	C LC cm 55.20 46.23 40.32 34.85	Disp. Cc 5.64 cm Density LK cm 59.34 55.20 48.43 44.51	997 WSPH cm2 1160.5 1062.9 945.2	CSP 0.751 1.005 1.250 1.504	CT x10-3 27.746540 32.836180 26.735700 21.699830	n. Visco RT/DIS 0.078 0.152 0.170 0.180	0.026 0.012 -0.017	0.9568E TAO Total 3.75 7.11 7.71	-06 m2/s Cwsph 2.632 2.410 2.143
3.588 3.837 Displa VCG Po Statio Water Vel m/s 	cement D sition trim TA Temp. RT gms	243 24 200 2 22 H Cm 0.54 0.26 -0.37 -1.46 -2.14	2.0 gm .52 % B .30 deg .00 deg TAO deg 1.45 4.81 5.41 6.08 5.60	C LC cm 55.20 46.23 40.32 34.85 30.36	Disp. Cc 5.64 cm Density LK cm 59.34 55.20 48.43 44.51 39.68	997 WSPH Cm2 1160.5 1062.9 945.2 850.0 750.7	CSP 0.751 1.005 1.504 1.771	CT x10-3 27.746540 32.836180 26.735700 21.699830	0.078 0.152 0.170 0.180	0.026 0.012 -0.017 -0.070 -0.102	0.9568E TAO Total 3.75 7.11 7.71 8.38 7.90	-06 m2/s Cwsph
3.588 3.837 Displa VCG Po Statio Water Vel m/s 	rement D sition trim TA Temp. RT gms	243 24 200 2 22 H Cm 0.54 0.26 -0.37 -1.46 -2.14	2.0 gm .52 % B .30 deg .00 deg TAO deg 1.45 4.81 5.41 6.08 5.60 4.59	C LC Cm 55.20 46.23 40.32 34.85 30.36 26.97	Disp. Cc 5.64 cm Density LK cm 59.34 55.20 48.43 44.51 39.68	997 WSPH Cm2 1160.5 1062.9 945.2 850.0 750.7	CSP 0.751 1.005 1.504 1.771	.20 /m3 Ki x10-3 27.746540 32.836180 26.735700 21.699830 16.050570	0.078 0.152 0.170 0.180 0.163 0.151	0.026 0.012 -0.017 -0.070 -0.102	0.9568E TAO Total 3.75 7.11 7.71 8.38 7.90	-06 m2/s Cwsph
3.588 3.837 Displa VCG Po Statio Water Vel m/s 	rement D sition trim TA Temp. RT gms	OIS 2433 24 24 200 2 22 H Cm 0.54 0.26 -0.37 -1.46 -2.14 -2.40	2.0 gm .52 % B .30 deg .00 deg TAO deg 1.45 4.81 5.41 6.08 5.60 4.59	C LC Cm 55.20 46.23 40.32 34.85 30.36 26.97	Disp. Cc 5.64 CR Density LK Cm 59.34 55.20 48.43 44.51 39.68 39.08	997 WSPH cm2 1160.5 1062.9 945.2 850.0 750.7 708.1 678.3	CSP 0.751 1.005 1.250 1.771 2.020	CT x10-3 	n. Visco RT/DIS 0.078 0.152 0.170 0.180 0.163 0.151 0.142 0.162	H/BPX 0.026 0.012 -0.017 -0.070 -0.102 -0.114 -0.117	0.9568E TAO Total 3.75 7.11 7.71 8.38 7.90 6.89	-06 m2/s Cwsph
3.588 3.837 Displa VCG Po Statio Water Vel m/s 	cement D sition trim TA Temp. RT gms	OS 243 24 OO 2 22 H Cm 0.54 0.26 -0.37 -1.46 -2.14 -2.40 -2.45	2.0 gm .52 % B .30 deg .00 deg TAO deg 1.45 4.81 5.41 6.08 5.60 4.59 3.93 3.39	S C LC CM 555.20 46.23 40.32 34.85 30.36 26.97 24.94 25.19	Disp. Co 5.64 CR Density LK Cm 59.34 55.20 48.43 44.51 39.68 39.08 38.34	997 WSPH cm2 1160.5 1062.9 945.2 850.0 750.7 708.1 678.3 699.0	CSP 0.751 1.005 1.250 1.771 2.020 2.265	CT x10-3	n. Visco RT/DIS 0.078 0.152 0.170 0.180 0.163 0.151 0.142 0.162	H/BPX 0.026 0.012 -0.017 -0.070 -0.102 -0.114 -0.117	0.9568E TAO Total 3.75 7.11 7.71 8.38 7.90 6.89 6.23	-06 m2/s Cwsph 2.632 2.410 2.143 1.927 1.702 1.606 1.538
3.588 3.837 Displa VCG Po Statio Water Vel m/s 	rement D sition trim TA Temp. RT gms	01S 243 24 000 2 22 H Cm 0.54 0.26 -0.37 -1.46 -2.14 -2.40 -2.45 -2.45	2.0 gm .52 % B .30 deg .00 deg TAO deg 1.45 4.81 5.41 6.08 5.60 4.59 3.93 3.39 2.96	S C LC CM 555.20 46.23 40.32 34.85 30.36 26.97 24.94 25.19 23.46	Disp. Cc 5.64 cm Density LK cm 59.34 55.20 48.43 44.51 39.68 39.08 38.34 40.02 39.33	997 WSPH Cm2 1160.5 1062.9 945.2 850.0 750.7 708.1 678.3 699.0 673.1	CSP 0.772 kg CSP 0.751 1.005 1.250 1.504 1.771 2.020 2.265 2.489 2.720	20 /m3 Ki 2T x10-3 27.746540 32.836180 26.735700 21.699830 16.050570 12.150490 9.456527 8.660318 8.050286	n. Visco RT/DIS 0.078 0.152 0.170 0.180 0.163 0.151 0.142 0.162	H/BPX 0.026 0.012 -0.017 -0.070 -0.102 -0.114 -0.117	0.9568E TAO Total 3.75 7.11 7.71 8.38 7.90 6.89 6.23 5.69	-06 m2/s Cwsph 2.632 2.410 2.143 1.927 1.702 1.606 1.538 1.585
3.588 3.837 Displa VCG Po Statio Water Vel m/s 	cement D sition trim TA Temp. RT gms	OIS 2433 24 24 OO 2 22 H Cm 0.54 0.26 -0.37 -1.46 -2.14 -2.40 -2.45 -2.46 -2.44	2.0 gm .52 % B .30 deg .00 deg TAO deg 1.45 4.81 5.41 6.08 5.60 4.59 3.93 3.39 2.96	S C LC Cm 555.20 46.23 40.32 34.85 30.36 26.97 24.94 25.19 23.46	Disp. Cc 5.64 cm Density LK cm 59.34 55.20 48.43 44.51 39.08 38.34 40.02 39.33 Disp. Cc	997 WSPH Cm2 1160.5 1062.9 945.2 850.0 750.7 708.1 678.3 699.0 673.1	CSP 0.751 1.005 1.771 2.020 2.265 2.489 2.720	CT x10-3 	n. Visco RT/DIS 0.078 0.152 0.170 0.180 0.163 0.151 0.142 0.162	H/BPX 0.026 0.012 -0.017 -0.070 -0.102 -0.114 -0.117	0.9568E TAO Total 3.75 7.11 7.71 8.38 7.90 6.89 6.23 5.69	-06 m2/s Cwsph 2.632 2.410 2.143 1.927 1.702 1.606 1.538 1.585
3.588 3.837 Displa VCG Po Statio Water Vel m/s 	cement D sition trim TA Temp. RT gms	H Cm 0.54 0.26 -0.37 -1.46 -2.14 -2.45 -2.46 -2.44 -2.45 -2.46 -2.44 -2.45	2.0 gm .52 % B .30 deg .00 deg TAO deg 	LC cm 55.20 46.23 40.32 34.85 30.36 26.97 24.94 25.19 23.46	Disp. Cc 5.64 cm Density LK cm 59.34 55.20 48.43 44.51 39.68 39.08 38.34 40.02 39.33	997 WSPH Cm2 1160.5 1062.9 945.2 850.0 750.7 708.1 678.3 699.0 673.1	CSP 0.751 1.005 1.771 2.020 2.265 2.489 2.720	20 /m3 Ki 2T x10-3 27.746540 32.836180 26.735700 21.699830 16.050570 12.150490 9.456527 8.660318 8.050286	n. Visco RT/DIS 0.078 0.152 0.170 0.180 0.163 0.151 0.142 0.162	H/BPX 0.026 0.012 -0.017 -0.070 -0.102 -0.114 -0.117	0.9568E TAO Total 3.75 7.11 7.71 8.38 7.90 6.89 6.23 5.69	-06 m2/s Cwsph 2.632 2.410 2.143 1.927 1.702 1.606 1.538 1.585
3.588 3.837 Displa VCG Po Statio Water Vel m/s 	cement D sition trim TA Temp. RT gms	OS 243 24 OO 2 22 H cm 0.54 0.26 -0.37 -1.46 -2.14 -2.40 -2.45 -2.45 -2.44 (IS 304)	2.0 gm .52 % B .30 deg .00 deg TAO deg 	C LC cm 555.20 46.23 40.32 34.85 30.36 26.97 24.94 25.19 23.46	Disp. Co 5.64 cm Density LK cm 59.34 55.20 48.43 44.51 39.68 39.08 38.34 40.02 39.33 Disp. Co 5.91 cm	997 WSPH Cm2 1160.5 1062.9 945.2 850.0 750.7 708.1 678.3 699.0 673.1 Deff. C	CSP 0.772 kg CSP 0.751 1.005 1.250 1.504 1.771 2.020 2.265 2.489 2.720 CDL 0 Line	.20 /m3 Ki: x10-3 27.746540 32.836180 26.735700 21.699830 16.050570 12.150490 9.456527 8.660318 8.050286	0.078 0.152 0.170 0.180 0.163 0.151 0.142 0.162 0.173	0.026 0.012 -0.017 -0.070 -0.102 -0.114 -0.117 -0.116	0.9568E TAO Total 3.75 7.11 7.71 8.38 7.90 6.89 6.23 5.69 5.26	-06 m2/s Cwsph 2.632 2.410 2.143 1.927 1.702 1.606 1.538 1.585 1.526
3.588 3.837 Displa VCG Po Statio Water Vel m/s 	cement D sition trim TA Temp. RT gms	OS 243 24 OO 2 22 H cm 0.54 0.26 -0.37 -1.46 -2.14 -2.40 -2.45 -2.45 -2.44 (IS 304)	2.0 gm .52 % B .30 deg .00 deg TAO deg 	C LC cm 555.20 46.23 40.32 34.85 30.36 26.97 24.94 25.19 23.46	Disp. Cc 5.64 cm Density LK cm 59.34 55.20 48.43 44.51 39.08 38.34 40.02 39.33 Disp. Cc	997 WSPH Cm2 1160.5 1062.9 945.2 850.0 750.7 708.1 678.3 699.0 673.1 Deff. C	CSP 0.772 kg CSP 0.751 1.005 1.250 1.504 1.771 2.020 2.265 2.489 2.720 CDL 0 Line	20 /m3 Ki 2T x10-3 27.746540 32.836180 26.735700 21.699830 16.050570 12.150490 9.456527 8.660318 8.050286	0.078 0.152 0.170 0.180 0.163 0.151 0.142 0.162 0.173	0.026 0.012 -0.017 -0.070 -0.102 -0.114 -0.117 -0.116	0.9568E TAO Total 3.75 7.11 7.71 8.38 7.90 6.89 6.23 5.69 5.26	-06 m2/s Cwsph 2.632 2.410 2.143 1.927 1.702 1.606 1.538 1.585
3.588 3.837 Displa VCG Po Statio Water Vel m/s 	cement D sition trim TA Temp. RT gms	0.54 0.26 0.37 -1.46 -2.14 -2.40 -2.45 -2.46 -2.44 -2.40 -2.25 -2.46 -2.24 -2.22	2.0 gm .52 % B .30 deg .00 deg TAO deg 	S C LC Cm 555.20 46.23 40.32 34.85 30.36 26.97 24.94 25.19 23.46 S	Disp. Co 5.64 cm Density LK cm 59.34 55.20 48.43 44.51 39.68 39.08 38.34 40.02 39.33 Disp. Co 5.91 cm	997 WSPH cm2 1160.5 1062.9 945.2 850.0 750.7 708.1 678.3 699.0 673.1 Deff. C	CSP 0.772 kg CSP 0.751 1.005 1.250 1.504 1.771 2.020 2.265 2.489 2.720 ELine 2.772 kg	.20 /m3 Ki x10-3	0.078 0.152 0.170 0.180 0.163 0.151 0.142 0.162	0.026 0.012 -0.017 -0.070 -0.102 -0.114 -0.117 -0.116	0.9568E TAO Total 3.75 7.11 7.71 8.38 7.90 6.89 6.23 5.69 5.26	-06 m2/s Cwsph 2.632 2.410 2.143 1.927 1.702 1.606 1.538 1.526
3.588 3.837 Displa VCG Po Statio Water Vel m/s 	cement D sition trim TA Temp. RT gms	OIS 2433 24 OO 2 22 H Cm 0.54 0.26 -0.37 -1.46 -2.14 -2.40 -2.45 -2.45 -2.46 -2.44 OIS 3042 25 OO 2 22	2.0 gm .52 % B .30 deg .00 deg TAO deg 	S C LC Cm 555.20 46.23 40.32 34.85 30.36 26.97 24.94 25.19 23.46 S C LC	Disp. Co 5.64 cm Density LK cm 59.34 55.20 48.43 44.51 39.08 38.34 40.02 39.33 Disp. Co 5.91 cm	997 WSPH Cm2 1160.5 1062.9 945.2 850.0 750.7 708.1 678.3 699.0 673.1 Deff. C	CSP 0.772 kg CSP 0.751 1.005 1.250 1.504 1.771 2.020 2.265 2.489 2.720 CDL 0 Line	.20 /m3 Ki CT x10-3	0.078 0.152 0.170 0.180 0.163 0.151 0.142 0.162	0.026 0.012 -0.017 -0.070 -0.102 -0.114 -0.117 -0.116	0.9568E TAO Total 3.75 7.11 7.71 8.38 7.90 6.89 6.23 5.69 5.26	-06 m2/s Cwsph 2.632 2.410 2.143 1.927 1.702 1.606 1.538 1.585 1.526
3.588 3.837 Displa VCG Po Statio Water Vel m/s 	cement D sition trim TA Temp. RT gms	0.54 0.26 0.37 -1.46 -2.14 -2.40 -2.45 -2.46 -2.44 -2.40 -2.25 -2.46 -2.24 -2.22	2.0 gm .52 % B .30 deg .00 deg TAO deg 	S C LC Cm 555.20 46.23 40.32 34.85 30.36 26.97 24.94 25.19 23.46 S	Disp. Co 5.64 cm Density LK cm 59.34 55.20 48.43 44.51 39.68 39.08 38.34 40.02 39.33 Disp. Co 5.91 cm	997 WSPH cm2 1160.5 1062.9 945.2 850.0 750.7 708.1 678.3 699.0 673.1 Deff. C	CSP 0.772 kg CSP 0.751 1.005 1.250 1.504 1.771 2.020 2.265 2.489 2.720 ELine 2.772 kg	.20 /m3 Ki x10-3	0.078 0.152 0.170 0.180 0.163 0.151 0.142 0.162	0.026 0.012 -0.017 -0.070 -0.102 -0.114 -0.117 -0.116	0.9568E TAO Total 3.75 7.11 7.71 8.38 7.90 6.89 6.23 5.69 5.26	-06 m2/s Cwsph 2.632 2.410 2.143 1.927 1.702 1.606 1.538 1.526
3.588 3.837 Displa VCG Po Statio Water Vel m/s	cement D sition trim TA Temp. RT gms	01S 2433 24 000 2 22 H cm 0.54 0.26 -0.37 -1.46 -2.14 -2.40 -2.45 -2.45 -2.46 -2.44 US 3044 US 3044 US 25 000 22 22	2.0 gm .52 % B .30 deg .00 deg TAO deg 1.45 4.81 5.60 4.59 3.93 3.39 2.96 2.0 gm .70 % B .54 deg .00 deg	S C LC cm 23.46.23 34.85 30.36 26.97 24.94 25.19 23.46 S C LC cm	Disp. Co 5.64 cm Density LK cm 59.34 55.20 48.43 44.51 39.68 39.08 38.34 40.02 39.33 Disp. Co 5.91 cm Density	997 WSPH Cm2 1160.5 1062.9 945.2 850.0 750.7 708.1 678.3 699.0 673.1 eff. Cc 997 WSPH Cm2	CSP 0.772 kg CSP 0.7751 1.005 1.250 1.504 1.771 2.020 2.265 2.489 2.720 CDL 0 Line 7.772 kg CSP	.20 /m3 Ki CT x10-3 27.746540 32.836180 26.735700 21.699830 16.050570 12.150490 9.456527 8.660318 8.050286 .25 /m3 Ki CT x10-3	0.078 0.152 0.170 0.180 0.163 0.151 0.142 0.162 0.173	0.026 0.012 -0.017 -0.070 -0.102 -0.114 -0.117 -0.116	0.9568E TAO Total 3.75 7.11 7.71 8.38 7.90 6.89 6.23 5.69 5.26 0.9568E TAO Total	-06 m2/s Cwsph
3.588 3.837 Displa VCG Po Statio Water Vel m/s 1.078 1.443 1.794 2.159 2.542 2.900 3.251 3.572 3.904 Displa VCG Po Statio Water Vel m/s 1.087	cement D sition trim TA Temp. RT gms	01S 243 24 000 2 22 H cm 0.54 0.26 -0.37 -1.46 -2.14 -2.40 -2.45 -2.45 -2.44 US 304 25 000 22 H cm	2.0 gm .52 % B .30 deg .00 deg TAO deg 	S C LC Cm S5.55	Disp. Cc 5.64 cm Density LK cm 59.34 55.20 48.43 44.51 39.68 39.08 38.34 40.02 39.33 Disp. Cc 5.91 cm Density	997 WSPH Cm2 1160.5 1062.9 945.2 850.0 750.7 708.1 678.3 699.0 673.1 Deff. Cm WSPH Cm2 1179.9	CSP 0.772 kg CSP 0.751 1.005 1.250 1.504 1.771 2.020 2.265 2.489 2.720 CDL 0 Line 7.772 kg CSP	.20 /m3 Ki x10-3 27.746540 32.836180 26.735700 21.699830 16.050570 12.150490 9.456527 8.660318 8.050286 .25 /m3 Ki cr x10-3 33.173700	0.078 0.078 0.152 0.170 0.180 0.163 0.151 0.142 0.162 0.173	0.026 0.012 -0.017 -0.070 -0.102 -0.114 -0.117 -0.116	0.9568E TAO Total 3.75 7.11 7.71 8.38 7.90 6.89 6.23 5.69 5.26 0.9568E TAO Total	-06 m2/s Cwsph 2.632 2.410 2.143 1.927 1.702 1.606 1.538 1.538 1.585 1.526 -06 m2/s Cwsph 2.676
3.588 3.837 Displa VCG Po Statio Water Vel m/s	cement D sition trim TA Temp. RT gms	0.54 0.54 0.26 0.37 -1.46 -2.14 -2.40 -2.45 -2.45 -2.46 -2.45 -2.46 -2.24 -2.40 -2.45 -2.46 -2.46 -2.36 -2.46 -2.46 -2.46 -2.45 -2.46 -2.46 -2.45 -3.66	2.0 gm .52 % B .30 deg .00 deg TAO deg 	S C LC CM 25.19 23.46 S C LC CM 25.75 47.61	Disp. Co 5.64 cm Density LK cm 59.34 55.20 48.43 44.51 39.68 39.08 38.34 40.02 39.33 Disp. Co 5.91 cm Density LK cm	997 WSPH Cm2 1160.5 1062.9 945.2 850.0 750.7 708.1 678.3 699.0 673.1 Deff. Cm WSPH Cm2 1179.9	CSP 0.772 kg CSP 0.751 1.005 1.250 1.504 1.771 2.020 2.265 2.489 2.720 ELine 7.772 kg CSP	.20 /m3 Ki x10-3	0.078 0.152 0.170 0.180 0.163 0.151 0.142 0.162 0.173	0.026 0.012 -0.017 -0.070 -0.102 -0.114 -0.117 -0.116	0.9568E TAO Total 3.75 7.11 7.71 8.38 7.90 6.89 6.23 5.69 5.26 TAO Total 4.07 8.56	-06 m2/s Cwsph 2.632 2.410 2.143 1.927 1.702 1.606 1.538 1.585 1.526 -06 m2/s Cwsph 2.676 2.437
3.588 3.837 Displa VCG Po Statio Water Vel m/s 1.078 1.443 1.794 2.159 2.542 2.900 3.251 3.572 3.904 Displa VCG Po Statio Water Vel m/s 1.087 1.439 1.804	cement D sition trim TA Temp. RT gms	OS 2433 24 200 2 22 H Cm 0.54 0.26 -0.37 -1.46 -2.14 -2.45 -2.46 -2.45 -2.46 -2.44 US 304 25 OO 2 22 H Cm	2.0 gm .52 % B .30 deg .00 deg TAO deg 	S C LC CM 25.19 23.46 S C LC CM 24.94 25.19 23.46 S C LC CM 25.55 47.61 41.40	Disp. Cc 5.64 cm Density LK cm 59.34 55.20 48.43 44.51 39.68 39.08 38.34 40.02 39.33 Disp. Cc 5.91 cm Density LK cm	997 WSPH Cm2 1160.5 1062.9 945.2 850.0 750.7 708.1 678.3 699.0 673.1 Deff. Cm Base 997 WSPH Cm2 1179.9 1074.8 972.7	CSP 0.751 1.005 1.250 1.504 1.771 2.020 2.265 2.489 2.720 ELL 0 Line 7.772 kg	.20 /m3 Ki CT x10-3 -27.746540 32.836180 26.735700 21.699830 16.050570 12.150490 9.456527 8.660318 8.050286 .25 /m3 Ki CT x10-3 -33.173700 45.971050 36.955170	n. Visco RT/DIS 0.078 0.152 0.170 0.180 0.163 0.151 0.142 0.162 0.173 n. Visco RT/DIS 0.077 0.171 0.196	0.026 0.012 -0.017 -0.070 -0.102 -0.114 -0.117 -0.116 Decity H/BPX	0.9568E TAO Total	-06 m2/s Cwsph
3.588 3.837 Displa VCG Po Statio Water Vel m/s	cement D sition trim TA Temp. RT gms	OIS 2433 24 00 2 22 H cm 0.54 0.26 -0.37 -1.46 -2.14 -2.40 -2.45 -2.46 -2.44 OS 304: 25 00 2 22 H cm 0.64 0.35 -0.41 -1.89	2.0 gm .52 % B .30 deg .00 deg TAO deg 	S C LC CM 25.519 23.46 S C LC CM 25.55 47.61 41.40 35.54	Disp. Cc 5.64 cm Density LK cm 59.34 55.20 48.43 44.51 39.68 39.08 38.34 40.02 39.33 Disp. Cc 5.91 cm LK cm	997 WSPH cm2 1160.5 1062.9 945.2 850.0 750.7 708.1 678.3 699.0 673.1 Deff. Cc 8 Base 997 WSPH cm2 1179.9 1074.8 972.7 834.7	CSP CSP CSP 0.751 1.005 1.250 1.504 1.771 2.020 2.265 2.489 2.720 ELine .772 kg CSP CSP CSP	.20 /m3 Ki CT x10-3 -27.746540 32.836180 26.735700 21.699830 16.050570 12.150490 9.456527 8.660318 8.050286 .25 /m3 Ki CT x10-3 -33.173700 45.971050 36.955170 30.659940	n. Visco RT/DIS 0.078 0.152 0.170 0.180 0.163 0.151 0.142 0.162 0.173 n. Visco RT/DIS 0.077 0.171 0.196 0.200	H/BPX 0.026 0.012 -0.017 -0.070 -0.102 -0.114 -0.117 -0.116 0.017 -0.019 -0.090	0.9568E TAO Total 3.75 7.11 7.71 8.38 7.90 6.89 5.26 0.9568E TAO Total 4.07 8.56 9.15 10.24	-06 m2/s Cwsph
3.588 3.837 Displa VCG Po Statio Water Vel m/s 	cement D sition trim TA Temp. RT gms	OS 2433 24 OO 2 22 H Cm 0.54 0.26 -0.37 -1.46 -2.14 -2.40 -2.45 -2.45 -2.44 US 304 25 OO 2 22 H Cm	2.0 gm .52 % B .30 deg .00 deg TAO deg 	C LC cm 55.520 446.23 44.85 30.36 26.97 24.94 25.19 23.46 S C LC cm 55.55 47.61 41.40 35.54 31.40	Disp. Co. 5.64 cm Density LK cm 59.34 55.20 48.43 44.51 39.68 39.08 38.34 40.02 39.33 Disp. Co. 5.91 cm Density LK cm 62.10 55.20 50.03 42.44 38.99	997 WSPH Cm2 1160.5 1062.9 945.2 850.0 750.7 708.1 678.3 699.0 673.1 eff. Cc @ Base 997 WSPH Cm2 1179.9 1074.8 972.7 754.3	CSP 0.751 1.005 1.250 1.504 1.771 2.020 2.265 2.489 2.720 CSP CSP 0.757 1.003 1.257 1.508 1.770	.20 /m3 Ki x10-3 27.746540 32.836180 26.735700 21.699830 16.050570 12.150490 9.456527 8.660318 8.050286 .25 /m3 Ki x10-3 33.173700 45.971050 36.955170 30.659940 22.041760	n. Visco RT/DIS 0.078 0.152 0.170 0.180 0.163 0.151 0.142 0.162 0.173 n. Visco RT/DIS 0.077 0.171 0.196 0.200 0.179	0.026 0.012 -0.017 -0.070 -0.114 -0.117 -0.116 Decity H/BPX -0.030 0.017 -0.019 -0.090 -0.134	0.9568E TAO Total 3.75 7.11 7.71 8.38 7.90 6.89 6.23 5.69 5.26 TAO Total 4.07 8.56 9.15 10.24 9.48	-06 m2/s Cwsph 2.632 2.410 2.143 1.927 1.702 1.606 1.538 1.585 1.526 -06 m2/s Cwsph 2.676 2.437 2.206 1.893 1.711
3.588 3.837 Displa VCG Po Statio Water Vel m/s	cement D sition trim TA Temp. RT gms	0.54 0.54 0.26 -0.37 -1.46 -2.14 -2.40 -2.45 -2.45 -2.45 -2.45 -2.46 -2.44 -2.50 25 0.64 0.35 -0.41 -1.89 -2.98	2.0 gm .52 % B .30 deg .00 deg TAO deg 	C LC CM 25.520 446.23 40.32 24.94 25.19 23.46 S C LC CM 25.55 47.61 41.40 35.54 31.40 28.84	Disp. Co 5.64 cm Density LK cm 59.34 55.20 48.43 44.51 39.68 39.08 38.34 40.02 39.33 Disp. Co 5.91 cm Density LK cm	997 WSPH cm2 1160.5 1062.9 945.2 850.0 750.7 708.1 678.3 699.0 673.1 Deff. Cm WSPH cm2 1179.9 1074.8 972.7 834.7 754.3 712.3	CSP 0.772 kg CSP 0.751 1.005 1.250 1.504 1.771 2.020 2.265 2.489 2.720 DL 0 Line 7.772 kg CSP	.20 /m3 Ki CT x10-3 27.746540 32.836180 26.735700 21.699830 16.050570 12.150490 9.456527 8.660318 8.050286 .25 /m3 Ki CT x10-3 33.173700 45.971050 36.955170 30.659940 12.9041760 15.905450	0.078 0.152 0.170 0.180 0.163 0.151 0.142 0.162 0.173 0.173	0.026 0.012 -0.017 -0.070 -0.102 -0.114 -0.117 -0.116 ocity H/BPX -0.030 0.017 -0.019 -0.090 -0.134 -0.142	0.9568E TAO Total 3.75 7.11 7.71 8.38 7.90 6.89 6.23 5.69 5.26 TAO Total 4.07 8.56 9.15 10.24 9.48 8.24	-06 m2/s Cwsph 2.632 2.410 2.143 1.927 1.702 1.606 1.538 1.585 1.526 -06 m2/s Cwsph 2.676 2.437 2.206 1.893 1.711 1.615
3.588 3.837 Displa VCG Po Statio Water Vel m/s 1.078 1.443 1.794 2.159 2.542 2.900 3.251 3.572 3.904 Displa VCG Po Statio Water Vel m/s	cement D sition trim TA Temp. RT gms	DIS 2433 24 24 200 2 22 H Cm 0.54 0.26 -0.37 -1.46 -2.14 -2.45 -2.46 -2.44 IS 304 25 00 2 22 H Cm 0.64 0.35 -0.41 -1.89 -2.81 -2.98 -2.97	2.0 gm .52 % B .30 deg .00 deg TAO deg 1.45 4.81 5.60 4.59 3.39 2.96 2.0 gm .70 % B .54 deg .00 deg TAO deg 1.53 6.02 6.61 7.70 6.94 5.70 4.68	C LC CM 46.23 40.32 34.85 30.36 26.97 24.94 25.19 23.46 s C LC CM	Disp. Cc 5.64 cm Density LK cm 59.34 55.20 48.43 44.51 39.68 39.08 38.34 40.02 39.33 Disp. Cc 5.91 cm Density LK cm 62.10 55.20 50.03 42.44 38.99 37.61 36.78	997 WSPH Cm2 1160.5 1062.9 945.2 850.0 750.7 708.1 678.3 699.0 673.1 Deff. Cc 8 Base 997 WSPH Cm2 1179.9 1074.8 972.7 834.7 754.3 712.3 686.4	CSP CSP 0.751 1.005 1.250 1.504 1.771 2.020 2.265 2.489 2.720 ELine 7.772 kg CSP CSP CSP 1.508 1.770 2.021 2.265	.20 /m3 Ki CT x10-3 -27.746540 32.836180 26.735700 21.699830 16.050570 12.150490 9.456527 8.660318 8.050286 .25 /m3 Ki CT x10-3 -33.173700 45.971050 36.955170 30.659940 22.041760 15.905450 12.144220	n. Visco RT/DIS 0.078 0.152 0.170 0.180 0.163 0.151 0.142 0.162 0.173 n. Visco RT/DIS 0.077 0.171 0.196 0.200 0.179 0.159 0.159	0.026 0.012 -0.017 -0.070 -0.102 -0.114 -0.117 -0.116 0.017 -0.019 -0.090 -0.134 -0.142 -0.142	0.9568E TAO Total	-06 m2/s Cwsph
3.588 3.837 Displa VCG Po Statio Water Vel m/s	cement D sition trim TA Temp. RT gms	0.54 0.54 0.26 -0.37 -1.46 -2.14 -2.40 -2.45 -2.45 -2.45 -2.45 -2.46 -2.44 -2.50 25 0.64 0.35 -0.41 -1.89 -2.98	2.0 gm .52 % B .30 deg .00 deg TAO deg 	S C LC Cm 24.94 25.19 23.46 S C C Cm 25.55.55 47.61 41.40 35.54 31.40 28.84 27.25 27.12	Disp. Co 5.64 cm Density LK cm 59.34 55.20 48.43 44.51 39.68 39.08 38.34 40.02 39.33 Disp. Co 5.91 cm Density LK cm	997 WSPH cm2 1160.5 1062.9 945.2 850.0 750.7 708.1 678.3 699.0 673.1 Deff. Cc 8 Base 997 WSPH cm2 1179.9 1074.8 972.7 834.7 754.3 712.3 686.4 698.3	CSP 0.772 kg CSP 0.751 1.005 1.250 1.504 1.771 2.020 2.265 2.489 2.720 DL 0 Line 7.772 kg CSP	.20 /m3 Ki CT x10-3 27.746540 32.836180 26.735700 21.699830 16.050570 12.150490 9.456527 8.660318 8.050286 .25 /m3 Ki CT x10-3 33.173700 45.971050 36.955170 30.659940 12.9041760 15.905450	n. Visco RT/DIS 0.078 0.152 0.170 0.180 0.163 0.151 0.142 0.162 0.173 n. Visco RT/DIS 0.077 0.171 0.196 0.200 0.179 0.159 0.147	H/BPX 0.026 0.012 -0.017 -0.070 -0.102 -0.114 -0.117 -0.116 0.030 0.017 -0.090 -0.134 -0.142	0.9568E TAO Total	-06 m2/s Cwsph 2.632 2.410 2.143 1.927 1.702 1.606 1.538 1.585 1.526 -06 m2/s Cwsph 2.676 2.437 2.206 1.893 1.711 1.615

Table B.8 L/B = 3.0 ; β = 12°; L_{co} = 35%; Thrust Line : Base Line

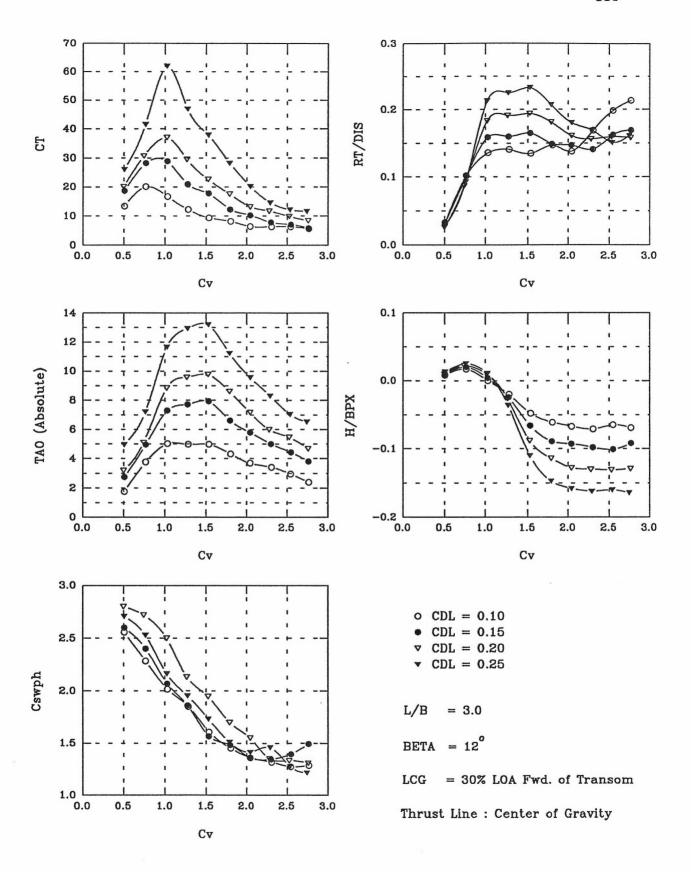


Figure B.9

						~							
	Model 1	No. T-30	112										
	L/B Rat			.0		Length	Overal I	ω 69	0.00 cm				
	Deadris			.00 deg	,		(Deck) E		3.00 cm				
				. oo acg			(Chine) E		1.00 cm			11	7
	LCG Pos	rition	30	00 9 7	03				L.OU CM			* *	•
	LCG POS	STCTOIL	30	.00 % I	,OA	20.70	cm @ Tra	insom					
	n:		~~										
			IS 121			Disp. C			0.10				
	VCG Pos			.43 % B		5.39 C	m @ Base	Line					
		trim TA	00 1	.21 deg	ſ								
	Water ?	remp.	22	.00 deg	C	Density	997	1.772 kg	g/m3 Ki	n. Visc	ocity	0.95681	-06 m2/s
	Vel	RT	H	TAO	LC	LK	WSPH	CSP	CT	RT/DIS	H/BPX	TAO	Cwsph
	m/s	qms	cm	deg	cm	cm	cm2		x10-3			Total	•
_		_											
	0.726	40.4	0.17	0.56		60.63	1126.6		13.383770	0.033	0.008	1.77	2.555
	1.101	124.4	0.36	2.56	40.57		1007.3		20.016760				2.284
	1.480	164.9	0.01	3.82		48.72		1.031	16.652230				2.016
	1.841		-0.43	3.77		46.23		1.282	12.212990				1.853
	2.206	164.4		3.76		41.03		1.537	9.364541				1.608
	2.590		-1.28	3.11		37.61		1.804					1.451
	2.934	167.4		2.48		37.04	599 6	2.044					1.360
	3.312	205.8		2.21		36.92		2.308					1.317
	3.653					36.32	560.0						
			-1.36					2.545					
	3.972	250.7	-1.45	1.20	15.12	37.80	201.3	2.767	5.683949	0.213	-0.069	2.41	1.286
	D 7		Ta 100										
						Disp. C	oeff. C	:DL 0	.15				
	VCG Pos			.70 % B		5.45 C	n @ Base	Line					
		trim TA	.00 2	.34 deg									
	Water 1	remp.	22	.00 deg	C	Density	997	.772 kg	r/m3 Ki	n. Visco	ocity	0.9568E	-06 m2/s
	Vel	RT	H	TAO	LC	LK	WSPH	CV	CT	RT/DIS	H/BPX	TAO	Cwsph
	m/s	gms	cm	deg	cm	cm	cm2		x10-3			Total	
-													
	0.728	57.7	0.19	0.41	41.40	58.65	1146.6	0.507	18.659872	0.032	0.009	2.75	2.600
	1.101	184.2	0.43	2.62	44.85	55.89	1059.3	0.767	28.208370	0.101	0.020	4.96	2.402
	1.473	290.6	0.08	4.97	37.34	48.10	912.0	1.026	28.880220	0.159	0.004	7.31	2.068
	1.830	292.4	-0.50	5.39		43.82		1.275				7.73	1.861
	2.198	300.8		5.59		36.92		1.531	17.708640		-0.066		1.568
	2.579	271.1		4.27		35.88		1.797					1.484
	2.929	268.8		3.47		33.02		2.041			-0.093		1.359
	3.306	257.1	-2.06	2.66	22 57	32 77	593.2	2.303	7.799926	0.141	-0.098	5.00	1.345
	3.306	257.1		2.66		32.77		2.303			-0.098		1.345
	3.655	296.2	-2.12	2.09	23.51	33.88	615.2	2.547	7.084871	0.162	-0.101	4.43	1.395
		296.2		2.09	23.51		615.2			0.162	-0.101	4.43	
	3.655 3.970	296.2 308.6	-2.12 -1.94	2.09 1.48	23.51 25.38	33.88 35.99	615.2 657.9	2.547 2.766	7.084871 5.854745	0.162	-0.101	4.43	1.395
	3.655 3.970 Displace	296.2 308.6 ement D	-2.12 -1.94	2.09 1.48 2.0 gm	23.51 25.38	33.88 35.99 Disp. Co	615.2 657.9 peff. C	2.547 2.766	7.084871	0.162	-0.101	4.43	1.395
	3.655 3.970 Displac	296.2 308.6 cement D	-2.12 -1.94 (IS 243)	2.09 1.48 2.0 gm	23.51 25.38	33.88 35.99 Disp. Co	615.2 657.9	2.547 2.766	7.084871 5.854745	0.162	-0.101	4.43	1.395
	3.655 3.970 Displac VCG Pos Static	296.2 308.6 cement D sition trim TA	-2.12 -1.94 IS 243: 23	2.09 1.48 2.0 gm .87 % B	23.51 25.38	33.88 35.99 Disp. Co	615.2 657.9 Deff. C	2.547 2.766 DL 0	7.084871 5.854745	0.162 0.169	-0.101 -0.092	4.43 3.82	1.395 1.492
	3.655 3.970 Displac	296.2 308.6 cement D sition trim TA	-2.12 -1.94 IS 243: 23	2.09 1.48 2.0 gm .87 % B	23.51 25.38	33.88 35.99 Disp. Co	615.2 657.9 Deff. C	2.547 2.766 DL 0	7.084871 5.854745	0.162 0.169	-0.101 -0.092	4.43 3.82	1.395 1.492
	3.655 3.970 Displac VCG Pos Static	296.2 308.6 cement D sition trim TA	-2.12 -1.94 IS 243: 23	2.09 1.48 2.0 gm .87 % B	23.51 25.38	33.88 35.99 Disp. Co	615.2 657.9 Deff. C	2.547 2.766 DL 0	7.084871 5.854745	0.162 0.169	-0.101 -0.092	4.43 3.82	1.395 1.492
	3.655 3.970 Displac VCG Pos Static	296.2 308.6 cement D sition trim TA	-2.12 -1.94 IS 243: 23	2.09 1.48 2.0 gm .87 % B	23.51 25.38	33.88 35.99 Disp. Co	615.2 657.9 Deff. C	2.547 2.766 DL 0	7.084871 5.854745	0.162 0.169	-0.101 -0.092	4.43 3.82	1.395 1.492
	3.655 3.970 Displac VCG Pos Static Water T	296.2 308.6 cement D sition trim TA	-2.12 -1.94 IS 2433 23 00 2 23	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg	23.51 25.38 s	33.88 35.99 Disp. Co 5.49 co	615.2 657.9 Deff. Con @ Base 997	2.547 2.766 EDL 0 Line	7.084871 5.854745 0.20 g/m3 Ki	0.162 0.169 n. Visco	-0.101 -0.092	4.43 3.82 0.9347E	1.395 1.492
1-	3.655 3.970 Displace VCG Pos Static Water T	296.2 308.6 cement D sition trim TA Cemp.	-2.12 -1.94 IS 2433 23 OO 2 23	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg	23.51 25.38 s	33.88 35.99 Disp. Co 5.49 co Density	615.2 657.9 Deff. Con @ Base 997	2.547 2.766 EDL 0 Line	7.084871 5.854745 2.20 g/m3 Ki	0.162 0.169 n. Visco	-0.101 -0.092	4.43 3.82 0.9347E	1.395 1.492
	3.655 3.970 Displace VCG Pos Statice Water T	296.2 308.6 cement D sition trim TA Temp. RT gms	-2.12 -1.94 IS 243: 23 00 2 23 H cm	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg	23.51 25.38 s C LC cm	33.88 35.99 Disp. Co 5.49 cr Density LK cm	615.2 657.9 Deff. Con @ Base 997 SWPH cm2	2.547 2.766 DL 0 Line .541 kg	7.084871 5.854745 0.20 g/m3 Ki CT x10-3	0.162 0.169 n. Visco	-0.101 -0.092 Deity H/BPX	4.43 3.82 0.9347E TAO Abs.	1.395 1.492 -06 m2/s Cswph
-	3.655 3.970 Displace VCG Pos Statice Water T Vel m/s	296.2 308.6 cement D sition trim TA Cemp. RT gms	-2.12 -1.94 IS 243: 23 Oo 2 23 H Cm	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg	23.51 25.38 S C LC cm	33.88 35.99 Disp. Co 5.49 Co Density LK Cm	615.2 657.9 Deff. Con @ Base 997 SWPH Cm2	2.547 2.766 DL 0 Line Cv Cv	7.084871 5.854745 0.20 f/m3 Ki CT x10-3 	0.162 0.169 n. Visco RT/DIS	-0.101 -0.092 Deity H/BPX	4.43 3.82 0.9347E TAO Abs.	1.395 1.492 -06 m2/s Cswph
-	3.655 3.970 Displac VCG Pos Static Water T Vel m/s	296.2 308.6 cement D sition trim TA Cemp. RT gms 	-2.12 -1.94 IS 2433 23 Oo 2 23 H cm	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 0.46 2.37	23.51 25.38 S C LC cm 60.80 54.03	33.88 35.99 Disp. Co 5.49 cr Density LK cm	615.2 657.9 Deff. Con @ Base 997 SWPH cm2 1234.8 1199.8	2.547 2.766 EDL 0 Line CV CV 0.497 0.741	7.084871 5.854745 2.20 2.20 2.20 2.20 2.20 2.20 2.20 2.2	0.162 0.169 n. Visco RT/DIS 0.026 0.087	-0.101 -0.092 Decity H/BPX 0.010 0.022	4.43 3.82 0.9347E TAO Abs.	1.395 1.492 2-06 m2/s Cswph 2.800 2.721
_	3.655 3.970 Displace VCG Pos Statice Water T Vel m/s 0.714 1.063 1.463	296.2 308.6 sement D sition trim TA Temp. RT gms 	-2.12 -1.94 IS 243: 23 OO 2 23 H cm 	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 0.46 2.37 6.12	23.51 25.38 S C LC cm 60.80 54.03 48.30	33.88 35.99 Disp. Cc 5.49 cr Density LK cm	615.2 657.9 Deff. Con @ Base 997 SWPH Cm2 1234.8 1199.8 1102.7	2.547 2.766 EDL 0 Line CV CV 0.497 0.741 1.020	7.084871 5.854745 0.20 f/m3 Ki CT x10-3 	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.183	-0.101 -0.092 becity H/BPX 0.010 0.022 0.010	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85	1.395 1.492 2-06 m2/s Cswph
-	3.655 3.970 Displace VCG Pos Statice Water T Vel m/s 	296.2 308.6 Sement D sition trim TA Temp. RT gms 	-2.12 -1.94 IS 243: 23 OO 2 23 H cm 	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 	23.51 25.38 S C LC cm 60.80 54.03 48.30 39.33	33.88 35.99 Disp. Co 5.49 Co Density LK Cm 0.00 64.81 57.27 48.99	615.2 657.9 Deff. Con @ Base 997 SWPH cm2 1234.8 1199.8 1102.7 941.1	2.547 2.766 EDL 0 E Line CV CV 0.497 0.741 1.020 1.263	7.084871 5.854745 0.20 3/m3 Ki CT x10-3 20.094010 30.691400 37.026450 29.579830	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.183 0.191	-0.101 -0.092 Decity H/BPX 0.010 0.022 0.010 -0.026	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85 9.58	1.395 1.492 2.06 m2/s Cswph 2.800 2.721 2.500 2.134
_	3.655 3.970 Displace VCG Pos Statice Water T Vel m/s 0.714 1.063 1.463 1.812 2.187	296.2 308.6 cement D sition trim TA Cemp. RT gms 	-2.12 -1.94 IS 243: 23 OO 2 23 H cm 	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 	23.51 25.38 s C LC cm 60.80 54.03 48.30 39.33 35.93	33.88 35.99 Disp. Co 5.49 Co Density LK cm 0.00 64.81 57.27 48.99 44.37	615.2 657.9 Deff. Con @ Base 997 SWPH cm2 1234.8 1199.8 1102.7 941.1 859.1	2.547 2.766 EDL 0 E Line CV CV 0.497 0.741 1.020 1.263 1.524	7.084871 5.854745 0.20 3/m3 Ki x10-3 	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.183 0.191 0.194	-0.101 -0.092 Deity H/BPX 0.010 0.022 0.010 -0.026 -0.088	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85 9.58 9.78	1.395 1.492 -06 m2/s Cswph 2.800 2.721 2.500 2.134 1.948
	3.655 3.970 Displace VCG Pos Statice Water T Vel m/s 0.714 1.063 1.463 1.812 2.187 2.565	296.2 308.6 cement D sition trim TA Cemp. RT gms 	-2.12 -1.94 IS 243: 23 OO 2 23 H Cm -0.22 0.45 0.21 -0.55 -1.84 -2.39	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg -0.46 2.37 6.12 6.85 7.05 5.88	23.51 25.38 s C LC cm 60.80 54.03 48.30 39.33 35.93 34.50	33.88 35.99 Disp. Co 5.49 Co Density LK Cm 0.00 64.81 57.27 48.99 44.37 42.44	615.2 657.9 Deff. Con @ Base 997 SWPH Cm2 1234.8 1199.8 1102.7 941.1 859.1 749.7	2.547 2.766 EDL 0 Line Cv Cv 0.497 0.741 1.020 1.263 1.524 1.787	7.084871 5.854745 0.20 f/m3 Ki CT x10-3 	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.183 0.191 0.194 0.181	-0.101 -0.092 Deity H/BPX 0.010 0.022 0.010 -0.026 -0.088 -0.114	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85 9.58 9.78 8.61	1.395 1.492 E-06 m2/s Cswph 2.800 2.721 2.500 2.134 1.948 1.700
	3.655 3.970 Displace VCG Pos Statice Water T Vel m/s 0.714 1.063 1.463 1.812 2.187 2.565 2.929	296.2 308.6 sement D sition trim TA Semp. RT gms 	-2.12 -1.94 IS 243: 23 OO 2 23 H Cm 0.22 0.45 0.21 -0.55 -1.84 -2.39 -2.70	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 0.46 2.37 6.12 6.85 7.05 5.88 4.43	23.51 25.38 s C LC cm 60.80 54.03 48.30 39.33 35.93 34.50 27.04	33.88 35.99 Disp. Cc 5.49 cr Density LK cm 0.00 64.81 57.27 48.99 44.37 42.44 36.76	615.2 657.9 Deff. Con @ Base 997 SWPH Cm2 1234.8 1199.8 1102.7 941.1 859.1 749.7 684.0	2.547 2.766 EDL 0 Line Cv 0.497 0.741 1.020 1.263 1.524 1.787 2.041	7.084871 5.854745 0.20 f/m3 Ki CT x10-3 	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.183 0.191 0.194 0.181 0.161	-0.101 -0.092 Decity H/BPX -0.010 -0.022 0.010 -0.026 -0.088 -0.114 -0.128	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85 9.58 9.78 8.61 7.16	1.395 1.492 2-06 m2/s Cswph
12	3.655 3.970 Displace VCG Pos Statice Water T Vel m/s 	296.2 308.6 sement D sition trim TA Temp. RT gms 	-2.12 -1.94 IS 243: 23 OO 2 23 H cm 	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 	23.51 25.38 s C LC cm 60.80 54.03 48.30 39.33 35.93 34.50 27.04 22.08	33.88 35.99 Disp. Cd 5.49 Cd Density LK Cm 0.00 64.81 57.27 48.99 44.37 42.44 36.76 33.47	615.2 657.9 Deff. Con @ Base 997 SWPH Cm2 1234.8 1199.8 1102.7 941.1 859.1 749.7 684.0 595.4	2.547 2.766 EDL 0 Line 2.541 kg CV 0.497 0.741 1.020 1.263 1.524 1.787 2.041 2.279	7.084871 5.854745 0.20 3/m3 Ki CT x10-3 20.094010 30.691400 37.026450 29.579830 22.595260 17.500380 13.155960 11.694950	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.191 0.194 0.181 0.161 0.156	-0.101 -0.092 H/BPX -0.010 0.022 0.010 -0.026 -0.088 -0.114 -0.128 -0.130	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85 9.58 9.78 8.61 7.16 5.99	1.395 1.492 2.00 m2/s Cswph 2.721 2.500 2.134 1.948 1.700 1.551 1.350
	3.655 3.970 Displace VCG Pos Statice Water T Vel m/s 0.714 1.063 1.463 1.812 2.187 2.565 2.929 3.271 3.624	296.2 308.6 cement D sition trim TA cemp. RT gms 	-2.12 -1.94 IS 243: 23 OO 2 23 H Cm 0.22 0.45 0.21 -0.55 -1.84 -2.39 -2.70 -2.75	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 	23.51 25.38 s C LC cm 60.80 54.03 48.30 39.33 35.93 34.50 27.04 22.08 20.94	33.88 35.99 Disp. Co 5.49 Co Density LK Cm 0.00 64.81 57.27 48.99 44.37 42.44 36.76 33.47 33.88	615.2 657.9 Deff. Con @ Base 997 SWPH cm2 1234.8 1102.7 941.1 859.1 749.7 684.0 595.4 587.7	2.547 2.766 EDL 0 E Line CV CV 0.497 0.741 1.020 1.263 1.524 1.787 2.041 2.279 2.525	7.084871 5.854745 0.20 3/m3 Ki 20.094010 30.691400 37.026450 29.579830 22.595260 17.500380 13.155960 11.694950 9.876659	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.183 0.191 0.194 0.181 0.161 0.156 0.159	-0.101 -0.092 Decity H/BPX -0.010 0.022 0.010 -0.026 -0.088 -0.114 -0.128 -0.130 -0.131	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85 9.78 8.61 7.16 5.99 5.47	1.395 1.492 2.492 2.800 2.721 2.500 2.134 1.948 1.700 1.551 1.350 1.333
	3.655 3.970 Displace VCG Pos Statice Water T Vel m/s 	296.2 308.6 sement D sition trim TA Temp. RT gms 	-2.12 -1.94 IS 243: 23 OO 2 23 H Cm 0.22 0.45 0.21 -0.55 -1.84 -2.39 -2.70 -2.75	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 	23.51 25.38 s C LC cm 60.80 54.03 48.30 39.33 35.93 34.50 27.04 22.08 20.94	33.88 35.99 Disp. Cd 5.49 Cd Density LK Cm 0.00 64.81 57.27 48.99 44.37 42.44 36.76 33.47	615.2 657.9 Deff. Con @ Base 997 SWPH cm2 1234.8 1102.7 941.1 859.1 749.7 684.0 595.4 587.7	2.547 2.766 EDL 0 Line 2.541 kg CV 0.497 0.741 1.020 1.263 1.524 1.787 2.041 2.279	7.084871 5.854745 0.20 3/m3 Ki CT x10-3 20.094010 30.691400 37.026450 29.579830 22.595260 17.500380 13.155960 11.694950	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.183 0.191 0.194 0.181 0.161 0.156 0.159	-0.101 -0.092 Decity H/BPX -0.010 0.022 0.010 -0.026 -0.088 -0.114 -0.128 -0.130 -0.131	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85 9.78 8.61 7.16 5.99 5.47	1.395 1.492 2.00 m2/s Cswph 2.721 2.500 2.134 1.948 1.700 1.551 1.350
	3.655 3.970 Displace VCG Pos Statice Water T Vel m/s 0.714 1.063 1.463 1.812 2.187 2.565 2.929 3.271 3.624 3.962	296.2 308.6 sement D sition trim TA Temp. RT gms 	-2.12 -1.94 IS 243: 23 OO 2 23 H Cm 0.22 0.45 0.21 -0.55 -1.84 -2.39 -2.70 -2.72 -2.75 -2.70	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 	23.51 25.38 s C LC cm 60.80 54.03 48.30 39.33 35.93 34.50 27.04 22.08 20.94 19.32	33.88 35.99 Disp. Cc 5.49 cr Density LK cm 0.00 64.81 57.27 48.99 44.37 42.44 36.76 33.47 33.88 34.50	615.2 657.9 Deff. Con @ Base 997 SWPH Cm2 1234.8 1199.8 1102.7 941.1 859.1 749.7 684.0 595.4 587.7 577.0	2.547 2.766 DL 0 Line 2.541 kg Cv 0.497 0.741 1.020 1.263 1.524 1.787 2.041 2.279 2.525 2.760	7.084871 5.854745 2.20 3/m3 Ki CT x10-3 20.094010 30.691400 37.026450 29.579830 22.595260 17.500380 13.155960 11.694950 9.876659 8.358156	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.183 0.191 0.194 0.181 0.161 0.156 0.159	-0.101 -0.092 Decity H/BPX -0.010 0.022 0.010 -0.026 -0.088 -0.114 -0.128 -0.130 -0.131	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85 9.78 8.61 7.16 5.99 5.47	1.395 1.492 2.492 2.800 2.721 2.500 2.134 1.948 1.700 1.551 1.350 1.333
_	3.655 3.970 Displace VCG Pos Static Water T Vel m/s 0.714 1.063 1.463 1.812 2.187 2.565 2.929 3.271 3.624 3.962 Displace	296.2 308.6 cement D sition trim TA cemp. RT gms 	-2.12 -1.94 IS 243: 23 OO 2 23 H Cm 0.22 0.45 0.21 -0.55 -1.84 -2.39 -2.70 -2.72 -2.75 -2.70 IS 3042	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 	23.51 25.38 s C LC cm 60.80 39.33 35.93 34.50 27.04 22.08 20.94 19.32	33.88 35.99 Disp. Cd 5.49 cd Density LK cm 0.00 64.81 57.27 48.99 44.37 42.44 36.76 33.47 33.88 34.50 Disp. Cd	615.2 657.9 Deff. Con @ Base 997 SWPH Cm2 1234.8 1199.8 1102.7 941.1 859.1 749.7 684.0 595.4 587.7 577.0	2.547 2.766 EDL 0 Line CV 0.497 0.741 1.020 1.263 1.524 1.787 2.041 2.279 2.525 2.760	7.084871 5.854745 0.20 3/m3 Ki 20.094010 30.691400 37.026450 29.579830 22.595260 17.500380 13.155960 11.694950 9.876659	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.183 0.191 0.194 0.181 0.161 0.156 0.159	-0.101 -0.092 Decity H/BPX -0.010 0.022 0.010 -0.026 -0.088 -0.114 -0.128 -0.130 -0.131	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85 9.78 8.61 7.16 5.99 5.47	1.395 1.492 2.492 2.800 2.721 2.500 2.134 1.948 1.700 1.551 1.350 1.333
	3.655 3.970 Displace VCG Pos Static Water T Vel m/s 	296.2 308.6 Sement D sition trim TA Temp. RT gms 	-2.12 -1.94 IS 243: 23 OO 2 23 H Cm 0.22 0.45 0.21 -0.55 -1.84 -2.39 -2.70 -2.72 -2.75 -2.70 IS 304: 25	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 	23.51 25.38 s C LC cm 	33.88 35.99 Disp. Cd 5.49 cd Density LK cm 0.00 64.81 57.27 48.99 44.37 42.44 36.76 33.47 33.88 34.50 Disp. Cd	615.2 657.9 Deff. Con @ Base 997 SWPH Cm2 1234.8 1199.8 1102.7 941.1 859.1 749.7 684.0 595.4 587.7 577.0	2.547 2.766 EDL 0 Line CV 0.497 0.741 1.020 1.263 1.524 1.787 2.041 2.279 2.525 2.760	7.084871 5.854745 2.20 3/m3 Ki CT x10-3 20.094010 30.691400 37.026450 29.579830 22.595260 17.500380 13.155960 11.694950 9.876659 8.358156	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.183 0.191 0.194 0.181 0.161 0.156 0.159	-0.101 -0.092 Decity H/BPX -0.010 0.022 0.010 -0.026 -0.088 -0.114 -0.128 -0.130 -0.131	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85 9.78 8.61 7.16 5.99 5.47	1.395 1.492 2.492 2.800 2.721 2.500 2.134 1.948 1.700 1.551 1.350 1.333
_	3.655 3.970 Displace VCG Pos Static Water T Vel m/s 	296.2 308.6 cement D sition trim TA cemp. RT gms 	-2.12 -1.94 IS 243: 23 OO 2 23 H Cm 0.22 0.45 0.21 -0.55 -1.84 -2.39 -2.70 -2.72 -2.75 -2.70 IS 304: 25	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 	23.51 25.38 s C LC cm 	33.88 35.99 Disp. Cd 5.49 cd Density LK cm 0.00 64.81 57.27 48.99 44.37 42.44 36.76 33.47 33.88 34.50 Disp. Cd	615.2 657.9 Deff. Con @ Base 997 SWPH cm2 1234.8 1199.8 1102.7 941.1 859.1 749.7 684.0 595.4 587.7 577.0	2.547 2.766 EDL 0 Line 2.541 kg Cv 0.497 0.741 1.020 1.263 1.524 1.787 2.041 2.279 2.525 2.760 EDL 0	7.084871 5.854745 0.20 3/m3 Ki x10-3 	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.183 0.191 0.194 0.181 0.166 0.159 0.158	-0.101 -0.092 Decity H/BPX 0.010 0.022 0.010 -0.026 -0.088 -0.114 -0.128 -0.130 -0.131 -0.129	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85 9.58 9.78 8.61 7.16 5.99 5.47 4.68	1.395 1.492 comph comph 2.800 2.721 2.500 2.134 1.948 1.700 1.551 1.350 1.333 1.308
	3.655 3.970 Displace VCG Pos Static Water T Vel m/s 	296.2 308.6 cement D sition trim TA Temp. RT gms 	-2.12 -1.94 IS 243: 23 OO 2 23 H Cm 0.22 0.45 0.21 -0.55 -1.84 -2.39 -2.70 -2.72 -2.75 -2.70 IS 304: 25 OO 4	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 	23.51 25.38 s C LC cm 60.80 54.03 48.30 39.33 35.93 34.50 27.04 22.08 20.94 19.32	33.88 35.99 Disp. Cd 5.49 cd Density LK cm 0.00 64.81 57.27 48.99 44.37 42.44 36.76 33.47 33.88 34.50 Disp. Cd	615.2 657.9 Deff. Con @ Base 997 SWPH cm2 1234.8 1102.7 941.1 859.1 749.7 684.0 595.4 587.7 577.0	2.547 2.766 EDL 0 Line 2.541 kg Cv 0.497 0.741 1.020 1.263 1.524 1.787 2.041 2.279 2.525 2.760 EDL 0	7.084871 5.854745 2.20 3/m3 Ki CT x10-3 20.094010 30.691400 37.026450 29.579830 22.595260 17.500380 13.155960 11.694950 9.876659 8.358156	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.183 0.191 0.194 0.181 0.166 0.159 0.158	-0.101 -0.092 Decity H/BPX 0.010 0.022 0.010 -0.026 -0.088 -0.114 -0.128 -0.130 -0.131 -0.129	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85 9.58 9.78 8.61 7.16 5.99 5.47 4.68	1.395 1.492 comph comph 2.800 2.721 2.500 2.134 1.948 1.700 1.551 1.350 1.333 1.308
	3.655 3.970 Displace VCG Possible VCG Possi	296.2 308.6 cement D sition trim TA Temp. RT gms 	-2.12 -1.94 IS 243: 23 OO 2 23 H Cm 0.22 0.45 0.21 -0.55 -1.84 -2.39 -2.70 -2.72 -2.75 -2.70 IS 304: 25 OO 4	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 	23.51 25.38 s C LC cm 60.80 54.03 48.30 39.33 35.93 34.50 27.04 22.08 20.94 19.32	33.88 35.99 Disp. Co 5.49 Co Density LK Cm 0.00 64.81 57.27 48.99 44.37 42.44 36.76 33.47 33.88 34.50 Disp. Co 5.79 Co	615.2 657.9 Deff. Con @ Base 997 SWPH cm2 1234.8 1102.7 941.1 859.1 749.7 684.0 595.4 587.7 577.0	2.547 2.766 EDL 0 Line 2.541 kg Cv 0.497 0.741 1.020 1.263 1.524 1.787 2.041 2.279 2.525 2.760 EDL 0	7.084871 5.854745 0.20 3/m3 Ki x10-3 	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.183 0.191 0.194 0.181 0.166 0.159 0.158	-0.101 -0.092 Decity H/BPX 0.010 0.022 0.010 -0.026 -0.088 -0.114 -0.128 -0.130 -0.131 -0.129	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85 9.58 9.78 8.61 7.16 5.99 5.47 4.68	1.395 1.492 comph comph 2.800 2.721 2.500 2.134 1.948 1.700 1.551 1.350 1.333 1.308
	3.655 3.970 Displace VCG Possible VCG Possi	296.2 308.6 cement D sition trim TA Temp. RT gms 	-2.12 -1.94 IS 243: 23 OO 2 23 H Cm 0.22 0.45 0.21 -0.55 -1.84 -2.39 -2.70 -2.72 -2.75 -2.70 IS 304: 25 OO 4	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 	23.51 25.38 s C LC cm 60.80 54.03 48.30 39.33 35.93 34.50 27.04 22.08 20.94 19.32	33.88 35.99 Disp. Co 5.49 Co Density LK Cm 0.00 64.81 57.27 48.99 44.37 42.44 36.76 33.47 33.88 34.50 Disp. Co 5.79 Co	615.2 657.9 Deff. Con @ Base 997 SWPH Cm2 1234.8 1199.8 1102.7 941.1 859.1 749.7 684.0 595.4 587.7 577.0 Deff. Con @ Base	2.547 2.766 EDL 0 Line 2.541 kg Cv 0.497 0.741 1.020 1.263 1.524 1.787 2.041 2.279 2.525 2.760 EDL 0	7.084871 5.854745 0.20 3/m3 Ki CT x10-3 20.094010 30.691400 37.026450 29.579830 22.595260 17.500380 13.155960 11.694950 9.876659 8.358156	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.183 0.191 0.194 0.181 0.166 0.159 0.158	-0.101 -0.092 Deity H/BPX 0.010 0.022 0.010 -0.026 -0.088 -0.114 -0.128 -0.130 -0.131 -0.129	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85 9.58 9.78 8.61 7.16 5.99 5.47 4.68	1.395 1.492 comph comph 2.800 2.721 2.500 2.134 1.948 1.700 1.551 1.350 1.333 1.308
	3.655 3.970 Displace VCG Posstatic Water To Vel m/s 0.714 1.063 1.463 1.812 2.187 2.565 2.929 3.271 3.624 3.962 Displace VCG Posstatic Water To VCG Posstatic VCG Posstatic Water To VCG Posstatic Water To VCG Posstatic Water To VCG Posstatic VC	296.2 308.6 sement D sition trim TA Semp. RT gms 	-2.12 -1.94 IS 243: 23 OO 2 23 H Cm 0.22 0.45 0.21 -0.55 -1.84 -2.39 -2.70 -2.72 -2.75 -2.70 IS 304: 25 OO 4 23	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 	23.51 25.38 s C LC cm 60.80 54.03 48.30 39.33 35.93 34.50 27.04 22.08 20.94 19.32	33.88 35.99 Disp. Cc 5.49 cr Density LK cm 0.00 64.81 57.27 48.99 44.37 42.44 36.76 33.47 33.88 34.50 Disp. Cc 5.79 cr	615.2 657.9 Deff. Con @ Base 997 SWPH cm2 1234.8 1102.7 941.1 859.1 749.7 684.0 595.4 587.7 577.0	2.547 2.766 DL 0 Line .541 kg Cv 0.497 0.741 1.020 1.263 1.524 1.787 2.041 2.279 2.525 2.760 DL 0 Line .541 kg	7.084871 5.854745 0.20 3/m3 Ki x10-3 	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.183 0.191 0.194 0.181 0.156 0.159 0.158	-0.101 -0.092 Deity H/BPX 0.010 0.022 0.010 -0.026 -0.088 -0.114 -0.128 -0.130 -0.131 -0.129	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85 9.58 9.78 8.61 7.16 5.99 5.47 4.68	1.395 1.492 c-06 m2/s Cswph
	3.655 3.970 Displace VCG Possible VCG Possible VCG Possible Vcl m/s 0.714 1.063 1.463 1.812 2.187 2.565 2.929 3.271 3.624 3.962 Displace VCG Possible VCG Poss	296.2 308.6 Sement D Sition trim TA Temp. RT gms 	-2.12 -1.94 IS 243: 23 OO 2 23 H Cm 0.22 0.45 0.21 -0.55 -1.84 -2.39 -2.70 -2.72 -2.75 -2.70 IS 304: 25 OO 4 23 H	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 	23.51 25.38 s C LC cm 60.80 54.03 48.30 39.33 34.50 27.04 22.08 20.94 19.32 s	33.88 35.99 Disp. Cd 5.49 Cl Density LK cm 0.00 64.81 57.27 48.99 44.37 42.44 36.76 33.47 33.88 34.50 Disp. Cd 5.79 Cl	615.2 657.9 Deff. Con @ Base 997 SWPH Cm2 1234.8 1199.8 1102.7 941.1 859.1 749.1 749.1 749.1 757.0 Deff. Con @ Base 997	2.547 2.766 DL 0 Line .541 kg Cv 0.497 0.741 1.020 1.263 1.524 1.787 2.041 2.279 2.525 2.760 DL 0 Line .541 kg	7.084871 5.854745 0.20 3/m3 Ki CT x10-3 20.094010 30.691400 37.026450 29.579830 22.595260 17.500380 13.155960 11.694950 9.876659 8.358156	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.183 0.191 0.194 0.181 0.156 0.159 0.158	-0.101 -0.092 Deity H/BPX 0.010 0.022 0.010 -0.026 -0.088 -0.114 -0.128 -0.130 -0.131 -0.129	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85 9.58 9.78 8.61 7.16 5.99 5.47 4.68	1.395 1.492 c-06 m2/s Cswph
	3.655 3.970 Displace VCG Possible VCG Possi	296.2 308.6 Sement D sition trim TA Temp. RT gms 	-2.12 -1.94 IS 243: 23 OO 2 23 H Cm 0.22 0.45 0.21 -0.55 -1.84 -2.39 -2.70 -2.75 -2.70 IS 304: 25 OO 4 23 H Cm	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 	23.51 25.38 s C LC cm 60.80 54.03 48.30 39.33 35.93 34.50 27.04 22.08 20.94 19.32 s	33.88 35.99 Disp. Co 5.49 Co Density LK Cm 0.00 64.81 57.27 48.99 44.37 42.44 36.76 33.47 33.88 34.50 Disp. Co 5.79 Co Density	615.2 657.9 Deff. Con @ Base 997 SWPH cm2 1234.8 1102.7 941.1 859.1 749.7 684.0 595.4 587.7 577.0 Deff. Con @ Base 997	2.547 2.766 EDL 0 Line 5.541 kg Cv 0.497 0.741 1.020 1.263 1.524 1.787 2.041 2.279 2.525 2.760 EDL 0 Line CSP	7.084871 5.854745 0.20 3/m3 Ki x10-3 20.094010 37.026450 29.579830 22.595260 17.500380 13.155960 11.694950 9.876659 8.358156	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.183 0.191 0.161 0.156 0.159 0.158	-0.101 -0.092 Decity H/BPX 0.010 0.022 0.010 -0.026 -0.088 -0.114 -0.128 -0.130 -0.131 -0.129	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85 9.78 8.61 7.16 5.99 5.47 4.68	1.395 1.492 comph comph 2.800 2.721 2.500 2.134 1.948 1.700 1.551 1.350 1.333 1.308
	3.655 3.970 Displace VCG Possible VCG Possible VCG Possible Vcl m/s 0.714 1.063 1.463 1.812 2.187 2.565 2.929 3.271 3.624 3.962 Displace VCG Possible VCG Possible VCG Possible Vcl m/s 0.725	296.2 308.6 sement D sition trim TA Semp. RT gms 64.3 211.7 444.6 464.8 472.0 392.5 378.8 387.6 384.8 sement D sition trim TA semp.	-2.12 -1.94 IS 243: 23 OO 2 23 H Cm 0.22 0.45 0.21 -0.55 -1.84 -2.39 -2.70 -2.72 -2.75 -2.70 IS 304: 25 OO 4 23 H Cm 0.26	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 	23.51 25.38 S C LC cm 60.80 54.03 48.30 39.33 35.93 34.50 27.04 22.08 20.94 19.32 S	33.88 35.99 Disp. Cc 5.49 cr Density LK cm 0.00 64.81 57.27 48.99 44.37 42.44 36.76 33.47 33.88 34.50 Disp. Cc 5.79 cr Density	615.2 657.9 Deff. Con @ Base 997 SWPH Cm2 1234.8 1199.8 1102.7 941.1 859.1 749.7 684.0 595.4 587.7 577.0 Deff. Con @ Base 997 WSPH Cm2	2.547 2.766 DL 0 Line .541 kg Cv 0.497 0.741 1.020 1.263 1.524 1.787 2.041 2.279 2.525 2.760 DL 0 Line .541 kg	7.084871 5.854745 2.20 3/m3 Ki CT x10-3 20.094010 30.691400 37.026450 29.579830 22.595260 17.500380 13.155960 11.694950 9.876659 8.358156 2.25 3/m3 Ki	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.183 0.191 0.156 0.159 0.158 n. Visco RT/DIS	-0.101 -0.092 Deity H/BPX -0.010 -0.022 0.010 -0.026 -0.088 -0.114 -0.128 -0.130 -0.131 -0.129	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85 9.58 8.61 7.16 5.99 5.47 4.68	1.395 1.492 comph
	3.655 3.970 Displace VCG Posstatic Water To Vel m/s 0.714 1.063 1.463 1.812 2.187 2.565 2.929 3.271 3.624 3.962 Displace VCG Posstatic Water To Vel m/s Vel m/s 0.725 1.094	296.2 308.6 sement D sition trim TA Semp. RT gms 	-2.12 -1.94 IS 243: 23 OO 2 23 H Cm -0.22 0.45 0.21 -0.55 -1.84 -2.39 -2.70 -2.72 -2.75 -2.70 IS 304: Cm -0.26 0.53	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 0.46 2.37 6.12 6.85 7.05 5.88 4.43 3.26 2.74 1.95 2.0 gm .17 % B .41 deg .00 deg TAO deg 0.54 2.80	23.51 25.38 s C LC cm 60.80 39.33 35.93 34.50 27.04 22.08 20.94 19.32 s	33.88 35.99 Disp. Cd 5.49 Cd Density LK Cm 0.00 64.81 57.27 48.99 44.37 42.44 36.76 33.47 33.88 34.50 Disp. Cd 5.79 Cd Density LK Cm	615.2 657.9 Deff. Con @ Base 997 SWPH Cm2 1234.8 1199.8 1102.7 941.1 859.1 749.7 684.0 595.4 587.7 577.0 Deff. Con @ Base 997 WSPH Cm2	2.547 2.766 EDL 0 Line .541 kg Cv 0.497 0.741 1.020 1.263 1.524 1.787 2.041 2.279 2.525 2.760 EDL 0 Line .541 kg CSP	7.084871 5.854745 0.20 3/m3 Ki CT x10-3 	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.183 0.191 0.156 0.159 0.158 n. Visco RT/DIS	-0.101 -0.092 H/BPX 0.010 0.022 0.010 -0.026 -0.088 -0.114 -0.128 -0.130 -0.131 -0.129 Deity H/BPX 0.013 0.025	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85 9.58 9.78 8.61 7.16 5.99 5.47 4.68 0.9347E TAO Total	1.395 1.492 comph comph 2.800 2.721 2.500 2.134 1.948 1.700 1.551 1.350 1.333 1.308 comph complete the complete the c
	3.655 3.970 Displace VCG Possible VCG Possible VCG Possible Vel m/s 0.714 1.063 1.463 1.812 2.187 2.565 2.929 3.271 3.624 3.962 Displace VCG Possible VCG Poss	296.2 308.6 Sement D Sition trim TA Temp. RT gms 	-2.12 -1.94 IS 243: 23 OO 2 23 H Cm -0.22 0.45 0.21 -0.55 -1.84 -2.39 -2.70 -2.72 -2.75 -2.70 IS 304: 25 OO 4 23 H Cm -0.26 0.53 0.24	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 0.46 2.37 6.12 6.85 7.05 5.88 4.43 3.26 2.74 1.95 2.0 gm .17 % B .41 deg .00 deg TAO deg 0.54 2.80 7.25	23.51 25.38 s C LC cm 60.80 54.03 48.30 39.33 34.50 27.04 22.08 20.94 19.32 s	33.88 35.99 Disp. Cd 5.49 Cf LK cm 0.00 64.81 57.27 48.99 44.37 42.44 36.76 33.47 33.88 34.50 Disp. Cd 5.79 cf Density LK cm 63.83 57.96 48.30	615.2 657.9 Deff. Con @ Base 997 SWPH Cm2 1234.8 1199.8 1102.7 941.1 859.1 749.7 595.4 587.7 577.0 Deff. Con @ Base 997 WSPH Cm2	2.547 2.766 EDL 0 Line 5.541 kg Cv 0.497 0.741 1.020 1.263 1.524 1.787 2.041 2.279 2.525 2.760 EDL 0 Line 5.541 kg CSP	7.084871 5.854745 0.20 3/m3 Ki CT x10-3 	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.181 0.191 0.156 0.159 0.158 n. Visco RT/DIS	-0.101 -0.092 H/BPX 0.010 0.022 0.010 -0.026 -0.088 -0.114 -0.128 -0.130 -0.131 -0.129 Deity H/BPX 0.013 0.025 0.011	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85 9.58 9.78 8.61 7.16 5.99 5.47 4.68 0.9347E TAO Total	1.395 1.492 comph com
	3.655 3.970 Displace VCG Possible VCG Possi	296.2 308.6 Sement D sition trim TA Temp. RT gms 	-2.12 -1.94 IS 243: 23 OO 2 23 H Cm -0.25 -1.84 -2.39 -2.70 -2.72 -2.75 -2.70 IS 304: 25 OO 4 23 H Cm -0.26 0.53 0.24 -0.75	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 	23.51 25.38 s C LC cm 60.80 54.03 39.33 35.93 34.50 27.04 22.08 20.94 19.32 s C	33.88 35.99 Disp. Cd 5.49 Cf Density LK Cm 0.00 64.81 57.27 48.99 44.37 42.44 36.76 33.47 33.88 34.50 Disp. Cd 5.79 Cf Density LK Cm 63.83 57.96 48.30 43.95	615.2 657.9 Deff. Con @ Base 997 SWPH cm2 1234.8 1199.8 1102.7 941.1 859.1 749.7 684.0 595.4 587.7 577.0 Deff. Con @ Base 997 WSPH cm2	2.547 2.766 EDL 0 E Line 2.541 kg CV 0.497 0.741 1.020 1.263 1.524 1.787 2.041 2.279 2.525 2.760 EDL 0 E Line 2.541 kg CSP 0.505 0.762 1.021 1.272	7.084871 5.854745 0.20 3/m3 Ki 2T x10-3 20.094010 30.691400 37.026450 29.579830 22.595260 17.50038 13.155960 11.694950 9.876659 8.358156 0.25 3/m3 Ki CT x10-3 26.040980 41.631550 61.978260 46.934600	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.183 0.191 0.156 0.159 0.158 n. Visco RT/DIS 0.027 0.027 0.093 0.213 0.225	-0.101 -0.092 H/BPX 0.010 0.022 0.010 -0.026 -0.088 -0.114 -0.128 -0.130 -0.131 -0.129 Decity H/BPX 0.013 0.025 0.011 -0.036	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85 9.78 8.61 7.16 5.99 5.47 4.68 0.9347E TAO Total 4.95 7.21 11.66 12.94	1.395 1.492 -06 m2/s Cswph
	3.655 3.970 Displace VCG Posstatic Water Tolerand VCG Posstatic Water Tolerand VCG Poss Static Water Tolerand VCG Posstatic VC	296.2 308.6 sement D sition trim TA Temp. RT gms 	-2.12 -1.94 IS 243: 23 OO 2 23 H Cm 0.22 0.45 0.21 -0.55 -1.84 -2.39 -2.70 -2.72 -2.75 -2.70 IS 304: 25 OO 4 23 H Cm 0.26 0.53 0.24 -0.75 -2.31	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 	23.51 25.38 S C LC cm 60.80 54.03 48.30 39.33 35.93 34.50 27.04 22.08 20.94 19.32 S C	33.88 35.99 Disp. Cc 5.49 cr Density LK cm 0.00 64.81 57.27 48.99 44.37 42.44 36.76 33.47 33.88 34.50 Disp. Cc 5.79 cr Density LK cm	615.2 657.9 Deff. Con @ Base 997 SWPH Cm2 1234.8 1199.8 1102.7 941.1 859.1 749.7 684.0 595.4 587.7 577.0 Deff. Con @ Base 997 WSPH Cm2 1194.5 1115.2 954.9 861.6 764.7	2.547 2.766 DL 0 Line 0.541 kg 0.741 1.020 1.263 1.524 1.787 2.041 2.279 2.525 2.760 DL 0 Line 0.541 kg CSP 0.505 0.762 1.021 1.272 1.527	7.084871 5.854745 2.20 3/m3 Ki CT x10-3 20.094010 30.691400 37.026450 29.579830 22.595260 17.500380 13.155960 11.694950 9.876659 8.358156 2.25 3/m3 Ki CT x10-3 26.040980 41.631550 61.978260 46.934600 37.987520	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.183 0.191 0.156 0.159 0.158 n. Visco RT/DIS 0.027 0.093 0.213 0.225 0.233	-0.101 -0.092 Deity H/BPX 0.010 0.022 0.010 -0.026 -0.088 -0.114 -0.128 -0.130 -0.131 -0.129 Deity H/BPX 0.013 0.025 0.011 0.036 -0.110	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85 9.58 8.61 7.16 5.99 5.47 4.68 TAO Total 4.95 7.21 11.66 12.94 13.21	1.395 1.492 comph 2.800 2.721 2.500 2.134 1.948 1.700 1.551 1.350 1.333 1.308 comph comph comph comph comph comph comph comph comph comph comph comph comph comph comph companies comph comph companies comph companies companies comph companies compan
	3.655 3.970 Displace VCG Posstatic Water Tolerand VCG Posstatic Water Tolerand VCG Poss Static Water Tolerand VCG Posstatic Water T	296.2 308.6 sement D sition trim TA Semp. RT gms 	-2.12 -1.94 IS 243: 23 OO 2 23 H Cm -0.25 -1.84 -2.39 -2.70 -2.72 -2.75 -2.70 IS 304: 25 OO 4 23 H Cm -0.26 0.53 0.24 -0.75 -2.31 -3.10	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 0.46 2.37 6.12 6.85 7.05 5.88 4.43 3.26 2.74 1.95 2.0 gm .17 % B .41 deg .00 deg TAO deg 0.54 2.80 7.25 8.53 8.80 6.82	23.51 25.38 s C LC cm 60.80 39.33 35.93 34.50 27.04 22.08 20.94 19.32 s C LC cm	33.88 35.99 Disp. Cc 5.49 cr LK cm 0.00 64.81 57.27 48.99 44.37 42.44 36.76 33.47 33.88 34.50 Disp. Cc 5.79 cr LK cm Cm 63.83 57.96 48.30 43.95 39.40 34.50	615.2 657.9 Deff. Con @ Base 997 SWPH Cm2 1234.8 1199.8 1102.7 941.1 859.1 749.7 684.0 595.4 587.7 577.0 Deff. Con @ Base 997 WSPH Cm2 1194.5 1115.2 954.9 861.6 764.7 665.7	2.547 2.766 DL 0 Line .541 kg Cv 0.497 0.741 1.020 1.263 1.524 1.787 2.041 2.279 2.525 2.760 DL 0 Line .541 kg CSP 0.505 0.762 1.021 1.272 1.272 1.272 1.272	7.084871 5.854745 0.20 3/m3 Ki CT x10-3 	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.183 0.191 0.156 0.159 0.158 n. Visco RT/DIS 0.027 0.093 0.213 0.225 0.233 0.207	-0.101 -0.092 Deity H/BPX -0.010 -0.026 -0.088 -0.114 -0.128 -0.130 -0.131 -0.129 Deity H/BPX -0.036 -0.011 -0.036 -0.011 -0.036	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85 9.58 9.78 8.61 7.16 5.99 5.47 4.68 0.9347E TAO Total 4.95 7.21 11.66 12.94 13.21 11.23	1.395 1.492 c-06 m2/s Cswph 2.800 2.721 2.500 2.134 1.948 1.700 1.551 1.350 1.333 1.308 c-06 m2/s Cwsph 2.709 2.529 2.165 1.954 1.734 1.510
	3.655 3.970 Displace VCG Posstatic Water To Vel m/s 0.714 1.063 1.463 1.812 2.187 2.565 2.929 3.271 3.624 3.962 Displace VCG Posstatic Water To Vel m/s Vel m/s 0.725 1.094 1.466 1.826 2.192 2.5666 2.931	296.2 308.6 Sement D Sition trim TA Temp. RT gms 	-2.12 -1.94 IS 243: 23 OO 2 23 H Cm -0.22 0.45 0.21 -0.55 -1.84 -2.39 -2.70 -2.72 -2.75 -2.70 IS 304: 25 OO 4 23 H Cm -0.53 0.24 -0.75 -2.31 -3.10 -3.31	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 0.46 2.37 6.12 6.85 7.05 5.88 4.43 3.26 2.74 1.95 2.0 gm .17 % B .41 deg .00 deg TAO deg 0.54 2.80 7.25 8.53 8.80 6.82 5.16	23.51 25.38 s C LC cm 60.80 54.03 48.30 39.33 34.50 27.04 22.08 20.94 19.32 s C LC cm	33.88 35.99 Disp. Cd 5.49 Cl LK cm 0.00 64.81 57.27 48.99 44.37 42.44 36.76 33.47 33.88 34.50 Disp. Cd 5.79 Cl Density LK cm 63.83 57.96 48.30 43.95 39.40 34.50 33.53	615.2 657.9 Deff. Con @ Base 997 SWPH Cm2 1234.8 1199.8 1102.7 941.1 859.1 749.7 577.0 Deff. Con @ Base 997 WSPH Cm2 1194.5 1115.2 954.9 861.6 764.7 665.7 665.7 665.7	2.547 2.766 EDL 0 Line 5.541 kg Cv 0.497 0.741 1.020 1.263 1.524 1.787 2.041 2.279 2.525 2.760 EDL 0 Line 6.541 kg CSP 0.505 0.762 1.021 1.272 1.527 1.788 2.042	7.084871 5.854745 0.20 3/m3 Ki CT x10-3 	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.183 0.191 0.156 0.159 0.158 n. Visco RT/DIS 0.027 0.093 0.213 0.225 0.233 0.207 0.180	-0.101 -0.092 H/BPX 0.010 0.022 0.010 -0.026 -0.088 -0.114 -0.128 -0.130 -0.131 -0.129 Deity H/BPX 0.013 0.025 0.011 -0.036 -0.110 -0.036 -0.110 -0.036 -0.110	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85 9.58 9.78 8.61 7.16 5.99 5.47 4.68 0.9347E TAO Total 11.66 12.94 13.21 11.23 9.57	1.395 1.492
	3.655 3.970 Displace VCG Possible VCG Possible VCG Possible Vel m/s 0.714 1.063 1.463 1.812 2.187 2.565 2.929 3.271 3.624 3.962 Displace VCG Possible VCG Poss	296.2 308.6 Sement D sition trim TA Temp. RT gms 	-2.12 -1.94 IS 243: 23 OO 2 23 H Cm 0.22 0.45 0.21 -0.55 -1.84 -2.39 -2.70 -2.72 -2.75 -2.70 IS 304: 25 OO 4 0.75 -2.31 -3.10 -3.31 -3.41	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 0.46 2.37 6.12 6.85 7.05 5.88 4.43 3.26 2.74 1.95 2.0 gm .17 % B .41 deg .00 deg TAO deg 0.54 2.80 7.25 8.53 8.80 6.82 5.16 3.89	23.51 25.38 s C LC cm 	33.88 35.99 Disp. Cd 5.49 Cf LK Cm 0.00 64.81 57.27 48.99 44.37 42.44 36.76 33.47 33.88 34.50 Disp. Cd 5.79 Cf LK Cm	615.2 657.9 Deff. Con @ Base 997 SWPH cm2 1234.8 1199.8 1102.7 941.1 859.1 749.7 684.0 595.4 587.7 577.0 Deff. Con @ Base 997 WSPH cm2 1194.5 1115.2 954.9 861.6 764.7 623.5 643.5	2.547 2.766 EDL 0 Line 2.541 kg CV 0.497 0.741 1.020 1.263 1.524 1.787 2.041 2.279 2.525 2.760 EDL 0 Line 2.541 kg CSP 0.762 1.021 1.272 1.021 1.272 1.788 2.042 2.291	7.084871 5.854745 0.20 (m3 Ki CT x10-3 -20.094010 30.691400 37.026450 29.579830 22.595260 17.500380 13.155960 11.694950 9.876659 8.358156 0.25 (m3 Ki CT x10-3 -26.040980 41.631550 61.978260 46.934600 37.987520 28.258830 20.156750 14.550420	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.183 0.191 0.194 0.181 0.156 0.159 0.158 n. Visco RT/DIS 0.027 0.027 0.023 0.213 0.225 0.233 0.207 0.180 0.169	-0.101 -0.092 Decity H/BPX 0.010 0.022 0.010 -0.026 -0.088 -0.114 -0.128 -0.130 -0.131 -0.129 Decity H/BPX 0.013 0.025 0.011 -0.036 -0.110 -0.147 -0.158 -0.162	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85 9.58 9.78 8.61 7.16 5.99 5.47 4.68 TAO Total 	1.395 1.492
	3.655 3.970 Displace VCG Possible VCG Possi	296.2 308.6 Sement D sition trim TA Temp. RT gms 	-2.12 -1.94 IS 243: 23 OO 2 23 H Cm -0.22 0.45 0.21 -0.55 -1.84 -2.39 -2.70 -2.72 -2.75 -2.70 IS 304: 25 OO 4 23 H Cm -0.26 0.53 0.24 -0.75 -2.31 -3.31 -3.31 -3.31	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 0.46 2.37 6.12 6.85 7.05 5.88 4.43 3.26 2.74 1.95 2.0 gm .17 % B .41 deg .00 deg TAO deg 0.54 2.80 7.25 8.53 8.80 6.82 5.16 3.89 2.62	23.51 25.38 s C LC cm 60.80 54.03 39.33 35.93 34.50 27.04 22.08 20.94 19.32 s C C m	33.88 35.99 Disp. Co. 5.49 Co. Density LK. Cm. 0.00 64.81 57.27 48.99 44.37 42.44 36.76 33.47 33.88 34.50 Disp. Co. 5.79 Co. Density LK. Cm. 63.83 57.96 48.30 43.95 39.40 34.50 33.53 35.88 31.88	615.2 657.9 Deff. Con @ Base 997 SWPH Cm2 1234.8 1199.8 1102.7 941.1 859.1 749.7 684.0 595.4 587.7 577.0 Deff. Con @ Base 997 WSPH Cm2 1194.5 1115.2 954.9 861.6 764.7 665.7 643.5 562.9	2.547 2.766 DL 0 Line .541 kg Cv 0.497 0.741 1.020 1.263 1.524 1.787 2.041 2.279 2.525 2.760 DL 0 Line .541 kg CSP 0.505 0.762 1.021 1.272	7.084871 5.854745 2.20	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.183 0.191 0.156 0.159 0.158 n. Visco RT/DIS 0.027 0.023 0.213 0.225 0.233 0.207 0.169 0.169 0.169	-0.101 -0.092 Decity H/BPX 0.010 0.022 0.010 -0.026 -0.088 -0.114 -0.128 -0.130 -0.131 -0.129 Decity H/BPX 0.013 0.025 0.011 -0.036 -0.110 -0.147 -0.158 -0.162 -0.160	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85 9.58 8.61 7.16 5.99 5.47 4.68 TAO Total 11.66 12.94 13.21 11.23 9.57 8.30 7.03	1.395 1.492
	3.655 3.970 Displace VCG Possible VCG Possible VCG Possible Vel m/s 0.714 1.063 1.463 1.812 2.187 2.565 2.929 3.271 3.624 3.962 Displace VCG Possible VCG Poss	296.2 308.6 Sement D sition trim TA Temp. RT gms 	-2.12 -1.94 IS 243: 23 OO 2 23 H Cm -0.22 0.45 0.21 -0.55 -1.84 -2.39 -2.70 -2.72 -2.75 -2.70 IS 304: 25 OO 4 23 H Cm -0.26 0.53 0.24 -0.75 -2.31 -3.31 -3.31 -3.31	2.09 1.48 2.0 gm .87 % B .73 deg .00 deg TAO deg 0.46 2.37 6.12 6.85 7.05 5.88 4.43 3.26 2.74 1.95 2.0 gm .17 % B .41 deg .00 deg TAO deg 0.54 2.80 7.25 8.53 8.80 6.82 5.16 3.89	23.51 25.38 s C LC cm 60.80 54.03 39.33 35.93 34.50 27.04 22.08 20.94 19.32 s C C m	33.88 35.99 Disp. Cd 5.49 Cf LK Cm 0.00 64.81 57.27 48.99 44.37 42.44 36.76 33.47 33.88 34.50 Disp. Cd 5.79 Cf LK Cm	615.2 657.9 Deff. Con @ Base 997 SWPH Cm2 1234.8 1199.8 1102.7 941.1 859.1 749.7 684.0 595.4 587.7 577.0 Deff. Con @ Base 997 WSPH Cm2 1194.5 1115.2 954.9 861.6 764.7 665.7 643.5 562.9	2.547 2.766 EDL 0 Line 5.541 kg CV 0.497 0.741 1.020 1.263 1.524 1.787 2.041 2.279 2.525 2.760 EDL 0 Line 6.541 kg CSP 0.762 1.021 1.272 1.021 1.272 1.788 2.042 2.291	7.084871 5.854745 2.20	0.162 0.169 n. Visco RT/DIS 0.026 0.087 0.183 0.191 0.156 0.159 0.158 n. Visco RT/DIS 0.027 0.023 0.213 0.225 0.233 0.207 0.169 0.169 0.169	-0.101 -0.092 Decity H/BPX 0.010 0.022 0.010 -0.026 -0.088 -0.114 -0.128 -0.130 -0.131 -0.129 Decity H/BPX 0.013 0.025 0.011 -0.036 -0.110 -0.147 -0.158 -0.162	4.43 3.82 0.9347E TAO Abs. 3.19 5.10 8.85 9.58 9.78 8.61 7.16 5.99 5.47 4.68 TAO Total 	1.395 1.492 comph complete the series of th

Table B.9 L/B = 3.0 ; β = 12°; L_{cg} = 30%; Thrust Line : Centre of Gravity

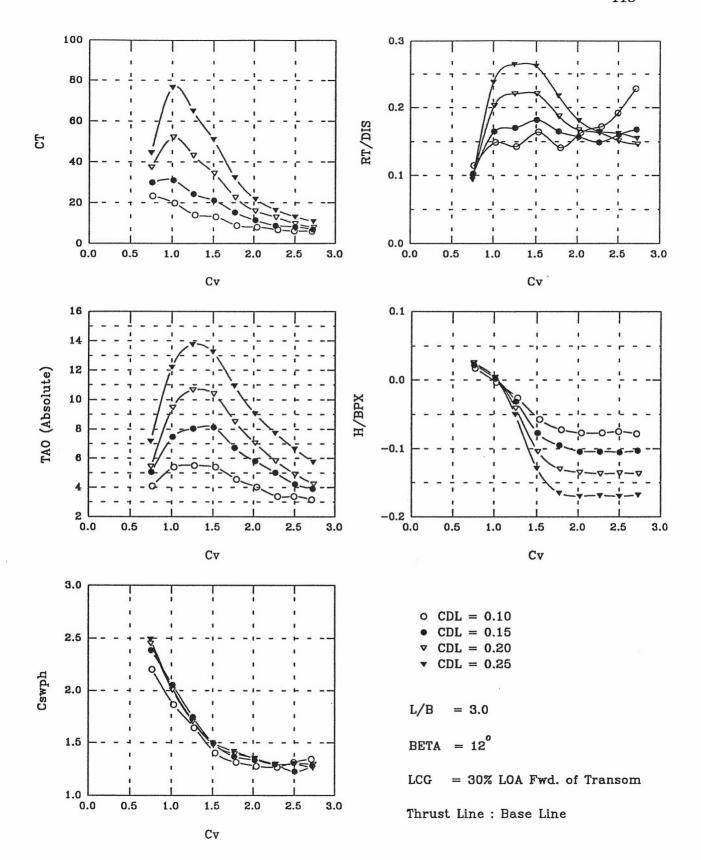


Figure B.10

Model No. T-3012 Length Overal LOA Breath (Deck) B L/B Ratio 3.0 69.00 cm 119 12.00 deg Deadrise 23.00 cm Breath (Chine) BPX 21.00 cm LCG Position 30.00 % T.OA 20.70 cm @ Transom Displacement DIS 1216.0 gms Disp. Coeff. CDL 0.10 VCG Position 23.43 % B 5.39 cm @ Base Line Static trim TAOo 1.21 deg Water Temp. 23.00 deg C Density 997.541 kg/m3 Kin. Viscocity 0.9347E-06 m2/s Vel TC TAO PT H TAO T.K WSPH CSP CT RT/DIS H/BPX Cwsph gms Total m/s CM deq x10-3 CM CM cm2 1.100 139.6 0.36 2.88 37.95 53.13 971.3 0.766 23.352580 0.115 0.017 2.202 1.476 181.2 -0.07 0.149 -0.003 5.39 1.862 4.18 31.62 44.98 821.0 1.028 19.926440 1.831 173.4 -0.54 4.28 27.60 40.02 14.032730 0.143 -0.026 5.49 1.644 724.9 1.276 2.197 0.164 -0.057 198.8 -1.20 4.17 22.77 34.85 617.6 1.531 13.119640 5.38 1.401 0.141 -0.072 2.573 171.3 -1.523.35 20.03 33.91 578.3 1.792 8.800810 4.56 1.311 2.927 198.7 -1.61 2.81 18.29 34.16 562.2 2.039 8.111470 0.163 -0.077 4.02 1.275 558.5 6.795667 0.172 -0.077 3.292 209.1 -1.62 2.17 17.60 34.50 2.294 3.38 1.266 3.580 233.7 -1.57 2.18 16.42 37.61 579.2 2.494 6.192637 0.192 -0.075 3.39 1.313 276.8 3.17 3.896 -1.63 1.96 15.53 39.68 591.7 2.714 6.062381 0.228 -0.078 1.342 Disp. Coeff. CDL 5.45 cm @ Base Line Displacement DIS 1825.0 gms 0.15 23.70 % B VCG Position Static trim TAOo 2.34 deg Water Temp. 23.50 deg C 997.421 kg/m3 Kin. Viscocity 0.9240E-06 m2/s Density VAI RT н TAO LC T.K WSPH CSP CT RT/DIS H/BPX TAO Cwsph m/s ams CM dea cm CM cm2 x10-3 Total 1.086 188.6 0.47 44.85 55.20 1051.6 0.757 29.921620 0.103 0.022 5.06 2.385 2.72 31.008560 0.165 0.002 2.054 1.454 0.05 905.8 1.013 7.47 301.8 5.13 37.95 46.92 1.806 310.0 -0.65 5.70 31.40 40.36 769.1 1.258 24.308280 0.170 -0.031 8.04 1.744 25.88 658.3 1.510 21.133240 0.182 -0.077 8.12 1.493 2.168 332.4 -1.615.78 35.54 2.537 302.0 -1.994.39 23.11 33.12 602.8 1.767 15.311370 0.165 -0.095 6.73 1.367 2.896 287.2 -2.19 21.74 588.0 2.018 11.455520 0.157 -0.104 5.80 1.333 3.46 33.12 0.149 -0.104 569.6 3.251 271.6 -2.192.67 19.32 2.265 8.871968 5.01 1.292 33.81 3.597 292.0 -2.21 1.88 17.25 33.12 540.0 2.506 8.222618 0.160 -0.105 4.22 1.224 306.1 0.168 -0.103 3.910 -2.16 1.57 16.42 36.22 564.4 2.724 6.977256 3.91 1.280 Displacement DIS 2432.0 qms Disp. Coeff. CDL 0.20 23.87 % B 5.49 cm @ Base Line VCG Position Static trim TAOo 2.73 deg Kin. Viscocity 0.9240E-06 m2/s 997.421 kg/m3 Water Temp. 23.50 deg C Density Vel RT H TAO LC T.K SWPH CV CT RT/DIS H/BPX TAO Cswph m/s deg x10-3 Abs. qms CM CM CM cm2 1.077 2.70 1079.9 0.751 37.423010 0.098 0.025 2.449 238.5 0.52 46.92 56.24 5.43 884.3 1.011 52.127910 0.203 0.004 2.005 1.451 493.6 0.07 6.75 37.61 45.20 9.48 750.6 1.255 650.9 1.511 1.802 534.3 -0.86 7.94 32.09 37.95 43.137010 0.220 -0.041 10.67 1.702 -2.18 0.220 -0.104 535.3 7.66 27.25 34.378640 10.39 1.476 2.169 33.47 2.544 454.4 -2.73 5.78 24.84 32.43 613.9 1.773 22.488080 0.187 -0.130 8.51 1.392 2.896 405.9 -2.83 4.32 23.11 31.00 595.3 2.018 15.994260 0.167 -0.135 7.05 1.350 3.259 395.7 -2.88 3.09 31.74 569.6 2.271 12.866680 0.163 -0.137 5.82 1.292 21.39 9.756967 0.151 -0.136 7.921918 0.146 -0.137 4.91 1.300 3.596 367.7 2.18 20.36 573.3 569.6 2.506 -2.87 33.12 33.81 1.292 3.928 353.9 -2.87 1.50 19.32 2.737 4.23 Displacement DIS 3042.0 gms Disp. Coeff. CDL 25.17 % B 5.79 cm @ Base Line VCG Position Static trim TAOo 4.41 deg Water Temp. 23.00 deg C Density 997.541 kg/m3 Kin. Viscocity 0.9347E-06 m2/s Vel H LC WSPH CT RT/DIS H/BPX TAO RT TAO LK CSP Cwsph deg Total m/s CM Cm x10-3 oms CM cm2 0.50 2.76 48.99 56.58 1098.3 0.747 44.584800 0.094 0.024 1.073 7.17 2.490 286.5 1.437 722.6 0.08 7.80 39.33 44.85 898.2 1.001 76.593330 0.238 0.004 12.21 2.037 1.791 803.4 -1.05 9.36 32.78 37.95 758.0 1.248 65.016970 0.264 -0.050 13.77 1.719 2.152 662.0 1.499 51.129620 0.262 -0.129 13.25 1.501 796.6 -2.728.84 28.29 33.47 625.0 1.766 591.7 2.017 0.217 -0.165 32.282770 1.417 25.88 10.95 2.534 658.9 -3.476.54 32.43 2.894 549.3 -3.57 4.65 23.81 31.40 21.793210 0.181 -0.170 9.06 1.342 31.05 16.456970 3.250 3.33 22.08 569.6 2.264 0.165 -0.169 7.74 1.292 503.3 -3.56 3.589 492.0 -3.58 2.24 20.70 32.43 569.6 2.501 13.188720 0.162 -0.170 6.65 1.292

<u>Table B.10</u> L/B = 3.0; β = 12°; L_{cg} = 30%; Thrust Line: Base Line

32.09

3.918

471.1

-3.53

1.33

19.67

554.8 2.730

10.878110

0.155 -0.168

5.74

1.258

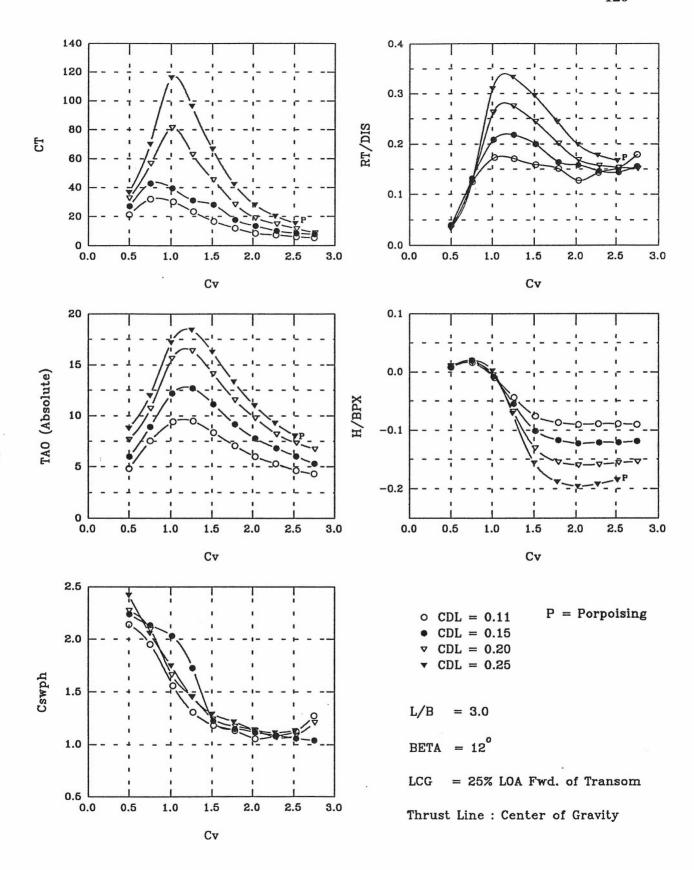


Figure B.11

	Model L/B Ra Deadri		3	.00 deg	ŗ	Breath	Overal I (Deck) E (Chine) E	23	9.00 cm 3.00 cm			12	21
		sition		.00 % I			cm @ Tra		L.OO CM				
	VCG Po	cement I sition trim TZ	25	4.0 gm .13 % B		Disp. Co			0.11				
	Water			.00 deg		Density		.541 kg		n. Visc			E-06 m2/s
_	Vel m/s	RT gms	H CM	TAO deg	cm LC	LK cm	WSPH cm2	CSP	CT x10-3	RT/DIS	H/BPX	TAO Total	Cwsph
	0.718	52.5	0.17	0.72	32.78	55.20	943.8	0.500	21.226800	0.040		4.82	2.140
	1.085	165.2 228.4	0.33	3.42 5.33	34.16 27.60	46.23 36.57	861.4 687.9	0.756 1.025	32.048640 30.195730	0.125	0.016	7.52 9.43	1.953 1.560
	1.820	226.7	-0.93	5.39	22.43	31.40	577.0	1.268	23.335210		-0.044	9.49	1.308
	2.180	210.1	-1.59	4.26	19.32	29.33	521.5	1.519	16.669800		-0.076	8.36	1.182
	2.559	199.3	-1.84	2.96	17.25	29.33	499.3	1.783	11.985140		-0.087	7.06	1.132
	2.916	168.4	-1.89	1.87	14.70	28.70	465.3	2.032	8.371337		-0.090	5.97	1.055
	3.275	189.5	-1.87	1.19	13.80	30.70	477.1	2.281	7.286501		-0.089	5.29	1.082
	3.627	201.3	-1.88	0.54	14.63	31.74	497.1	2.527	6.054693		-0.089	4.64	1.127
	3.947	237.2	-1.89	0.21	20.70		562.2	2.750	5.327358	0.179	-0.090	4.31	1.275
	VCG Po	cement D sition trim TA	25	5.0 gm .57 % B .29 deg		Disp. Co			.1504				
	Water			.00 deg		Density	997	.541 kg	y/m3 Ki	n. Visc	ocity	0.9347	E-06 m2/s
_	Vel m/s	RT gms	H	TAO deg	LC cm	LK cm	SWPH cm2	Cv	CT x10-3	RT/DIS	н/врх	TAO Abs.	Cswph
	0.725	71.5	0.18	0.68	37.26	55.20	986.9	0.505	27.14708	0.039	0.009	5.97	2.238
	1.082	240.1	0.42	3.63	37.05	51.06	940.8	0.754	42.88171	0.132	0.020	8.92	2.133
	1.456	381.0	-0.17	6.91	36.92	46.92	895.6	1.014	39.47685		-0.008	12.20	2.031
	1.813	397.3	-1.15	7.41	29.67	41.40	761.8	1.263	31.20150		-0.055	12.70	1.727
	2.179	365.2	-2.11	5.84	21.39	28.98	540.0	1.518	28.01965		-0.101	11.13	1.224
	2.561	300.1	-2.47	3.88	18.97	28.29	506.7	1.785	17.75813		-0.117	9.17	1.149
	2.913	287.8 267.0	-2.58 -2.55	2.49 1.51	16.97 15.53	28.84	491.1 480.8	2.029	13.58193 10.10449		-0.123 -0.121	7.78 6.80	1.114
	3.631	263.5	-2.53	0.72	13.87	29.33	466.0	2.530	8.43726		-0.121	6.01	1.057
	3.949	284.1	-2.50	-0.01	12.77	30.02	458.6	2.751	7.81192		-0.119	5.28	1.040
		cement D		2.0 gm		Disp. Co			.20				
	VCG Po			.35 % B		6.06 cm	a @ Base	Line					
	Water	trim TA Temp.		.99 deg		Density	997	.541 kg	y/m3 Kin	n. Visco	ocity	0.9347E	-06 m2/s
	Vel	RT	н	TAO	LC	LK	SWPH	CV	CT	RT/DIS	H/BPX	TAO	Cswph
	m/s 	gms	cm	deg	cm	cm	cm2		x10-3			Abs.	
	0.719	85.9	0.23	0.67	38.99	55.20	1002.9	0.501	32.584470	0.035	0.011	7.66	2.274
	1.087	314.3	0.36	3.73	38.64	47.96	923.4	0.758	56.611350	0.129	0.017	10.72	2.094
	1.451	638.8	-0.11	8.65	31.40	36.92	732.2	1.011	81.483180		-0.005	15.64	1.660
	1.805	669.6	-1.42	9.39	26.87	33.01	641.8	1.258	62.988620		-0.068	16.38	1.455
	2.174		-2.75	7.14 4.55		28.29			45.196140			14.13	1.241
	2.561 2.917		-3.26 -3.36	2.77		27.60 27.60		1.784	28.329260 18.941380				1.174 1.132
	3.292		-3.34	1.20				2.294					1.069
	3.634		-3.27	0.33					11.536930				1.090
	3.959		-3.24					2.758	8.625912				1.210
	Displac	cement D		2.0 gm .91 % B		Disp. Co			.25				
	Static Water	trim TA Temp.	.0o 7 22	.90 deg	С	Density	997	.658 kg	/m3 Kii	n. Visco	ocity	0.9457E	E-06 m2/s
	Vel	RT	н	TAO	LC	TY	WSPH	CSP	CT	פדת/חדם	H/BPX	ሞልር	Cwsph
	m/s	gms	cm	deg	cm	LK cm	cm2		x10-3			Total	
	0.711	100.8				57.96			36.710950				
	1.074		0.42						70.243430				
	1.437	941.8		9.31		39.92			116.324200				1.74
	1.792 2.158	1012.1		10.53					96.370170 66.838500				1.459 1.292
	2.138		-3.29 -3.94	8.37 5.42		28.98 27.60			42.243210				1.216
	2.901		-4.11	3.10				2.021					1.141
	3.260			1.39		27.25	491.9		20.339100				1.115
	3.608					28.29			15.334360				1.132
		poising				_ /							

Table B.11 L/B = 3.0 ; β = 12°; L_{cg} = 25%; Thrust Line : Centre of Gravity

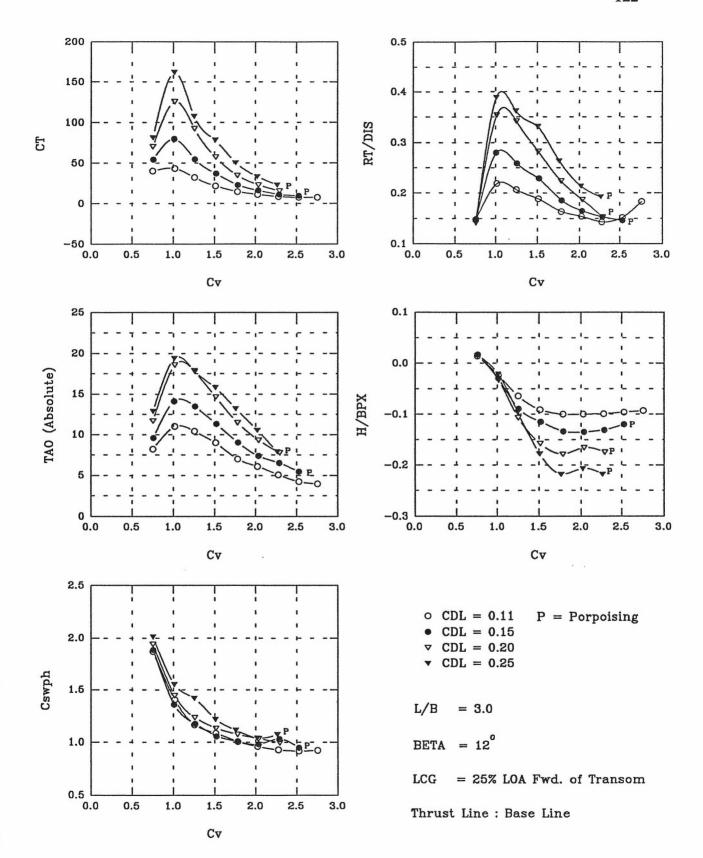


Figure B.12

Model L/B Ra Deadri												
L/B Ra	No. T-30	12										
			3.0		Length Ov	meral T	03 60	9.00 cm				
			2.00 deg	,	Breath (I							
DeadII	.30	12	u deg					3.00 cm			123	3
TOO D.					Breath (1.00 cm			120	,
LCG Po	sition	25	.00 % I	AO.	17.25 C	a e Tra	nsom					
	cement I		24.0 gm		Disp. Coe			0.11				
VCG Po			5.13 % E		5.78 cm	@ Base	Line					
Static	trim TA	00 4	.10 deg									
Water	Temp.	22	2.50 deg	C	Density	997	.658 kg	g/m3 Ki	n. Visc	ocity	0.9457E	-06 m2/s
	-							,,		2		
Vel	RT	H	TAO	LC	LK	WSPH	CSP	CT	RT/DTS	H/BPX	TAO	Cwsph
m/s	qms	cm	deg	cm	cm	cm2	-	x10-3	,	,	Total	Gudpu
	gms	CM	acg	CM	CIII	CMZ		X10-2			TOTAL	
1.078	195.2	0.30	4 10	34 16	42 70	024 5	A 751	40 060000	0 147	0 014	0 20	1 070
		0.30	4.10		42.78		0.751	40.062220		0.014	8.20	1.870
1.458	290.3	-0.50	6.90	24.84	32.78	617.6	1.016	43.492170		-0.024	11.00	1.401
1.803	273.7	-1.34	6.31	20.36	27.60	514.1	1.256	32.194940	0.207	-0.064	10.41	1.166
2.172	249.8	-1.90	4.89	17.94	26.56	477.1	1.513	21.823380	0.189	-0.091	8.99	1.082
2.555	216.7	-2.11	2.90	15.40	25.99	443.7	1.780	14.705900	0.164	-0.100	7.00	1.006
2.907	203.5	-2.11	1.99	13.41				11.194150		-0.100		0.959
3.273		-2.08	0.97	11.52			2.280	8.514046		-0.099		0.928
3.628	201.5											
			0.13	9.87			2.528	7.455128		-0.096		0.916
3.957	242.0	-1.96	-0.14	8.63	29.33	406.8	2.757	7.468892	0.183	-0.093	3.96	0.923
					4.5	202						
Displa	cement D	IS 182	25.0 gm	s	Disp. Coe			.1503				
VCG Po	sition	25	.57 % B		5.88 cm	@ Base	Line					
Static	trim TA	.00 5	.29 deg									
					•							
Water	Temp.	22	.50 deg	C	Dengity	997	.658 kc	g∕m3 Ki	n Visco	ocity	0.9457E	-06 m2/a
	-cmp		ucg	•	Demozey	,,,,	. obo ng	,, 20 1/1		octo	0171371	-00 MZ/D
Vel	RT	н	ma ₀	TO	TV	CLIDII	O	CIM.	DM/DTC	it /ppv	ma o	Cormb
			TAO	LC	LK	SWPH	Cv	CT	RT/DIS	H/BPX	TAO	Cswph
m/s	gms	cm	deg	cm	cm	cm2		x10-3			Abs.	
1.086	271.6	0.36	4.30	34.50		831.9	0.757	54.41037	0.149	0.017	9.59	1.886
1.449	510.8	-0.61	8.85	27.12	28.64	597.7	1.009	80.10178	0.280	-0.029	14.14	1.355
1.812	472.5	-1.88	8.20	21.39	26.91	517.8	1.262	54.69332	0.259	-0.089	13.49	1.174
2.182		-2.41	6.05	17.46	26.01	466.0	1.520	36.98385		-0.115	11.34	1.057
2.561	339.1	-2.82	3.74	15.53		443.8	1.784	22.91281		-0.134	9.03	1.006
2.918												
		-2.83	2.09	13.80	26.56		2.033	16.09876		-0.135	7.38	0.981
3.285		-2.75	1.24	12.77			2.288	11.15254		-0.131	6.53	1.032
3.629		-2.52	0.15	8.63	30.36	417.9	2.528	9.48877	0.146	-0.120	5.44	0.948
** Porp	oising											
Displac	cement D	IS 243	2.0 qm	s	Disp. Coe	ff. C	DL 0	.20				
VCG Po			.35 % B		6.06 cm							
	trim TA		.99 deg			- 2400						
Water !					Donaites	007	CEO les	/-2 7:			0.04579	06 -2/-
Mater	remp.	22	.50 deg	C	Density	991	.036 Kg	r/m3 Ki	n. visco	ocicy	U.945/E	-U6 M2/S
	-	712577		20.00	00000			19			202	
Vel	RT	н	TAO	LC	LK	WSPH	CSP	CT	RT/DIS	H/BPX	TAO	Cwsph
Vel m/s	RT gms	H	TAO deg	LC	LK	WSPH cm2	CSP	CT x10-3	RT/DIS	H/BPX	TAO Total	Cwsph
							CSP		RT/DIS	H/BPX		Cwsph
m/s	gms	cm	deg	cm	cm	cm2	CSP 0.752	x10-3			Total	
m/s 1.079	gms 358.2	cm 0.33	deg 4.71	cm 36.57	cm 43.47	cm2 855.9	0.752	x10-3 70.658950	0.147	0.015	Total 11.70	1.941
m/s 1.079 1.455	gms 358.2 860.2	0.33 -0.69	deg 4.71 11.58	36.57 27.60	cm 43.47 31.74	855.9 636.1	0.752 1.014	x10-3 70.658950 125.646900	0.147 0.354	0.015 -0.033	11.70 18.57	1.941 1.44
m/s 1.079 1.455 1.805	gms 358.2 860.2 832.8	0.33 -0.69 -2.25	deg 4.71 11.58 10.81	36.57 27.60 23.11	Cm 43.47 31.74 27.60	855.9 636.1 543.7	0.752 1.014 1.257	x10-3 70.658950 125.646900 92.496540	0.147 0.354 0.342	0.015 -0.033 -0.107	11.70 18.57 17.80	1.941 1.44 1.233
m/s 1.079 1.455 1.805 2.174	gms 358.2 860.2 832.8 688.7	0.33 -0.69 -2.25 -3.33	deg 4.71 11.58 10.81 7.66	36.57 27.60 23.11 20.70	43.47 31.74 27.60 25.88	855.9 636.1 543.7 499.3	0.752 1.014 1.257 1.515	x10-3 70.658950 125.646900 92.496540 57.379550	0.147 0.354 0.342 0.283	0.015 -0.033 -0.107 -0.158	11.70 18.57 17.80 14.65	1.941 1.44 1.233 1.132
m/s 1.079 1.455 1.805	gms 358.2 860.2 832.8 688.7 543.8	0.33 -0.69 -2.25 -3.33 -3.76	deg 4.71 11.58 10.81	36.57 27.60 23.11	Cm 43.47 31.74 27.60	855.9 636.1 543.7 499.3 473.4	0.752 1.014 1.257 1.515 1.778	x10-3 70.658950 125.646900 92.496540 57.379550 34.708190	0.147 0.354 0.342 0.283 0.224	0.015 -0.033 -0.107 -0.158 -0.179	11.70 18.57 17.80 14.65 11.49	1.941 1.44 1.233
m/s 1.079 1.455 1.805 2.174	gms 358.2 860.2 832.8 688.7 543.8	0.33 -0.69 -2.25 -3.33	deg 4.71 11.58 10.81 7.66 4.50	20.70 18.97	cm 43.47 31.74 27.60 25.88 25.19	855.9 636.1 543.7 499.3 473.4	0.752 1.014 1.257 1.515 1.778	x10-3 70.658950 125.646900 92.496540 57.379550	0.147 0.354 0.342 0.283 0.224	0.015 -0.033 -0.107 -0.158 -0.179	11.70 18.57 17.80 14.65 11.49	1.941 1.44 1.233 1.132
m/s 1.079 1.455 1.805 2.174 2.551 2.921	gms 358.2 860.2 832.8 688.7 543.8 455.1	0.33 -0.69 -2.25 -3.33 -3.76 -3.49	deg 4.71 11.58 10.81 7.66 4.50 2.34	27.60 23.11 20.70 18.97	cm 43.47 31.74 27.60 25.88 25.19 25.32	855.9 636.1 543.7 499.3 473.4 456.4	0.752 1.014 1.257 1.515 1.778 2.035	x10-3 70.658950 125.646900 92.496540 57.379550 34.708190 22.988410	0.147 0.354 0.342 0.283 0.224 0.187	0.015 -0.033 -0.107 -0.158 -0.179 -0.166	11.70 18.57 17.80 14.65 11.49 9.33	1.941 1.44 1.233 1.132 1.073 1.035
m/s 1.079 1.455 1.805 2.174 2.551 2.921 3.291	gms 358.2 860.2 832.8 688.7 543.8 455.1 373.0	0.33 -0.69 -2.25 -3.33 -3.76	deg 4.71 11.58 10.81 7.66 4.50 2.34	27.60 23.11 20.70 18.97	cm 43.47 31.74 27.60 25.88 25.19	855.9 636.1 543.7 499.3 473.4 456.4	0.752 1.014 1.257 1.515 1.778 2.035	x10-3 70.658950 125.646900 92.496540 57.379550 34.708190	0.147 0.354 0.342 0.283 0.224 0.187	0.015 -0.033 -0.107 -0.158 -0.179 -0.166	11.70 18.57 17.80 14.65 11.49 9.33	1.941 1.44 1.233 1.132 1.073
m/s 1.079 1.455 1.805 2.174 2.551 2.921 3.291	gms 358.2 860.2 832.8 688.7 543.8 455.1	0.33 -0.69 -2.25 -3.33 -3.76 -3.49	deg 4.71 11.58 10.81 7.66 4.50 2.34	27.60 23.11 20.70 18.97	cm 43.47 31.74 27.60 25.88 25.19 25.32	855.9 636.1 543.7 499.3 473.4 456.4	0.752 1.014 1.257 1.515 1.778 2.035	x10-3 70.658950 125.646900 92.496540 57.379550 34.708190 22.988410	0.147 0.354 0.342 0.283 0.224 0.187	0.015 -0.033 -0.107 -0.158 -0.179 -0.166	11.70 18.57 17.80 14.65 11.49 9.33	1.941 1.44 1.233 1.132 1.073 1.035
m/s 1.079 1.455 1.805 2.174 2.5551 2.921 3.291 ** Por	gms 358.2 860.2 832.8 688.7 543.8 455.1 373.0 poising	0.33 -0.69 -2.25 -3.33 -3.76 -3.49 -3.68	deg 4.71 11.58 10.81 7.66 4.50 2.34 0.79	20.70 18.97 17.25 15.53	43.47 31.74 27.60 25.88 25.19 25.32 25.53	855.9 636.1 543.7 499.3 473.4 456.4 440.1	0.752 1.014 1.257 1.515 1.778 2.035 2.293	x10-3 70.658950 125.646900 92.496540 57.379550 34.708190 22.988410 15.385920	0.147 0.354 0.342 0.283 0.224 0.187	0.015 -0.033 -0.107 -0.158 -0.179 -0.166	11.70 18.57 17.80 14.65 11.49 9.33	1.941 1.44 1.233 1.132 1.073 1.035
m/s 1.079 1.455 1.805 2.174 2.551 2.921 3.291 ** Porp	gms 358.2 860.2 832.8 688.7 543.8 455.1 373.0 poising	0.33 -0.69 -2.25 -3.33 -3.76 -3.49 -3.68	deg 4.71 11.58 10.81 7.66 4.50 2.34 0.79	cm 36.57 27.60 23.11 20.70 18.97 17.25 15.53	43.47 31.74 27.60 25.88 25.19 25.32 25.53	855.9 636.1 543.7 499.3 473.4 456.4 440.1	0.752 1.014 1.257 1.515 1.778 2.035 2.293	x10-3 70.658950 125.646900 92.496540 57.379550 34.708190 22.988410	0.147 0.354 0.342 0.283 0.224 0.187	0.015 -0.033 -0.107 -0.158 -0.179 -0.166	11.70 18.57 17.80 14.65 11.49 9.33	1.941 1.44 1.233 1.132 1.073 1.035
m/s 1.079 1.455 1.805 2.174 2.551 2.921 3.291 ** Porp	gms 358.2 860.2 832.8 688.7 543.8 455.1 373.0 poising cement D	0.33 -0.69 -2.25 -3.33 -3.76 -3.49 -3.68	deg 4.71 11.58 10.81 7.66 4.50 2.34 0.79 2.0 gm .91 % B	cm 36.57 27.60 23.11 20.70 18.97 17.25 15.53	43.47 31.74 27.60 25.88 25.19 25.32 25.53	855.9 636.1 543.7 499.3 473.4 456.4 440.1	0.752 1.014 1.257 1.515 1.778 2.035 2.293	x10-3 70.658950 125.646900 92.496540 57.379550 34.708190 22.988410 15.385920	0.147 0.354 0.342 0.283 0.224 0.187	0.015 -0.033 -0.107 -0.158 -0.179 -0.166	11.70 18.57 17.80 14.65 11.49 9.33	1.941 1.44 1.233 1.132 1.073 1.035
m/s 1.079 1.455 1.805 2.174 2.551 2.921 3.291 ** Porp Displac VCG Por	gms 358.2 860.2 832.8 688.7 543.8 455.1 373.0 poising cement D sition trim TA		deg 4.71 11.58 10.81 7.66 4.50 2.34 0.79 2.0 gm .91 % B	cm 36.57 27.60 23.11 20.70 18.97 17.25 15.53	43.47 31.74 27.60 25.88 25.19 25.32 25.53 Disp. Coe 5.96 cm	855.9 636.1 543.7 499.3 473.4 456.4 440.1	0.752 1.014 1.257 1.515 1.778 2.035 2.293	x10-3 70.658950 125.646900 92.496540 57.379550 34.708190 22.988410 15.385920	0.147 0.354 0.342 0.283 0.224 0.187 0.153	0.015 -0.033 -0.107 -0.158 -0.179 -0.166 -0.175	11.70 18.57 17.80 14.65 11.49 9.33 7.78	1.941 1.44 1.233 1.132 1.073 1.035 0.998
m/s 1.079 1.455 1.805 2.174 2.551 2.921 3.291 ** Porp	gms 358.2 860.2 832.8 688.7 543.8 455.1 373.0 poising cement D sition trim TA		deg 4.71 11.58 10.81 7.66 4.50 2.34 0.79 2.0 gm .91 % B	cm 36.57 27.60 23.11 20.70 18.97 17.25 15.53	43.47 31.74 27.60 25.88 25.19 25.32 25.53	855.9 636.1 543.7 499.3 473.4 456.4 440.1	0.752 1.014 1.257 1.515 1.778 2.035 2.293	x10-3 70.658950 125.646900 92.496540 57.379550 34.708190 22.988410 15.385920	0.147 0.354 0.342 0.283 0.224 0.187 0.153	0.015 -0.033 -0.107 -0.158 -0.179 -0.166 -0.175	11.70 18.57 17.80 14.65 11.49 9.33	1.941 1.44 1.233 1.132 1.073 1.035 0.998
m/s 1.079 1.455 1.805 2.174 2.551 2.921 3.291 ** Porp Displac VCG Por	gms 358.2 860.2 832.8 688.7 543.8 455.1 373.0 poising cement D sition trim TA		deg 4.71 11.58 10.81 7.66 4.50 2.34 0.79 2.0 gm .91 % B	cm 36.57 27.60 23.11 20.70 18.97 17.25 15.53	43.47 31.74 27.60 25.88 25.19 25.32 25.53 Disp. Coe 5.96 cm	855.9 636.1 543.7 499.3 473.4 456.4 440.1	0.752 1.014 1.257 1.515 1.778 2.035 2.293	x10-3 70.658950 125.646900 92.496540 57.379550 34.708190 22.988410 15.385920	0.147 0.354 0.342 0.283 0.224 0.187 0.153	0.015 -0.033 -0.107 -0.158 -0.179 -0.166 -0.175	11.70 18.57 17.80 14.65 11.49 9.33 7.78	1.941 1.44 1.233 1.132 1.073 1.035 0.998
m/s 1.079 1.455 1.805 2.174 2.551 3.291 ** Por Display VCG Por Static Water	gms 358.2 860.2 832.8 688.7 543.8 455.1 373.0 poising cement D sition trim TA	Cm -0.33 -0.69 -2.25 -3.33 -3.76 -3.49 -3.68 IS 304 25 OO 7 22	deg 4.71 11.58 10.81 7.66 4.50 2.34 0.79 2.0 gm .91 % B .90 deg .50 deg	36.57 27.60 23.11 20.70 18.97 17.25 15.53	43.47 31.74 27.60 25.88 25.19 25.32 25.53 Disp. Coe 5.96 cm	855.9 636.1 543.7 499.3 473.4 456.4 440.1 eff. C	0.752 1.014 1.257 1.515 1.778 2.035 2.293 DL 0 Line	x10-3 70.658950 125.646900 92.496540 57.379550 34.708190 22.988410 15.385920	0.147 0.354 0.342 0.283 0.224 0.187 0.153	0.015 -0.033 -0.107 -0.158 -0.179 -0.166 -0.175	11.70 18.57 17.80 14.65 11.49 9.33 7.78	1.941 1.44 1.233 1.132 1.073 1.035 0.998
m/s 1.079 1.455 1.805 2.174 2.551 2.921 ** Porp Display VCG Por Static Water Vel	gms 	Cm 0.33 -0.69 -2.25 -3.33 -3.76 -3.49 -3.68 IS 304 25 00 7 22	deg 4.71 11.58 10.81 7.66 4.50 2.34 0.79 2.0 gm .91 % B .90 deg .50 deg	36.57 27.60 23.11 20.70 18.97 17.25 15.53	43.47 31.74 27.60 25.88 25.19 25.32 25.53 Disp. Coe 5.96 cm	Cm2 855.9 636.1 543.7 499.3 473.4 456.4 440.1 eff. C @ Base 997 WSPH	0.752 1.014 1.257 1.515 1.778 2.035 2.293	x10-3 70.658950 125.646900 92.496540 57.379550 34.708190 22.988410 15.385920 0.25 g/m3 Ki	0.147 0.354 0.342 0.283 0.224 0.187 0.153	0.015 -0.033 -0.107 -0.158 -0.179 -0.166 -0.175	Total 11.70 18.57 17.80 14.65 11.49 9.33 7.78	1.941 1.44 1.233 1.132 1.073 1.035 0.998
m/s 1.079 1.455 1.805 2.174 2.551 3.291 ** Por Display VCG Por Static Water	gms 358.2 860.2 832.8 688.7 543.8 455.1 373.0 poising cement D sition trim TA	Cm -0.33 -0.69 -2.25 -3.33 -3.76 -3.49 -3.68 IS 304 25 OO 7 22	deg 4.71 11.58 10.81 7.66 4.50 2.34 0.79 2.0 gm .91 % B .90 deg .50 deg	36.57 27.60 23.11 20.70 18.97 17.25 15.53	43.47 31.74 27.60 25.88 25.19 25.32 25.53 Disp. Coe 5.96 cm	855.9 636.1 543.7 499.3 473.4 456.4 440.1 eff. C	0.752 1.014 1.257 1.515 1.778 2.035 2.293 DL 0 Line	x10-3 70.658950 125.646900 92.496540 57.379550 34.708190 22.988410 15.385920	0.147 0.354 0.342 0.283 0.224 0.187 0.153	0.015 -0.033 -0.107 -0.158 -0.179 -0.166 -0.175	11.70 18.57 17.80 14.65 11.49 9.33 7.78	1.941 1.44 1.233 1.132 1.073 1.035 0.998
m/s 1.079 1.455 1.805 2.174 2.551 2.921 3.291 ** Por Displac VCG Por Static Water Vel m/s	gms 358.2 860.2 832.8 688.7 543.8 455.1 373.0 poising cement D sition trim TA Temp. RT gms	Cm 0.33 -0.69 -2.25 -3.33 -3.76 -3.49 -3.68 IS 304 25 00 7 22 H Cm	deg 4.71 11.58 10.81 7.66 4.50 2.34 0.79 2.0 gm .91 % B .90 deg .50 deg	36.57 27.60 23.11 20.70 18.97 17.25 15.53	43.47 31.74 27.60 25.88 25.19 25.32 25.53 Disp. Coe 5.96 cm Density LK cm	855.9 636.1 543.7 499.3 473.4 456.4 440.1 eff. C @ Base 997 WSPH cm2	0.752 1.014 1.257 1.515 1.778 2.035 2.293 DL 0 Line .658 kg	x10-3 70.658950 125.646900 92.496540 57.379550 34.708190 22.988410 15.385920 0.25 g/m3 Ki:	0.147 0.354 0.342 0.283 0.224 0.187 0.153	0.015 -0.033 -0.107 -0.158 -0.179 -0.166 -0.175	Total 11.70 18.57 17.80 14.65 11.49 9.33 7.78 0.9457E-TAO Total	1.941 1.44 1.233 1.132 1.073 1.035 0.998
m/s 1.079 1.455 1.805 2.174 2.551 2.921 3.291 ** Por Display VCG Por Static Water Vel m/s	gms 358.2.8 680.2 832.8 688.7 543.8 455.1 373.0 poising cement D sition trim TA Temp. RT gms 429.7	Cm -0.33 -0.69 -2.25 -3.33 -3.76 -3.49 -3.68 IS 304 25 Oo 7 22 H Cm 0.34	deg	Cm 36.57 27.60 23.11 20.70 18.97 17.25 15.53 C LC cm 37.95	43.47 31.74 27.60 25.88 25.19 25.32 25.53 Disp. Coe 5.96 cm Density LK cm	Cm2 855.9 636.1 543.7 499.3 473.4 456.4 440.1 eff. C @ Base 997 WSPH Cm2	0.752 1.014 1.257 1.515 1.778 2.035 2.293 DL 0 Line .658 kg	x10-3 70.658950 125.646900 92.496540 57.379550 34.708190 22.988410 15.385920 0.25 g/m3	0.147 0.354 0.342 0.283 0.224 0.187 0.153	0.015 -0.033 -0.107 -0.158 -0.179 -0.166 -0.175	Total 11.70 18.57 17.80 14.65 11.49 9.33 7.78 0.9457E- TAO Total 12.89	1.941 1.44 1.233 1.132 1.073 1.035 0.998
m/s 1.079 1.455 1.805 2.174 2.551 3.291 ** Por Display VCG Por Static Water Vel m/s 1.081 1.448	gms 358.2 860.2 832.8 688.7 543.8 455.1 373.0 poising cement D strion trim TA Temp. RT gms 429.7 1184.3	Cm -0.33 -0.69 -2.25 -3.33 -3.76 -3.49 -3.68 IS 304 25 OO 7 22 H Cm -0.34 -0.44	deg 4.71 11.58 10.81 7.66 4.50 2.34 0.79 2.0 gm .91 % B .90 deg .50 deg TAO deg -4.99 11.49	Cm 36.57 27.60 23.11 20.70 18.97 17.25 15.53 S C LC cm 37.95 30.02	Cm 43.47 31.74 27.60 25.88 25.19 25.32 25.53 Disp. Coe 5.96 cm Density LK cm 45.20 33.81	Cm2 855.9 636.1 543.7 499.3 473.4 456.4 440.1 eff. C @ Base 997 WSPH cm2	0.752 1.014 1.257 1.515 1.778 2.035 2.293 DL 0 Line .658 kg	x10-3 70.658950 125.646900 92.496540 57.379550 34.708190 22.988410 15.385920 0.25 g/m3 Ki	0.147 0.354 0.342 0.283 0.224 0.187 0.153	0.015 -0.033 -0.107 -0.158 -0.179 -0.166 -0.175	Total 11.70 18.57 17.80 14.65 11.49 9.33 7.78 0.9457E TAO Total 12.89 19.39	1.941 1.44 1.233 1.132 1.073 1.035 0.998 -06 m2/s Cwsph
m/s 1.079 1.455 1.805 2.174 2.551 2.921 3.291 ** Por Display VCG Por Static Water Vel m/s	gms 358.2.8 680.2 832.8 688.7 543.8 455.1 373.0 poising cement D sition trim TA Temp. RT gms 429.7	Cm -0.33 -0.69 -2.25 -3.33 -3.76 -3.49 -3.68 IS 304 25 OO 7 22 H Cm -0.34 -0.44	deg	Cm 36.57 27.60 23.11 20.70 18.97 17.25 15.53 C LC cm 37.95	Cm 43.47 31.74 27.60 25.88 25.19 25.32 25.53 Disp. Coe 5.96 cm Density LK cm 45.20 33.81	Cm2 855.9 636.1 543.7 499.3 473.4 456.4 440.1 eff. C @ Base 997 WSPH cm2	0.752 1.014 1.257 1.515 1.778 2.035 2.293 DL 0 Line .658 kg	x10-3 70.658950 125.646900 92.496540 57.379550 34.708190 22.988410 15.385920 0.25 g/m3	0.147 0.354 0.342 0.283 0.224 0.187 0.153	0.015 -0.033 -0.107 -0.158 -0.179 -0.166 -0.175	Total 11.70 18.57 17.80 14.65 11.49 9.33 7.78 0.9457E TAO Total 12.89 19.39	1.941 1.44 1.233 1.132 1.073 1.035 0.998
m/s 1.079 1.455 1.805 2.174 2.551 2.921 ** Por Displace VCG Por Static Water Vel m/s 1.081 1.448 1.794	gms 358.2 860.2 832.8 688.7 543.8 455.1 373.0 poising cement D sition trim TA Temp. RT gms 429.7 1184.3 1101.9	Cm 0.33 -0.69 -2.25 -3.33 -3.76 -3.49 -3.68 IS 304 25 OO 7 22 H Cm -0.34 -0.44 -2.02	deg 4.71 11.58 10.81 7.66 4.50 2.34 0.79 2.0 gm .91 % B .90 deg .50 deg TAO deg 11.49 9.99	Cm 36.57 27.60 23.11 20.70 18.97 17.25 15.53 C LC cm 37.95 30.02 27.60	Cm 43.47 31.74 27.60 25.88 25.19 25.32 25.53 Disp. Coe 5.96 cm Density LK cm 45.20 33.81 30.70	Cm2 855.9 636.1 543.7 499.3 473.4 456.4 440.1 eff. C @ Base 997 WSPH cm2 887.8 684.1 625.0	0.752 1.014 1.257 1.515 1.778 2.035 2.293 DL 0 Line .658 kg CSP	x10-3 70.658950 125.646900 92.496540 57.379550 34.708190 22.988410 15.385920 0.25 g/m3 Ki	0.147 0.354 0.342 0.283 0.224 0.187 0.153 n. Visco RT/DIS 0.141 0.389 0.362	0.015 -0.033 -0.107 -0.158 -0.179 -0.166 -0.175	Total 11.70 18.57 17.80 14.65 11.49 9.33 7.78 0.9457E- TAO Total 12.89 19.39 17.89	1.941 1.44 1.233 1.132 1.073 1.035 0.998 -06 m2/s Cwsph
m/s 1.079 1.455 1.805 2.174 2.551 2.921 3.291 ** Por Displac VCG Por Static Water Vel m/s 1.081 1.448 1.794 2.166	gms	Cm -0.33 -0.69 -2.25 -3.33 -3.76 -3.49 -3.68 IS 304 25 Co 7 22 H Cm -0.34 -0.44 -2.02 -3.74	deg 4.71 11.58 10.81 7.66 4.50 2.34 0.79 2.0 gm .91 % B .90 deg .50 deg TAO deg 11.49 9.99 7.93	Cm	43.47 31.74 27.60 25.88 25.19 25.32 25.53 Disp. Coe 5.96 cm Density LK cm 45.20 33.81 30.70 27.25	Cm2 855.9 636.1 543.7 499.3 473.4 456.4 440.1 eff. C @ Base 997 WSPH cm2 887.8 684.1 625.0 536.3	0.752 1.014 1.257 1.515 1.778 2.035 2.293 EDL 0 Line .658 kg CSP 0.753 1.009 1.250 1.509	x10-3	0.147 0.354 0.342 0.283 0.224 0.187 0.153 n. Visco RT/DIS 0.141 0.389 0.362 0.332	0.015 -0.033 -0.107 -0.158 -0.179 -0.166 -0.175 DCITY H/BPX 0.016 -0.021 -0.021 -0.026 -0.178	Total 11.70 18.57 17.80 14.65 11.49 9.33 7.78 0.9457E TAO Total 12.89 19.39 17.89 15.83	1.941 1.44 1.233 1.132 1.073 1.035 0.998 -06 m2/s Cwsph -2.013 1.55 1.41 1.216
m/s 1.079 1.455 1.805 2.174 2.551 2.921 3.291 ** Por Displac VCG Por Static Water Vel m/s 1.081 1.448 1.794 2.166 2.519	gms	Cm 0.33 -0.69 -2.25 -3.33 -3.76 -3.49 -3.68 IS 304 25 00 7 22 H Cm 0.34 -0.44 -2.02 -3.74 -4.58	deg	Cm 36.57 27.60 23.11 20.70 18.97 17.25 15.53 S C LC Cm 37.95 30.02 27.60 22.77 20.36	Cm 43.47 31.74 27.60 25.88 25.19 25.32 25.53 Disp. Coe 5.96 cm Density LK cm 45.20 33.81 30.70 27.25 25.53	Cm2 855.9 636.1 543.7 499.3 473.4 456.4 440.1 eff. C @ Base 997 WSPH cm2 887.8 684.1 625.0 536.3 491.9	0.752 1.014 1.257 1.515 1.778 2.035 2.293 DL 0 Line .658 kg CSP 0.753 1.009 1.250 1.509 1.755	x10-3	0.147 0.354 0.342 0.283 0.224 0.187 0.153 n. Visco RT/DIS 0.141 0.389 0.362 0.362	0.015 -0.033 -0.107 -0.158 -0.179 -0.166 -0.175 0.016 -0.021 -0.096 -0.178 -0.218	Total 11.70 18.57 17.80 14.65 11.49 9.33 7.78 0.9457E- TAO Total 12.89 19.39 17.89 15.83 13.23	1.941 1.44 1.233 1.132 1.073 1.035 0.998 -06 m2/s Cwsph -2.013 1.55 1.41 1.216 1.115
m/s 1.079 1.455 1.805 2.174 2.551 2.921 3.291 ** Por Display VCG Por Static Water Vel m/s 1.081 1.448 1.794 2.166 2.519 2.897	gms	Cm -0.33 -0.69 -2.25 -3.33 -3.76 -3.49 -3.68 IS 304 25 00 72 H Cm -0.44 -2.02 -3.74 -4.58 -4.34	deg 4.71 11.58 10.81 7.66 4.50 2.34 0.79 2.0 gm .91 % B .90 deg TAO deg TAO deg 11.49 9.99 7.93 5.33 2.66	36.57.27.60 23.11 20.70 18.97 17.25 15.53 S C LC	43.47 31.74 27.60 25.88 25.19 25.32 25.53 Disp. Coe 5.96 cm Density LK cm 45.20 33.81 30.70 27.25 25.53 24.50	Cm2 855.9 636.1 543.7 499.3 473.4 456.4 440.1 eff. C @ Base 997 WSPH Cm2 887.8 684.1 625.0 536.3 491.9 458.6	0.752 1.014 1.257 1.515 1.778 2.035 2.293 DL 0 Line .658 kg CSP 0.753 1.009 1.250 1.509 1.755 2.019	x10-3	0.147 0.354 0.342 0.283 0.224 0.187 0.153 n. Visco RT/DIS 0.141 0.389 0.362 0.362 0.332 0.264 0.214	0.015 -0.033 -0.107 -0.158 -0.179 -0.166 -0.175 0.016 -0.021 -0.096 -0.178 -0.218 -0.207	Total 11.70 18.57 17.80 14.65 11.49 9.33 7.78 0.9457E TAO Total 12.89 19.39 17.89 15.83 13.23 10.56	1.941 1.44 1.233 1.132 1.073 1.035 0.998 -06 m2/s Cwsph -2.013 1.55 1.41 1.216 1.115 1.040
m/s 1.079 1.455 1.805 2.174 2.551 3.291 ** Por Display VCG Por Static Water Vel m/s 1.081 1.448 1.794 2.166 2.519 2.897 3.252	gms	Cm -0.33 -0.69 -2.25 -3.33 -3.76 -3.49 -3.68 IS 304 25 00 7 22 H Cm -0.34 -0.44 -2.02 -3.74 -4.58 -4.57	deg	36.57.27.60 23.11 20.70 18.97 17.25 15.53 S C LC	Cm 43.47 31.74 27.60 25.88 25.19 25.32 25.53 Disp. Coe 5.96 cm Density LK cm 45.20 33.81 30.70 27.25 25.53	Cm2 855.9 636.1 543.7 499.3 473.4 456.4 440.1 eff. C @ Base 997 WSPH Cm2 887.8 684.1 625.0 536.3 491.9 458.6	0.752 1.014 1.257 1.515 1.778 2.035 2.293 DL 0 Line .658 kg CSP 0.753 1.009 1.250 1.509 1.755	x10-3	0.147 0.354 0.342 0.283 0.224 0.187 0.153 n. Visco RT/DIS 0.141 0.389 0.362 0.362 0.332 0.264 0.214	0.015 -0.033 -0.107 -0.158 -0.179 -0.166 -0.175 0.016 -0.021 -0.096 -0.178 -0.218 -0.207	Total 11.70 18.57 17.80 14.65 11.49 9.33 7.78 0.9457E- TAO Total 12.89 19.39 17.89 15.83 13.23	1.941 1.44 1.233 1.132 1.073 1.035 0.998 -06 m2/s Cwsph -2.013 1.55 1.41 1.216 1.115

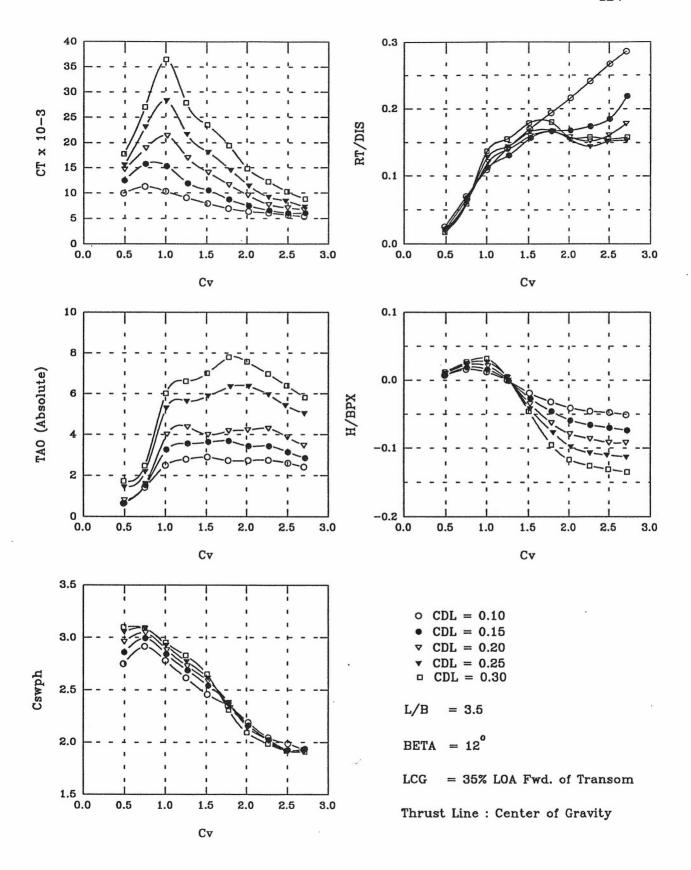


Figure B.13

Model No. T-3512 L/B Ratio 3 5 Length Overal LOA 80.50 cm Deadrise 12.00 deg Breath (Deck) В 23.00 cm 125 Breath (Chine) BPX 21.00 cm LCG Position 35.00 % LOA 28.18 cm @ Transom 1216.0 gms Displacement DIS Disp. Coeff. CDL 0.1002 23.74 % B VCG Position 5.46 cm & Base Line Static trim TAOo 0.45 deg Water Temp. 22.50 deg C Density 997.770 kg/m3 Kin. Viscocity 0.9568E-06 m2/s Ve1 RT SWPH RT/DIS H/BPX TAO H TAO LC LK CT Cv Cswoh x10-3 m/s qms Abs. Cm dea cm Cm cm2 0.007 2.746 0.696 29.8 0.14 0.19 44.68 68.43 1211.0 0.485 9.99391 0.025 0.64 0.96 1.071 84.6 0.34 55.14 67.62 1284.7 0.746 11.27674 0.070 0.016 1.41 2.913 1.433 132.5 0.26 2.04 50.31 65.61 1225.2 0.999 10.34976 0.109 0.012 2.49 2.778 1.794 171.8 0.00 45.08 63.19 1153.5 1.250 9.09928 0.141 0.000 2.79 2.616 2.34 1.514 206.2 2.44 1083.4 7.93130 0.170 - 0.0192.172 -0.4139.04 61.99 2.89 2.457 6.92631 2.545 1035.8 236.4 -0.66 2.27 36.22 60.38 1.773 0.194 -0.032 2.72 2.349 2.900 262.8 -0.86 2.28 31.80 58.36 966.8 2.020 6.35776 0.216 -0.041 2.73 2.192 3.252 293.1 -0.96 2.29 28.18 55.95 901.8 2.266 6.04399 0.241 -0.046 2.74 2.045 0.267 -0.048 3.595 325.1 -1.01 2.15 25.76 55.95 875.9 2.505 5.64671 2.60 1.986 3.878 347.6 -1.061.96 22.94 56.35 850.0 2.702 5.34833 0.286 -0.051 2.41 1.927 Disp. Coeff. Displacement DIS 1825.0 CDL 0.1503 gms 24.22 % B VCG Position 5.57 cm @ Base Line 0.41 deg Static trim TAOO Water Temp. 20.50 deg C Density 998.101 kg/m3 Kin. Viscocity 0.9916E-06 m2/s SWPH CT RT/DTS H/RPX Vel RT TAO LC TAO H T.K CV Cswph x10-3m/s gms cm deg CM CM cm2 Abs. 0.709 40.3 0.18 0.25 50.72 68.43 1260.3 0.494 12.50605 0.022 0.008 0.66 2.858 1.083 124.5 0.39 1.11 60.38 68.43 1321.0 0.755 15.77950 0.068 0.019 1.52 2.995 205.9 1.012 15.33485 3.25 2.839 1.452 0.33 54.34 65.21 1252.0 0.113 0.016 2.84 239.1 1184.6 1.270 0.131 -0.001 3.55 2,686 11.93361 1.823 -0.01 3.14 48.30 63.19 10.51553 0.157 -0.027 2.187 286.6 -0.56 3.22 44.28 60.78 1120.4 1.524 3.63 2.540 2.554 303.9 -0.96 3.27 39.45 58.36 1048.4 1.779 8.73710 0.167 -0.046 3.68 2.377 0.168 -0.059 2.901 305.7 -1.24 3.02 34.62 54.34 953.4 2.021 7.48723 3.43 2.162 3.03 0.174 -0.066 3.44 2.025 3.263 317.6 -1.3830.99 52.33 893.2 2.273 6.56711 850.0 2.506 6.03842 0.185 -0.070 3.597 337.9 -1.472.73 28.18 51.12 3.14 1.927 3.898 399.8 -1.55 2.44 26.97 52.73 854.3 2.716 6.05346 0.219 - 0.0742.85 1.937 Displacement DIS 2432.0 gms Disp. Coeff. CDL 5.63 cm @ Base Line 0.2003 24.48 % B VCG Position Static trim TAOo 0.56 deg Water Temp. 20.50 deg C Density 998.101 kg/m3 Kin. Viscocity 0.9916E-06 m2/s Vel RT н TAO LC LK SWPH CT RT/DIS H/BPX TAO Cswph x10-3 Abs. m/s dea cm2 CM CM CM qms 2.960 0.712 0.496 14.70475 0.80 0.20 55.55 1305.2 0.020 0.010 49.5 0.24 69.23 1.086 152.4 0.48 1.03 62.79 69.23 1342.9 0.757 18.90206 0.063 0.023 1.59 3.045 294.4 0.45 3.45 55.55 1270.9 1.017 21.37193 0.121 0.021 4.01 2.882 1.460 66.01 0.140 -0.000 1.815 341.3 -0.00 3.81 50.72 63.19 1202.3 1.265 16.93219 4.37 2.726 14.06397 2.184 388.8 -0.73 3.43 46.69 60.38 1139.5 1.521 0.160 -0.035 3.99 2.584 1.779 11.57070 0.166 -0.063 2.553 402.9 -1.323.61 41.86 56.35 1050.2 4.17 2.381 2.888 944.7 2.012 9.56829 0.158 -0.079 4.22 2.142 383.5 -1.65 3.66 36.22 51.92 3.252 370.5 -1.81 3.74 33.41 49.91 893.1 2.266 7.71164 0.152 -0.086 4.30 2.025 2.499 1.918 3.587 391.0 -1.93 7.06321 0.161 - 0.0923.87 3.31 30.59 48.30 845.7 3.877 433.1 -1.942.91 30.19 49.11 850.0 2.701 6.66400 0.178 - 0.0923.47 1.927 Displacement DIS 3042.0 gms Disp. Coeff. CDL 0.2505 25.83 % B 5.94 cm @ Base Line VCG Position 1.17 deg Static trim TAOo Water Temp. 20.50 deg C Density 998.101 kg/m3 Kin. Viscocity 0.9916E-06 m2/s Vel RT H TAO LC LK SWPH CT RT/DIS H/BPX TAO Cswph m/s x10-3 Abs. gms CM deg CM Cm cm2 0.710 1346.7 0.494 15.55545 0.018 0.011 1.45 3.054 53.7 0.23 0.28 60.38 71.24 1.080 0.752 23.16228 0.061 0.025 2.19 3.087 187.0 0.53 1.02 67.62 70.84 1361.4 1.446 388.5 0.57 58.36 66.41 1291.2 1.007 28.30371 0.128 0.027 5.29 2.928 4.12 437.4 1.256 21.66349 0.144 0.004 5.63 2.770 1.802 0.07 63.19 1221.6 4.46 53.13 0.166 -0.042 1.520 2.182 505.0 -0.874.72 48.30 59.97 1151.4 18.10287 5.89 2.611 2.583 506.5 -1.61 5.18 41.86 54.34 1028.9 1.799 14.50697 0.167 -0.077 6.35 2.333 2.905 468.0 -2.05 5.19 38.24 50.72 953.3 2.024 11.43325 0.154 -0.098 6.36 2.162 3.251 439.2 -2.25 4.79 34.62 48.30 888.7 2.265 9.19308 0.144 -0.107 5.96 2.015 8.45895 0.151 -0.110 845.7 5.42 1.918 3.551 -2.31 4.25 32.20 2.474 458.9 46.69 3.884 466.9 -2.38 3.86 30.99 47.50 841.4 2.706 7.23218 0.153 - 0.1135.03 1.908

<u>Table B.13</u> L/B = 3.5; β = 12°; L_{cg} = 35%; Thrust Line: Centre of Gravity (1/2)

Displacement DIS 3640.0 gms Disp. Coeff. CDL 0.2998 VCG Position 27.70 % B 6.37 cm @ Base Line

Static trim TAOo 1.48 deg 126 0.9568E-06 m2/s Water Temp. Kin. Viscocity 22.00 deg C Density 997.772 kg/m3 RT H TAO LC LK SWPH Cv CT RT/DIS H/BPX TAO Cswph m/s gms CM deg cm CM x10-3 cm2 Abs. 0.487 0.748 0.012 0.699 60.3 0.25 0.25 66.41 1366.6 17.74718 0.017 1.73 3.099 71.64 1.074 215.7 0.99 70.84 1362.6 0.059 0.57 68.43 27.01488 0.027 2.47 3.090 4.53 1.002 1.438 499.8 59.57 66.82 1301.5 36.50232 0.137 0.032 6.01 0.66 2.951 565.4 1246.8 1.247 0.005 1.789 54.74 64.40 27.85047 0.11 5.14 0.155 6.62 2.827 2.163 653.1 -0.97 5.53 49.91 60.38 1167.8 1.507 23.50511 0.179 -0.046 7.01 2.648 2.554 656.9 -2.00 6.31 42.67 52.73 1019.7 1.779 19.42542 0.180 -0.095 7.79 2.312 2.876 574.7 -2.46 6.09 37.84 48.30 923.1 2.004 14.80392 0.158 -0.117 7.57 2.093 5.50 3.247 574.7 -2.65 35.02 46.69 875.8 2.262 12.24173 0.158 -0.126 6.98 1.986 845.7 2.489 841.4 2.715 3.573 563.6 4.91 33.00 45.89 10.26769 0.155 -0.131 6.39 1.918 -2.76 8.82929 5.81 573.6 -2.84 1.908 3.897 4.33 31.80 46.69 0.158 -0.135

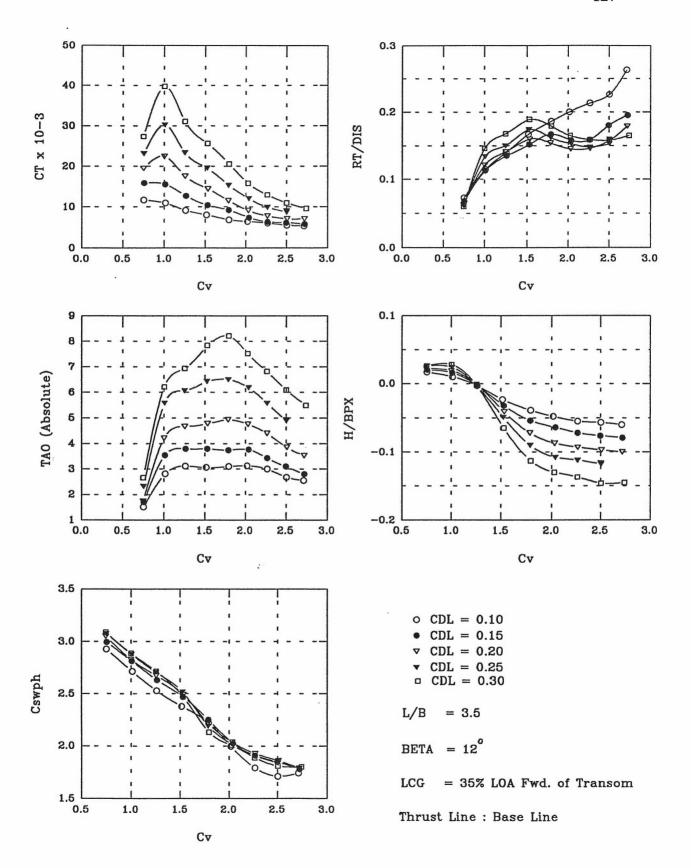


Figure B.14

Model N					~							
	lo. T-35	12										
L/B Rat			.5		Length C	veral I	OA 80	.50 cm				
Deadris	se .		.00 deg		Breath (.00 cm			128	
			-		Breath (.00 cm			120	
LCG Pos	ition	35	.00 % L	OA	28.18							
		IS 121			Disp. Co			.1002				
VCG Pos	sition	23	.74 % B		5.46 cm	e Base	Line					
Static	trim TA	.00 0	.45 deg									
Water T	emp.	22	.00 deg	C	Density	997	.772 kg	/m3 Ki	n. Visc	ocity	0.9568E	-06 m2/s
					-					_		
Vel	RT	H	TAO	LC	LK	SWPH	CV	CT	RT/DIS	H/BPX	TAO	Cswph
m/s	gms	cm	deg	cm	cm	cm2		x10-3			Abs.	
1.079	89.0	0.36	1.07	55.95	67.62	1291.4	0.752	11.64022	0.073	0.017	1.52	2.928
1.454	140.3	0.21	2.36	48.30	64.40	1197.0	1.013	10.90853	0.115	0.010	2.81	2.714
1.809	169.7	-0.06	2.67	42.26	61.99	1114.4	1.260	9.15411	0.140	-0.003	3.12	2.527
2.176	203.4	-0.48	2.61	37.43	60.38	1048.7	1.516	8.05469	0.167	-0.023	3.06	2.378
2.570	226.8	-0.82	2.65	34.21	57.16	979.4	1.791	6.89249	0.186	-0.039	3.10	2.221
2.895		-1.01	2.68	28.98	53.13		2.017	6.48103		-0.048	3.13	1.996
3.255		-1.16	2.55	24.55	49.11		2.268	6.09318		-0.055		1.790
3.593		-1.20	2.23	22.14	48.30		2.504	5.55456		-0.057		1.712
3.894	319.8	-1.25		20.13			2.713	5.40076		-0.060	2.55	1.742
Displac	ement D	TS 182	5.0 cm	s	Disp. Co	eff. C	DL 0.	1503				
VCG Pos			.22 % B		5.57 cm							
Static			.41 deg		3.5.	, L Dabe	22110					
Water T			.00 deg		Density	997	772 kg	m3 Ki	n Wigo	ocity	0 95688	-06 m2/a
water 1	·Cmp•	22	.oo deg	-	Density	,,,,	. / / Z Kg/	MO KI	n. visco	ocicy	0.75001	-00 M2/5
Vel	RT	H	TAO	LC	LK	SWPH	Cv	CT	DM/DTC	H/BPX	TAO	Cswph
			_				CV		KI/DIS	II/ DF A		Cawpii
m/s	gms	cm	deg	cm	cm	cm2		x10-3			Abs.	
1 004	124.9	0.42	1 20		60.43	1331 0	0 755	15 01400	0.060	0 020		2.995
1.084		0.42	1.30		68.43	1321.0		15.81400			1.71	2.814
1.448	205.9	0.33	3.13	53.53			1.009	15.55006		0.016	3.54	
1.814	246.9		3.39	46.69	62.39		1.264	12.70549		-0.003	3.80	2.631
2.196		-0.68	3.39	42.26	59.57	1088.6		10.41081		-0.032	3.80	2.468
2.565	305.7		3.34	36.22	56.35		1.787	9.21195			3.75	2.250
2.926		-1.35	3.36	32.60	50.72		2.039	7.42825		-0.064	3.77	2.025
3.257	289.6	-1.51	3.02	29.38	49.11	841.4	2.269	6.38273	0.159	-0.072	3.43	1.908
3.582	328.8	-1.59	2.69	27.37	48.70	815.5	2.496	6.18030	0.180	-0.076	3.10	1.849
3.905	355.1	-1.66	2.39	24.95	48.30	785.3	2.721	5.83015	0.195	-0.079	2.80	1.781
Dignlac	amant D			~	Disp. Co	eff. C	DL 0.	2003				
		IS 243										
VCG Pos	ition	24	.48 % B		5.63 cm		Line					
	ition	24 00 0	.48 % B				Line					
VCG Pos	ition trim TA	24 00 0	.48 % B			@ Base		m3 Kii	n. Visco	ocity	0.9568E-	-06 m2/s
VCG Pos Static Water To	ition trim TA emp.	00 0 22	.48 % B .56 deg .00 deg	С	5.63 cm Density	@ Base	.772 kg/			_		
VCG Pos Static Water To Vel	ition trim TA	24 00 0	.48 % B		5.63 cm	@ Base		'm3 Kii		ocity H/BPX	0.9568E-	-06 m2/s Cswph
VCG Pos Static Water To	ition trim TA emp.	00 0 22	.48 % B .56 deg .00 deg	С	5.63 cm Density	997	.772 kg/			_		
VCG Pos Static Water To Vel m/s	ition trim TA 'emp. RT gms	24 00 0 22	.48 % B .56 deg .00 deg	c	5.63 cm Density	997 SWPH	.772 kg/	СТ	RT/DIS	н/врх 	TAO	Cswph
VCG Pos Static Water To Vel	ition trim TA emp.	24 00 0 22	.48 % B .56 deg .00 deg	c	5.63 cm Density	997 SWPH cm2	.772 kg/	СТ	RT/DIS	_	TAO	
VCG Pos Static Water To Vel m/s	ition trim TA 'emp. RT gms	00 0 22 H cm	.48 % B .56 deg .00 deg TAO deg	C LC cm	Density LK cm	997 SWPH cm2	.772 kg/	CT x10-3	RT/DIS 0.063	H/BPX 0.022	TAO Abs.	Cswph
VCG Pos Static Water To Vel m/s	emp. RT gms 152.7 293.8	00 0 22 H cm	.48 % B .56 deg .00 deg TAO deg	C LC cm 63.19	Density LK cm 69.23	997 SWPH cm2	.772 kg/ Cv 0.746 1.000	CT x10-3	0.063 0.121	H/BPX 0.022	TAO Abs.	Cswph 3.051
VCG Pos Static Water To Vel m/s 1.070 1.436	emp. RT gms 152.7 293.8 341.8	24 00 22 H cm 	.48 % B .56 deg .00 deg TAO deg 1.18 3.65 4.11	C LC cm 63.19 54.34 48.70	5.63 cm Density LK cm 69.23 64.80 62.39	997 SWPH cm2 1345.7 1247.7 1179.2	.772 kg/ Cv 0.746 1.000 1.254	CT x10-3 19.48884 22.45171 17.59161	0.063 0.121 0.141	H/BPX 0.022 0.019 -0.001	TAO Abs. 1.74 4.21	Cswph 3.051 2.829
VCG Pos Static Water T Vel m/s 1.070 1.436 1.800 2.198	ition trim TA emp. RT gms 152.7 293.8 341.8 389.8	24 00 22 H Cm -0.47 0.40 -0.03 -0.86	.48 % B .56 deg .00 deg TAO deg 1.18 3.65 4.11 4.22	C LC cm 63.19 54.34 48.70 44.68	Density LK cm 69.23 64.80 62.39 58.36	997 SWPH cm2 1345.7 1247.7 1179.2 1098.7	.772 kg/ Cv 0.746 1.000 1.254 1.532	CT x10-3 19.48884 22.45171 17.59161 14.43777	0.063 0.121 0.141 0.160	H/BPX 0.022 0.019 -0.001 -0.041	TAO Abs. 1.74 4.21 4.67 4.78	3.051 2.829 2.674 2.491
VCG Pos Static Water To Vel m/s 1.070 1.436 1.800 2.198 2.557	ition trim TA emp. RT gms 	24 00 22 H cm 	.48 % B .56 deg .00 deg TAO deg 1.18 3.65 4.11 4.22 4.37	C LC cm 63.19 54.34 48.70 44.68 39.04	5.63 cm Density LK cm 69.23 64.80 62.39 58.36 52.33	997 SWPH cm2 1345.7 1247.7 1179.2 1098.7 979.1	.772 kg/ Cv 0.746 1.000 1.254 1.532 1.782	CT x10-3 19.48884 22.45171 17.59161 14.43777 11.52433	0.063 0.121 0.141 0.160 0.154	H/BPX 0.022 0.019 -0.001 -0.041 -0.072	TAO Abs. 1.74 4.21 4.67 4.78 4.93	Cswph 3.051 2.829 2.674 2.491 2.220
VCG Pos Static Water To Vel m/s 1.070 1.436 1.800 2.198 2.557 2.914	ition trim TA emp. RT gms 152.7 293.8 341.8 389.8 375.2 353.4	24 00 22 H cm 	.48 % B .56 deg .00 deg TAO deg 1.18 3.65 4.11 4.22 4.37 4.20	C LC cm 63.19 54.34 48.70 44.68 39.04 34.62	5.63 cm Density LK cm 69.23 64.80 62.39 58.36 52.33 49.11	997 SWPH cm2 1345.7 1247.7 1179.2 1098.7 979.1 897.4	.772 kg/ Cv 0.746 1.000 1.254 1.532 1.782 2.030	CT x10-3 19.48884 22.45171 17.59161 14.43777 11.52433 9.12041	0.063 0.121 0.141 0.160 0.154 0.145	H/BPX 0.022 0.019 -0.001 -0.041 -0.072 -0.087	TAO Abs. 1.74 4.21 4.67 4.78 4.93 4.76	3.051 2.829 2.674 2.491 2.220 2.035
VCG Pos Static Water T Vel m/s 1.070 1.436 1.800 2.198 2.557 2.914 3.254	ition trim TA emp. RT gms 	24 00 22 H Cm -0.47 0.40 -0.03 -0.86 -1.52 -1.83 -1.95	.48 % B .56 deg .00 deg TAO deg 1.18 3.65 4.11 4.22 4.37 4.20 3.84	C LC cm 63.19 54.34 48.70 44.68 39.04 34.62 31.80	5.63 cm Density LK cm 69.23 64.80 62.39 58.36 52.33 49.11 47.50	997 SWPH cm2 1345.7 1247.7 1179.2 1098.7 979.1 897.4 850.0	.772 kg/ Cv 0.746 1.000 1.254 1.532 1.782 2.030 2.267	CT x10-3 19.48884 22.45171 17.59161 14.4377 11.52433 9.12041 7.77813	0.063 0.121 0.141 0.160 0.154 0.145	H/BPX 0.022 0.019 -0.001 -0.041 -0.072 -0.087 -0.093	TAO Abs. 1.74 4.21 4.67 4.78 4.93 4.76 4.40	3.051 2.829 2.674 2.491 2.220 2.035 1.927
VCG Pos Static Water To Water To Vel m/s 	rition trim TA emp. RT gms 	24 00 22 H Cm 	.48 % B .56 deg .00 deg TAO deg 	C LC cm 63.19 54.34 48.70 44.68 39.04 31.80 29.38	LK cm 69.23 64.80 62.39 58.36 52.33 49.11 47.50 47.09	997 SWPH Cm2	.772 kg/ Cv 0.746 1.000 1.254 1.532 1.782 2.030 2.267 2.508	CT x10-3 19.48884 22.45171 17.59161 14.43777 11.52433 9.12041 7.77813 7.09402	0.063 0.121 0.141 0.160 0.154 0.145 0.146	H/BPX 0.022 0.019 -0.001 -0.041 -0.072 -0.087 -0.093 -0.097	TAO Abs. 1.74 4.21 4.67 4.78 4.93 4.76 4.40 3.86	3.051 2.829 2.674 2.491 2.220 2.035 1.927 1.859
VCG Pos Static Water T Vel m/s 1.070 1.436 1.800 2.198 2.557 2.914 3.254	rition trim TA emp. RT gms 	24 00 22 H Cm -0.47 0.40 -0.03 -0.86 -1.52 -1.83 -1.95	.48 % B .56 deg .00 deg TAO deg 	C LC cm 63.19 54.34 48.70 44.68 39.04 31.80 29.38	5.63 cm Density LK cm 69.23 64.80 62.39 58.36 52.33 49.11 47.50	997 SWPH Cm2 1345.7 1247.7 1179.2 1098.7 979.1 897.4 850.0 819.8	.772 kg/ Cv 0.746 1.000 1.254 1.532 1.782 2.030 2.267	CT x10-3 19.48884 22.45171 17.59161 14.4377 11.52433 9.12041 7.77813	0.063 0.121 0.141 0.160 0.154 0.145 0.146	H/BPX 0.022 0.019 -0.001 -0.041 -0.072 -0.087 -0.093 -0.097	TAO Abs. 1.74 4.21 4.67 4.78 4.93 4.76 4.40	3.051 2.829 2.674 2.491 2.220 2.035 1.927
VCG Pos Static Water To Vel m/s 1.070 1.436 1.800 2.198 2.557 2.914 3.254 3.599 3.901	ition trim TA emp. RT gms 152.7 293.8 341.8 389.8 375.2 353.4 356.0 383.1 434.6	24 00 22 H Cm 	.48 % B .56 deg .00 deg TAO deg 1.18 3.65 4.11 4.22 4.37 4.20 3.84 3.30 2.97	C LC cm 63.19 54.34 48.70 44.68 39.04 34.62 31.80 29.38 27.37	5.63 cm Density LK cm	997 SWPH Cm2 1345.7 1179.2 1098.7 979.1 897.4 850.0 819.8 789.6	.772 kg/ CV 0.746 1.000 1.254 1.532 1.782 2.030 2.267 2.508 2.718	CT x10-3 19.48884 22.45171 17.59161 14.43777 11.52433 9.12041 7.77813 7.09402 7.11386	0.063 0.121 0.141 0.160 0.154 0.145 0.146	H/BPX 0.022 0.019 -0.001 -0.041 -0.072 -0.087 -0.093 -0.097	TAO Abs. 1.74 4.21 4.67 4.78 4.93 4.76 4.40 3.86	3.051 2.829 2.674 2.491 2.220 2.035 1.927 1.859
VCG Pos Static Water T Vel m/s 1.070 1.436 1.800 2.198 2.557 2.914 3.254 3.599 3.901 Displace	rition trim TA emp. RT gms	24 00 22 H Cm -0.47 0.40 -0.03 -0.86 -1.52 -1.83 -1.95 -2.04 -2.10	.48 % B .56 deg .00 deg TAO deg 1.18 3.65 4.11 4.22 4.37 4.20 3.84 3.30 2.97	C LC cm 63.19 54.34 48.70 44.68 39.04 39.04 29.38 27.37	5.63 cm Density LK cm 69.23 64.80 62.39 58.36 52.33 49.11 47.50 47.09 46.29 Disp. Co	997 SWPH cm2	.772 kg/ CV 0.746 1.000 1.254 1.532 1.782 2.030 2.267 2.508 2.718 DL 0.	CT x10-3 19.48884 22.45171 17.59161 14.43777 11.52433 9.12041 7.77813 7.09402	0.063 0.121 0.141 0.160 0.154 0.145 0.146	H/BPX 0.022 0.019 -0.001 -0.041 -0.072 -0.087 -0.093 -0.097	TAO Abs. 1.74 4.21 4.67 4.78 4.93 4.76 4.40 3.86	3.051 2.829 2.674 2.491 2.220 2.035 1.927 1.859
VCG Pos Static Water T Vel m/s 1.070 1.436 1.800 2.198 2.557 2.914 3.599 3.901 Displace VCG Pos	rition trim TA (emp. RT gms 152.7 293.8 341.8 389.8 375.2 353.4 356.0 383.1 434.6 ement D ition	24 00 22 H Cm 	.48 % B .56 deg .00 deg TAO deg 1.18 3.65 4.11 4.22 4.37 4.20 3.84 3.30 2.97	C LC cm 63.19 54.34 48.70 44.68 39.04 39.04 29.38 27.37	5.63 cm Density LK cm	997 SWPH cm2	.772 kg/ CV 0.746 1.000 1.254 1.532 1.782 2.030 2.267 2.508 2.718 DL 0.	CT x10-3 19.48884 22.45171 17.59161 14.43777 11.52433 9.12041 7.77813 7.09402 7.11386	0.063 0.121 0.141 0.160 0.154 0.145 0.146	H/BPX 0.022 0.019 -0.001 -0.041 -0.072 -0.087 -0.093 -0.097	TAO Abs. 1.74 4.21 4.67 4.78 4.93 4.76 4.40 3.86	3.051 2.829 2.674 2.491 2.220 2.035 1.927 1.859
VCG Pos Static Water T Vel m/s 	rition trim TA emp. RT gms 	24 00 22 H Cm 	.48 % B .56 deg .00 deg TAO deg 1.18 3.65 4.11 4.22 4.37 4.20 3.84 3.30 2.97 2.0 gms .83 % B .17 deg	C LC cm 63.19 44.68 39.04 34.62 31.80 29.38 27.37	LK cm	997 SWPH Cm2 1345.7 1247.7 1179.2 1098.7 979.1 897.4 850.0 819.8 789.6 eff. C	.772 kg/ CV 0.746 1.000 1.254 1.532 1.782 2.030 2.267 2.508 2.718 DL 0. Line	CT x10-3 19.48884 22.45171 17.59161 14.43777 11.52433 9.12041 7.77813 7.09402 7.11386	0.063 0.121 0.141 0.160 0.154 0.145 0.146 0.158 0.179	H/BPX 0.022 0.019 -0.001 -0.041 -0.072 -0.087 -0.093 -0.097 -0.100	TAO Abs. 1.74 4.21 4.67 4.78 4.93 4.76 4.40 3.86 3.53	3.051 2.829 2.674 2.491 2.220 2.035 1.927 1.859 1.790
VCG Pos Static Water T Vel m/s 1.070 1.436 1.800 2.198 2.557 2.914 3.599 3.901 Displace VCG Pos	rition trim TA emp. RT gms 	24 00 22 H Cm	.48 % B .56 deg .00 deg TAO deg 1.18 3.65 4.11 4.22 4.37 4.20 3.84 3.30 2.97 2.0 gms .83 % B .17 deg	C LC cm 63.19 44.68 39.04 34.62 31.80 29.38 27.37	LK cm	997 SWPH Cm2 1345.7 1247.7 1179.2 1098.7 979.1 897.4 850.0 819.8 789.6 eff. C	.772 kg/ CV 0.746 1.000 1.254 1.532 1.782 2.030 2.267 2.508 2.718 DL 0. Line	CT x10-3 19.48884 22.45171 17.59161 14.43777 11.52433 9.12041 7.77813 7.09402 7.11386	0.063 0.121 0.141 0.160 0.154 0.145 0.146 0.158 0.179	H/BPX 0.022 0.019 -0.001 -0.041 -0.072 -0.087 -0.093 -0.097 -0.100	TAO Abs. 1.74 4.21 4.67 4.78 4.93 4.76 4.40 3.86	3.051 2.829 2.674 2.491 2.220 2.035 1.927 1.859 1.790
VCG Pos Static Water T Vel m/s 1.070 1.436 1.800 2.198 2.557 2.914 3.254 3.254 3.599 3.901 Displace VCG Pos Static Water T	rition trim TA emp. RT gms 152.7 293.8 341.8 389.8 375.2 353.4 356.0 383.1 434.6 ement D ition trim TA emp.	24 00 22 H Cm 	.48 % B .56 deg .00 deg TAO deg 1.18 3.65 4.11 4.22 4.37 4.20 3.84 3.30 2.97 2.0 gms .83 % B .17 deg .00 deg	C LC cm 63.19 54.34 48.70 44.68 39.04 34.62 31.80 29.38 27.37	5.63 cm Density LK cm	997 SWPH Cm2 1345.7 1247.7 1179.2 1098.7 979.1 897.4 850.0 819.8 789.6 eff. C	.772 kg/ Cv 0.746 1.000 1.254 1.532 1.782 2.030 2.267 2.508 2.718 DL 0. Line .772 kg/	CT x10-3 19.48884 22.45171 17.59161 14.43777 11.52433 9.12041 7.77813 7.09402 7.11386 2506	0.063 0.121 0.141 0.160 0.154 0.145 0.146 0.158 0.179	H/BPX 0.022 0.019 -0.001 -0.041 -0.072 -0.087 -0.093 -0.097 -0.100	TAO Abs. 1.74 4.21 4.67 4.78 4.93 4.76 4.40 3.86 3.53	3.051 2.829 2.674 2.491 2.220 2.035 1.927 1.859 1.790
VCG Pos Static Water To Water To Vel m/s 1.070 1.436 1.800 2.198 2.557 2.914 3.254 3.599 3.901 Displace VCG Pos Static Water To Vel	rition trim TA emp. RT gms 152.7 293.8 341.8 389.8 375.2 353.4 356.0 383.1 434.6 ement D ition trim TA emp. RT	24 00 22 H Cm -0.47 0.40 -0.03 -0.86 -1.52 -1.83 -1.95 -2.04 -2.10 IS 304:	.48 % B .56 deg .00 deg TAO deg 1.18 3.65 4.11 4.22 4.37 4.20 3.84 3.30 2.97 2.0 gms .83 % B .17 deg .00 deg	C LC cm 63.19 54.34 48.70 44.68 39.04 29.38 27.37 C LC	5.63 cm Density LK cm 69.23 64.80 62.39 58.36 52.33 49.11 47.50 47.09 46.29 Disp. Co 5.94 cm Density LK	997 SWPH Cm2 1345.7 1247.7 1179.2 1098.7 979.1 897.4 850.0 819.8 789.6 eff. C @ Base	.772 kg/ CV 0.746 1.000 1.254 1.532 1.782 2.030 2.267 2.508 2.718 DL 0. Line	CT x10-3 19.48884 22.45171 17.59161 14.43777 11.52433 9.12041 7.77813 7.09402 7.11386 2506	0.063 0.121 0.141 0.160 0.154 0.145 0.146 0.158 0.179	H/BPX 0.022 0.019 -0.001 -0.041 -0.072 -0.087 -0.093 -0.097 -0.100	TAO Abs. 1.74 4.21 4.67 4.78 4.93 4.76 4.40 3.86 3.53	3.051 2.829 2.674 2.491 2.220 2.035 1.927 1.859 1.790
VCG Pos Static Water T Vel m/s 1.070 1.436 1.800 2.198 2.557 2.914 3.254 3.254 3.599 3.901 Displace VCG Pos Static Water T	rition trim TA emp. RT gms 152.7 293.8 341.8 389.8 375.2 353.4 356.0 383.1 434.6 ement D ition trim TA emp.	24 00 22 H Cm 	.48 % B .56 deg .00 deg TAO deg 1.18 3.65 4.11 4.22 4.37 4.20 3.84 3.30 2.97 2.0 gms .83 % B .17 deg .00 deg	C LC cm 63.19 54.34 48.70 44.68 39.04 34.62 31.80 29.38 27.37	5.63 cm Density LK cm	997 SWPH Cm2 1345.7 1247.7 1179.2 1098.7 979.1 897.4 850.0 819.8 789.6 eff. C	.772 kg/ Cv 0.746 1.000 1.254 1.532 1.782 2.030 2.267 2.508 2.718 DL 0. Line .772 kg/	CT x10-3 19.48884 22.45171 17.59161 14.43777 11.52433 9.12041 7.77813 7.09402 7.11386 2506	0.063 0.121 0.141 0.160 0.154 0.145 0.146 0.158 0.179	H/BPX 0.022 0.019 -0.001 -0.041 -0.072 -0.087 -0.093 -0.097 -0.100	TAO Abs. 1.74 4.21 4.67 4.78 4.93 4.76 4.40 3.86 3.53 0.9568E- TAO Abs.	3.051 2.829 2.674 2.491 2.220 2.035 1.927 1.859 1.790
VCG Pos Static Water To Vel m/s 1.070 1.436 1.800 2.198 2.557 2.914 3.254 3.254 3.254 3.599 3.901 Displace VCG Pos Static Water To Vel m/s	### Action	24 00 22 H Cm 	TAO deg TAO deg 1.18 3.65 4.11 4.22 4.37 4.20 3.84 3.30 2.97 2.0 gms 83 % B 17 deg 00 deg TAO deg	C LC cm 63.19 54.34 48.70 44.68 39.04 34.62 31.80 29.38 27.37 C LC cm	5.63 cm Density LK cm 69.23 64.80 62.39 58.36 52.33 49.11 47.50 47.09 46.29 Disp. Co 5.94 cm Density LK cm	997 SWPH Cm2	.772 kg/ Cv 0.746 1.000 1.254 1.532 1.782 2.030 2.267 2.508 2.718 DL 0. Line .772 kg/	CT x10-3 19.48884 22.45171 17.59161 14.43777 11.52433 9.12041 7.77813 7.09402 7.11386 2506	0.063 0.121 0.141 0.160 0.154 0.145 0.146 0.179	H/BPX 0.022 0.019 -0.001 -0.041 -0.072 -0.087 -0.093 -0.097 -0.100	TAO Abs. 1.74 4.21 4.67 4.78 4.93 4.76 4.40 3.86 3.53 0.9568E- TAO Abs.	3.051 2.829 2.674 2.491 2.220 2.035 1.927 1.859 1.790
VCG Pos Static Water To Water To Vel m/s 1.070 1.436 1.800 2.198 2.557 2.914 3.559 3.901 Displace VCG Pos Static Water To Vel m/s	rition trim TA (emp. RT gms	24 00 22 H Cm 	TAO deg TAO 3.84 3.30 2.97 2.0 gms 83 % B 17 deg TAO deg TAO deg	C LC cm 63.19 39.04 34.62 31.80 27.37 C LC cm 66.41	5.63 cm Density LK cm 69.23 64.80 62.39 58.36 52.33 49.11 47.50 47.09 46.29 Disp. Co 5.94 cm Density LK cm 70.04	997 SWPH Cm2 1345.7 1247.7 1179.2 1098.7 979.1 897.4 850.0 819.8 789.6 eff. C @ Base 997 SWPH Cm2 1356.6	.772 kg/ Cv 0.746 1.000 1.254 1.532 1.782 2.030 2.267 2.508 2.718 DL 0. Line .772 kg/ Cv	CT x10-3 19.48884 22.45171 17.59161 14.43777 11.52433 9.12041 7.77813 7.09402 7.11386 2506 (m3 Kin CT x10-3	0.063 0.121 0.141 0.160 0.154 0.145 0.146 0.158 0.179	H/BPX 0.022 0.019 -0.001 -0.041 -0.072 -0.087 -0.093 -0.097 -0.100 Decity H/BPX	TAO Abs. 1.74 4.21 4.67 4.78 4.93 4.76 4.40 3.86 3.53 0.9568E- TAO Abs.	3.051 2.829 2.674 2.491 2.220 2.035 1.927 1.859 1.790 -06 m2/s Cswph
VCG Pos Static Water Towns Vel m/s 1.070 1.436 1.800 2.198 2.557 2.914 3.254 3.254 3.254 3.599 3.901 Displace VCG Pos Static Water Towns Vel m/s	### Action	24 00 22 H Cm 	TAO deg TAO 3.84 3.30 2.97 2.0 gms 83 % B 17 deg TAO deg TAO deg	C LC cm 63.19 39.04 34.62 31.80 27.37 C LC cm 66.41	5.63 cm Density LK cm 69.23 64.80 62.39 58.36 52.33 49.11 47.50 47.09 46.29 Disp. Co 5.94 cm Density LK cm	997 SWPH Cm2 1345.7 1247.7 1179.2 1098.7 979.1 897.4 850.0 819.8 789.6 eff. C @ Base 997 SWPH Cm2 1356.6	.772 kg/ Cv 0.746 1.000 1.254 1.532 1.782 2.030 2.267 2.508 2.718 DL 0. Line .772 kg/	CT x10-3 19.48884 22.45171 17.59161 14.43777 11.52433 9.12041 7.77813 7.09402 7.11386 2506	0.063 0.121 0.141 0.160 0.154 0.145 0.146 0.158 0.179	H/BPX 0.022 0.019 -0.001 -0.041 -0.072 -0.087 -0.093 -0.097 -0.100 Decity H/BPX	TAO Abs. 1.74 4.21 4.67 4.78 4.93 4.76 4.40 3.86 3.53 0.9568E- TAO Abs.	Cswph 3.051 2.829 2.674 2.491 2.220 2.035 1.927 1.859 1.790 -06 m2/s Cswph 3.076 2.879
VCG Pos Static Water To Water To Vel m/s 1.070 1.436 1.800 2.198 2.557 2.914 3.559 3.901 Displace VCG Pos Static Water To Vel m/s	ition trim TA (emp. RT gms 341.8 389.8 375.2 353.4 356.0 383.1 434.6 ement D ition trim TA (emp. RT gms - 185.3 407.7	24 00 22 H Cm 	TAO deg TAO 3.84 3.30 2.97 2.0 gms 83 % B 17 deg TAO deg TAO deg	C LC cm 63.19 39.04 34.62 31.80 27.37 C LC cm 66.41	5.63 cm Density LK cm 69.23 64.80 62.39 58.36 52.33 49.11 47.50 47.09 46.29 Disp. Co 5.94 cm Density LK cm 70.04 65.21	997 SWPH Cm2 1345.7 1247.7 1179.2 1098.7 979.1 897.4 850.0 819.8 789.6 eff. C @ Base 997 SWPH Cm2 1356.6	.772 kg/ Cv 0.746 1.000 1.254 1.532 1.782 2.030 2.267 2.508 2.718 DL 0. Line .772 kg/ Cv 0.751 1.006	CT x10-3 19.48884 22.45171 17.59161 14.43777 11.52433 9.12041 7.77813 7.09402 7.11386 2506 (m3 Kin CT x10-3	0.063 0.121 0.141 0.160 0.154 0.145 0.146 0.158 0.179	H/BPX 0.022 0.019 -0.001 -0.041 -0.072 -0.087 -0.093 -0.097 -0.100 DCITY H/BPX 0.026 0.024	TAO Abs. 1.74 4.21 4.67 4.78 4.93 4.76 4.40 3.86 3.53 0.9568E- TAO Abs.	3.051 2.829 2.674 2.491 2.220 2.035 1.927 1.859 1.790 -06 m2/s Cswph
VCG Pos Static Water T Vel m/s 1.070 1.436 1.800 2.198 2.557 2.914 3.254 3.599 3.901 Displace VCG Pos Static Water T Vel m/s	ition trim TA (emp. RT gms 341.8 389.8 375.2 353.4 356.0 383.1 434.6 ement D ition trim TA (emp. RT gms - 185.3 407.7 457.6	24 00 22 H Cm -0.47 0.40 -0.03 -0.86 -1.52 -1.83 -1.95 -2.04 -2.10 IS 304: 25 00 1 22 H Cm	.48 % B .56 deg .00 deg TAO deg 1.18 3.65 4.11 4.22 4.37 4.20 3.84 3.30 2.97 2.0 gms .83 % B .17 deg .00 deg TAO deg .1.15 4.41 4.90	C LC cm 63.19 54.34 48.70 44.68 39.04 34.62 31.80 29.38 27.37 C LC cm 66.41 56.35 51.12	5.63 cm Density LK cm 69.23 64.80 62.39 58.36 52.33 49.11 47.50 47.09 46.29 Disp. Co 5.94 cm Density LK cm 70.04 65.21 61.99	997 SWPH Cm2	.772 kg/ Cv 0.746 1.000 1.254 1.532 1.782 2.030 2.267 2.508 2.718 DL 0. Line .772 kg/ Cv 0.751 1.006 1.251	CT x10-3 19.48884 22.45171 17.59161 14.43777 11.52433 9.12041 7.77813 7.09402 7.11386 2506 (m3 Kin CT x10-3 23.13291 30.30042 23.37558	0.063 0.121 0.141 0.160 0.154 0.145 0.179 n. Visco RT/DIS	H/BPX 0.022 0.019 -0.001 -0.041 -0.072 -0.087 -0.093 -0.097 -0.100 Deity H/BPX 0.026 0.024 -0.002	TAO Abs. 1.74 4.21 4.67 4.78 4.93 4.76 4.40 3.86 3.53 0.9568E- TAO Abs. 2.32 5.58 6.07	Cswph 3.051 2.829 2.674 2.491 2.220 2.035 1.927 1.859 1.790 -06 m2/s Cswph 3.076 2.879 2.706
VCG Pos Static Water T Vel m/s 1.070 1.436 1.800 2.198 2.557 2.914 3.254 3.599 3.901 Displace VCG Pos Static Water T Vel m/s	ition trim TA emp. RT gms	24 00 22 H Cm 	.48 % B .56 deg .00 deg TAO deg 1.18 3.65 4.11 4.22 4.37 4.20 3.84 3.30 2.97 2.0 gms .83 % B .17 deg .00 deg TAO deg 1.15 4.41 4.90 5.26	C LC cm 63.19 54.34 48.70 44.68 39.04 31.80 29.38 27.37 C LC cm 66.41 56.35 56.35 56.12 46.69	5.63 cm Density LK cm 69.23 64.80 62.39 58.36 52.33 49.11 47.50 47.09 46.29 Disp. Co 5.94 cm Density LK cm 70.04 65.21 61.99 57.56	997 SWPH Cm2	.772 kg/ Cv 0.746 1.000 1.254 1.532 1.782 2.030 2.267 2.508 2.718 DL 0. Line .772 kg/ Cv 0.751 1.006 1.251 1.523	CT x10-3 19.48884 22.45171 17.59161 14.43777 11.52433 9.12041 7.77813 7.09402 7.11386 2506 (m3 Kin CT x10-3 23.13291 30.30042 23.37558 19.61399	RT/DIS 0.063 0.121 0.141 0.160 0.154 0.145 0.146 0.158 0.179 n. Visco RT/DIS 0.061 0.134 0.150 0.174	H/BPX 0.022 0.019 -0.001 -0.041 -0.072 -0.087 -0.093 -0.097 -0.100 Decity H/BPX 0.026 0.024 -0.002 -0.049	TAO Abs. 1.74 4.21 4.67 4.78 4.93 4.76 4.40 3.86 3.53 0.9568E- TAO Abs. 2.32 5.58 6.07 6.43	Cswph 3.051 2.829 2.674 2.491 2.220 2.035 1.927 1.859 1.790 -06 m2/s Cswph -3.076 2.879 2.706 2.517
VCG Pos Static Water To Water To Vel m/s 1.070 1.436 1.800 2.198 2.557 2.914 3.254 3.254 3.599 3.901 Displace VCG Pos Static To Water To Vel m/s	ition trim TA (emp. RT gms	24 00 22 H Cm 	.48 % B .56 deg .00 deg TAO deg 1.18 3.65 4.11 4.22 4.37 4.20 3.84 3.30 2.97 2.0 gms .83 % B .17 deg .00 deg TAO deg 1.15 4.41 4.90 5.26 5.33	C LC cm 63.19 54.34 48.70 44.68 39.04 31.80 29.38 27.37 C LC cm 66.41 56.35 51.12 46.69 39.45	5.63 cm Density LK cm	997 SWPH Cm2	.772 kg/ Cv 0.746 1.000 1.254 1.532 1.782 2.030 2.267 2.508 2.718 DL 0. Line .772 kg/ Cv 0.751 1.006 1.251 1.523 1.785	CT x10-3 19.48884 22.45171 17.59161 14.43777 11.52433 9.12041 7.77813 7.09402 7.11386 2506 (m3 Kings) CT x10-3 23.13291 30.30042 23.37558 19.61399 15.30969	0.063 0.121 0.141 0.160 0.154 0.145 0.179 n. Visco RT/DIS 0.061 0.134 0.150 0.174	H/BPX 0.022 0.019 -0.001 -0.041 -0.072 -0.087 -0.097 -0.100 Decity H/BPX 0.026 0.024 -0.002 -0.049 -0.099	TAO Abs. 1.74 4.21 4.67 4.78 4.93 4.76 4.40 3.86 3.53 0.9568E- TAO Abs. 2.32 5.58 6.07 6.43 6.50	Cswph 3.051 2.829 2.674 2.491 2.220 2.035 1.927 1.859 1.790 Cswph -06 m2/s Cswph -3.076 2.879 2.706 2.517 2.191
VCG Pos Static Water T Vel m/s 1.070 1.436 1.800 2.198 2.557 2.914 3.254 3.599 3.901 Displace VCG Pos Static Water T Vel m/s 1.077 1.444 1.796 2.186 2.563 2.922	ition trim TA emp. RT gms	24 00 22 H Cm -0.47 0.40 -0.03 -0.86 -1.52 -1.83 -1.95 -2.04 -2.10 IS 3042 25 00 1 22 H Cm -0.54 0.51 -0.04 -1.03 -1.03 -1.89 -2.27	.48 % B .56 deg .00 deg TAO deg	C LC cm 63.19 54.34 48.70 44.68 39.04 329.38 27.37 C LC cm 66.41 56.35 51.12 46.69 39.45 35.82	5.63 cm Density LK cm 69.23 64.80 62.39 58.36 52.33 49.11 47.50 47.09 46.29 Disp. Co 5.94 cm Density LK cm 70.04 65.21 61.99 57.56 50.72 47.09	997 SWPH cm2	.772 kg/ Cv 0.746 1.000 1.254 1.532 1.782 2.030 2.267 2.508 2.718 DL 0. Line .772 kg/ Cv 0.751 1.006 1.251 1.523 1.785 2.036	CT x10-3 19.48884 22.45171 17.59161 14.43777 11.52433 9.12041 7.77813 7.09402 7.11386 2506 /m3 Kin CT x10-3 23.13291 30.30042 23.37558 19.61399 15.30969 12.03069	RT/DIS 0.063 0.121 0.141 0.160 0.154 0.145 0.146 0.158 0.179 n. Visco RT/DIS 0.061 0.134 0.150 0.174 0.162 0.153	H/BPX 0.022 0.019 -0.001 -0.041 -0.072 -0.087 -0.093 -0.097 -0.100 Decity H/BPX 0.026 0.024 -0.002 -0.049 -0.090 -0.108	TAO Abs. 1.74 4.21 4.67 4.78 4.93 4.76 4.40 3.86 3.53 0.9568E- TAO Abs. 2.32 5.58 6.07 6.43 6.50 6.19	Cswph 3.051 2.829 2.674 2.491 2.220 2.035 1.927 1.859 1.790 -06 m2/s Cswph -3.076 2.879 2.706 2.517 2.191 2.015
VCG Pos Static Water To Water To Vel m/s 1.070 1.436 1.800 2.198 2.557 2.914 3.254 3.254 3.599 3.901 Displace VCG Pos Static To Water To Vel m/s	ition trim TA (emp. RT gms	24 00 22 H Cm -0.47 0.40 -0.03 -0.86 -1.52 -1.83 -1.95 -2.04 -2.10 IS 3042 25 00 1 22 H Cm -0.54 0.51 -0.04 -1.03 -1.03 -1.89 -2.27	.48 % B .56 deg .00 deg TAO deg	C LC cm 63.19 54.34 48.70 44.68 39.04 329.38 27.37 C LC cm 66.41 56.35 51.12 46.69 39.45 35.82	5.63 cm Density LK cm	997 SWPH Cm2	.772 kg/ Cv 0.746 1.000 1.254 1.532 1.782 2.030 2.267 2.508 2.718 DL 0. Line .772 kg/ Cv 0.751 1.006 1.251 1.523 1.785 2.036	CT x10-3 19.48884 22.45171 17.59161 14.43777 11.52433 9.12041 7.77813 7.09402 7.11386 2506 (m3 Kings) CT x10-3 23.13291 30.30042 23.37558 19.61399 15.30969	RT/DIS 0.063 0.121 0.141 0.160 0.154 0.145 0.146 0.158 0.179 n. Visco RT/DIS 0.061 0.134 0.150 0.174 0.162 0.153	H/BPX 0.022 0.019 -0.001 -0.041 -0.072 -0.087 -0.093 -0.097 -0.100 Decity H/BPX 0.026 0.024 -0.002 -0.049 -0.090 -0.108	TAO Abs. 1.74 4.21 4.67 4.78 4.93 4.76 4.40 3.86 3.53 0.9568E- TAO Abs. 2.32 5.58 6.07 6.43 6.50	Cswph 3.051 2.829 2.674 2.491 2.220 2.035 1.927 1.859 1.790 Cswph -06 m2/s Cswph -3.076 2.879 2.706 2.517 2.191

Water Te	mp.	22.	00 deg	C	Density	997	.772 kg	/m3 Ki	n. Visco	ocity	0.9568E	-06 m2/s
Vel m/s	RT gms	H cm	TAO deg	LC cm	LK	SWPH cm2	Cv	CT x10-3	RT/DIS	н/врх	TAO Abs.	Cswph
1.438 1.798 2.195 2.572 2.908 3.249 3.592 3.933 3.592	217.8 532.5 612.4 686.2 650.0 599.0 579.5 574.3 598.9 466.6 485.4	0.55 0.59 -0.04 -1.36 -2.37 -2.72 -2.88 -3.06 -3.05 -2.47 -2.44	1.18 4.73 5.46 6.36 6.74 6.04 5.34 4.61 4.01 3.72 3.76	67.62 57.16 51.52 46.29 39.45 36.22 33.41 30.99 29.78 30.59 30.99	65.21 61.99 55.95 48.30 46.29 44.28 43.47	1361.4 1273.1 1196.7 1089.4 940.4 884.4 832.7 798.2 793.9 811.2 819.8	0.747 1.002 1.253 1.530 1.792 2.026 2.264 2.503 2.740 2.503 2.503	27.37846 39.77097 31.13462 25.69900 20.54666 15.75160 12.96132 10.96182 9.58879 8.76441 9.03668	0.189 0.179 0.165 0.159 0.158 0.165 0.153	0.026 0.028 -0.002 -0.065 -0.113 -0.130 -0.137 -0.146 -0.118 -0.118	2.66 6.21 6.94 7.84 8.22 7.52 6.82 6.09 5.49 4.89	3.087 2.887 2.714 2.470 2.132 2.005 1.888 1.810 1.800 1.839 1.859

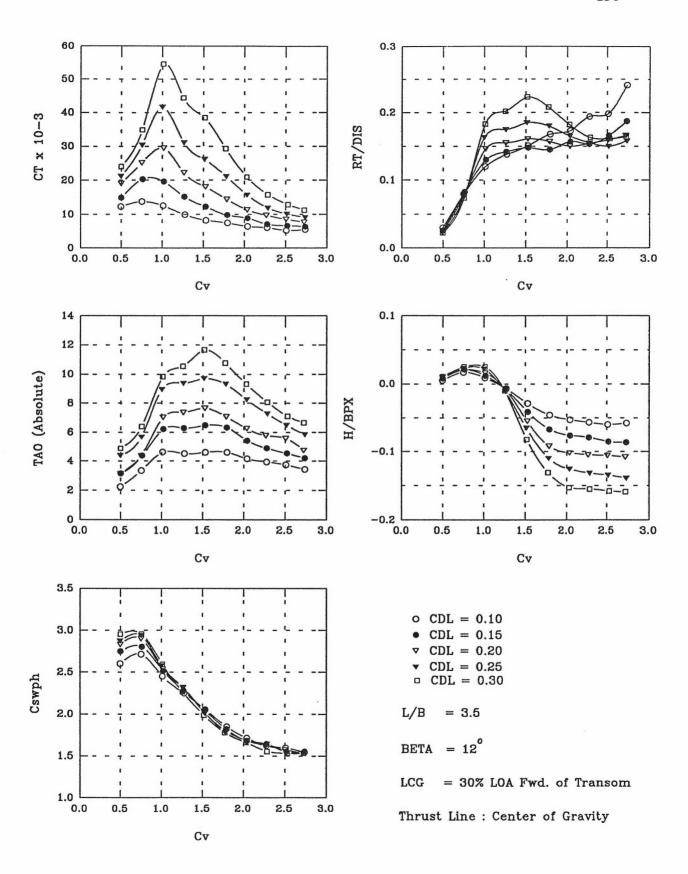


Figure B.15

Model L/B Ra Deadri		3	.5 .00 deg	ī	Breath	Overal I (Deck) E (Chine) E	23	.50 cm			131	
	sition		.00 % I		24.15	cm @ Tra	nsom					
VCG Po	cement I sition trim T/	23	6.0 gm .74 % B .95 deg	3	Disp. Co	oeff. C m @ Base		.1001				
Water			.00 deg		Density	997	.994 kg	/m3 Ki	n. Visc	ocity	0.9798E	-06 m2/s
Vel m/s	RT gms	H cm	TAO deg	LC cm	LK cm	SWPH cm2	Cv	CT x10-3	RT/DIS	н/врх	TAO Abs.	Cswph
0.711	36.2 97.3	0.12	0.29	40.25 48.30	66.41 64.40	1147.4 1197.0	0.496	12.25748 13.78761			2.24 3.35	2.602
1.452	145.6	0.18	2.67	41.06		1081.7	1.012	12.54673			4.62	2.453
1.832	167.9	-0.15	2.56	36.22		992.1	1.276	9.91455		-0.007	4.51	2.250
2.198 2.575	183.9 204.8	-0.60 -0.97	2.66 2.66	32.20 28.18		906.1 815.5	1.531 1.794	8.25954 7.44432		-0.029 -0.046	4.61	2.055 1.849
2.925	210.1		2.21	24.15			2.038	6.39317		-0.053	4.16	1.712
3.270	235.4	-1.20	2.00	21.73			2.278	6.04366		-0.057	3.95	1.624
3.602	240.9	-1.25	1.79	19.32		703.3	2.510	5.18992		-0.060		1.595
3.929	293.2	-1.21	1.48	16.10	47.50	681.7	2.738	5.47570	0.241	-0.058	3.43	1.546
VCG Po	cement I sition trim TA	24	5.0 gm .22 % B	3	Disp. Co 5.57 cr	oeff. C n @ Base		.1503				
Water			.00 deg		Density	997	.994 kg	/m3 Ki	n. Visco	ocity	0.9798E	-06 m2/s
Vel m/s	RT gms	H cm	TAO deg	LC cm	LK cm	SWPH cm2	Cv	СТ x10-3	RT/DIS	H/BPX	TAO Abs.	Cswph
0.716	47.0	0.16	0.43	46.29	67.22	1211.3	0.499	14.90206	0.026		3.16	2.747
1.089	151.7	0.44	1.65	52.33			0.759	20.35482		0.021	4.38	2.802
1.462	236.6	0.26	3.50		60.38	1108.5	1.019	19.62158	0.130	0.012	6.23	2.514
1.824	258.9	-0.17	3.56	39.04	54.74	1005.0	1.271	15.21731		-0.008	6.29	2.279
2.193 2.569	270.4	-0.86 -1.40	3.75 3.61	35.02 30.59			1.528 1.790	12.26567 9.78939		-0.041	6.48	2.045 1.820
2.925		-1.60	2.70	26.97			2.038	8.86103		-0.076	5.43	1.683
3.267	278.4		2.17	24.95		724.9	2.276	7.07278		-0.079		1.644
3.617		-1.78	1.80		42.26	686.0	2.520	6.64077		-0.085	4.53	1.556
3.925	340.4	-1.81	1.48	20.53	43.47	686.0	2.735	6.33230	0.187	-0.086	4.21	1.556
VCG Po	cement D sition trim TA	24	2.0 gm .48 % B .81 deg			oeff. C m @ Base		.2003				
Water			.00 deg		Density	997	.994 kg	/m3 Ki	n. Visco	ocity	0.9798E	-06 m2/s
Vel m/s	RT gms	H cm	TAO deg	LC cm	LK cm	SWPH cm2	Cv	CT x10-3	RT/DIS		TAO Abs.	Cswph
0.713	61.7	0.21	0.33	50.31	67.62	1248.3	0.497	19.11661	0.025	0.010	3.14	2.831
1.074	188.6	0.45	1.55	55.95	66.41	1278.7	0.748	25.13652			4.36	2.899
1.456	355.9	0.33	4.22	46.69		1118.5	1.014	29.50705 22.18498		0.016	7.03 7.37	2.536 2.314
1.811 2.188	377.8	-0.15 -1.16	4.56	41.86	53.53 46.69	1020.4 888.7	1.262	18.10931			7.66	2.015
2.561		-1.93			42.26		1.784	14.45283				1.800
2.917		-2.14			40.65	742.1	2.033	11.35047	0.150	-0.102	6.27	1.683
3.252		-2.21			40.25	716.3	2.266	9.72966	0.154	-0.105	5.77	1.624
3.596 3.909		-2.24 -2.26	2.78 1.94		40.25 40.65	694.7	2.505	11.35047 9.72966 8.48975 7.68447	0.159	-0.106	4.75	1.575 1.536
	cement D	IS 304		s	Disp. Co	peff. C	DL 0					
Static Water	trim TA Temp.	00 4	.00 deg					/m3 Ki	n. Visco	ocity	0.9798E	-06 m2/s
Vel	RT	Н	TAO	LC	LK	SWPH	Cv	CT	RT/DIS	H/BPX	TAO	Cswph
		cm	deg	cm	cm	. cm2		x10-3			Abs.	
0.709 1.077	68.6 232.5	0.20 0.49			68.02 66.82	1267.2 1295.1		21.16014 30.41054				2.873 2.937
1.434		0.45			58.36	1137.9						2.580
1.811		-0.22			52.73	1023.7		31.13187				2.321
2.172	562.4	-1.37	5.71	37.47	46.17	896.4	1.513	26.15323	0.185	-0.065	9.71	2.033
2.553		-2.31	5.32		40.65		1.779	21.05131			9.32	1.781
2.916 3.280		-2.65	4.26		39.03	735.7	2.032	15.75110 11.91985				1.668
3.280		-2.77 -2.83	3.28 2.49		39.45 38.03	724.9 679.8	2.515	10.12993				1.542
3.926		-2.91			39.04	677.4	2.735	9.07303				1.536

Table B.15 L/B = 3.5 ; β = 12°; L_{cg} = 30%; Thrust Line : Centre of Gravity (1/2)

Water 1	emp.	21.	.50 deg	C	Density	997	.885 kg	/m3 Ki	n. Visco	ocity	0.9682E	-06 m2/s
Vel m/s	RT gms	H cm	TAO deg	LC cm	LK cm	SWPH cm2	Cv	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cswph
0.713 1.082 1.451 1.804 2.178 2.543 2.910 3.283 3.629	81.0 271.1 667.9 733.5 813.0 755.7 661.8 594.7 585.6	0.23 0.52 0.53 -0.22 -1.73 -2.75 -3.21 -3.26	0.31 1.83 5.27 5.97 7.10 6.19 4.76 3.50 2.54	56.35 58.36 49.51 42.88 37.43 32.98 30.19 27.33 26.16	67.62 58.36 50.48 44.28 40.16 38.24 36.64	1303.3 1303.0 1144.3 998.2 875.7 784.0 733.5 685.7	0.497 0.754 1.011 1.257 1.518 1.772 2.028 2.287 2.528	24.02470 34.93466 54.54755 44.37803 38.47286 29.31563 20.94871 15.81829 12.90612	0.223 0.208 0.182 0.163	0.025	4.88 6.40 9.84 10.54 11.67 10.76 9.33 8.07 7.11	2.955 2.955 2.595 2.264 1.986 1.778 1.663 1.555

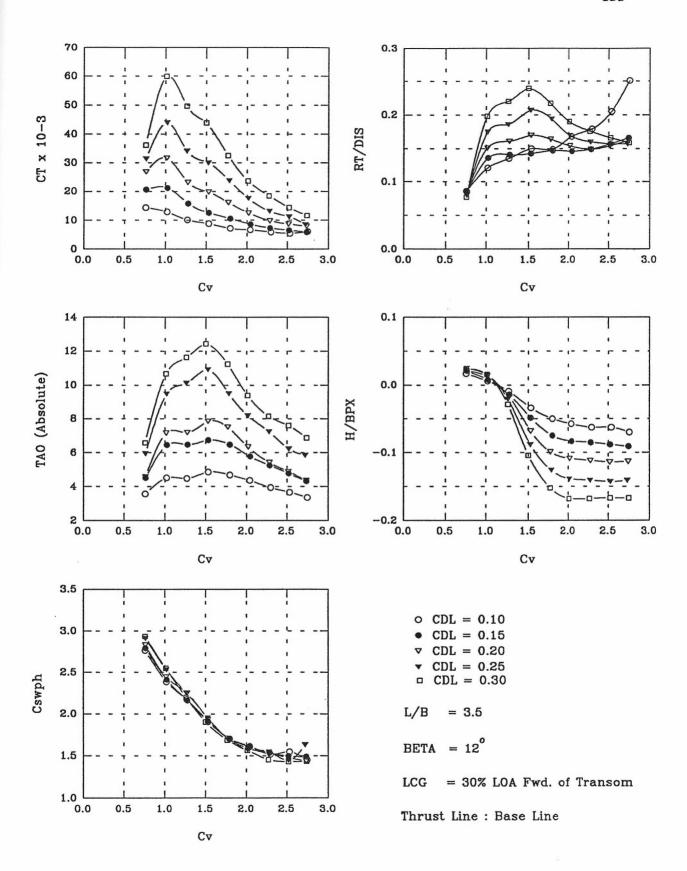


Figure B.16

Water Temp.

3.948

3.930

303.4

-1.92

Water Temp.

305.1 -1.48

3.36

1.448

Kin. Viscocity 0.9798E-06 m2/s

Kin. Viscocity 0.9798E-06 m2/s

nm/n=a **/nn**

6.02681 0.251 -0.070

L/B Ratio	3.5	Length	Overal	LOA	80.50	cm
Deadrise			(Deck)		23.00	cm
		Breath	(Chine)	BPX	21.00	Cm
LCG Position	30.00 % LOA	24.15	cm @ Ti	cansom		

Displacement DIS 1216.0 gms Disp. Coeff. CDL 0.1001 23.74 % B 5.46 cm @ Base Line VCG Position Static trim TAOo 1.95 deg

Density

Density

21.00 deg C

21.00 deg C

Vel m/s	RT gms	H cm	TAO deg	LC cm	LK cm	SWPH cm2	Cv	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cswph
1.087	105.1	0.36	1.61	50.72	64.80	1218.9	0.758	14.32987	0.086	0.017	3.56	2.764
1.461	147.0	0.13	2.56	39.85	58.36	1052.7	1.018	12.86797	0.121	0.006	4.51	2.387
1.824	163.8	-0.19	2.53	35.02	54.34	957.7	1.271	10.10701	0.135	-0.009	4.48	2.172
2.201	182.3	-0.71	2.91	30.19	48.30	841.4	1.533	8.79854	0.150	-0.034	4.86	1.908
2.577	180.7	-1.06	2.74	26.16	43.87	750.8	1.796	7.12351	0.149	-0.050	4.69	1.702
2.925	204.2	-1.21	2.41	22.94	43.47	711.9	2.038	6.58743	0.168	-0.058	4.36	1.614
3.300	217.7	-1.32	1.99	20.13	42.26	668.8	2.299	5.87859	0.179	-0.063	3.94	1.517
3.635	249 8	_1 32	1.72	18.11	45.48	681.7	2.532	5.45255	0.205	-0.063	3.67	1.546

638.6 2.750

997.994 kg/m3

997.994 kg/m3

Displacement DIS 1825.0 qms Disp. Coeff. CDL 0.1503 24.22 % B 5.57 cm @ Base Line VCG Position 2.73 deg Static trim TAOo

1.41 15.70 43.87

Vel RT Н TAO LC LK SWPH Cv CT RT/DIS H/BPX TAO Cswph x10 - 3Abs. m/s qms CID deg CM CIM cm2 1.095 154.8 0.45 1.79 52.33 64.80 1231.3 0.763 20.61249 0.085 0.021 4.52 2.792 1.469 247.8 0.16 3.73 41.86 57.56 1063.2 1.024 21.21988 0.136 0.008 6.46 2.411 1.833 257.7 3.75 51.52 953.3 15.82126 0.141 -0.014 6.48 2.162 -0.3037.43 1.277 12.58539 1.908 260.1 -1.03 4.02 0.143 -0.049 6.75 46.29 841.4 1.531 2.197 32.20 1.702 0.147 -0.075 2.579 268.6 -1.58 3.76 28.18 41.86 750.8 1.797 10.57396 6.49 2.931 265.9 -1.753.04 25.76 40.25 707.6 2.042 8.59752 0.146 -0.083 5.77 1.605 3.279 271.1 -1.79 2.53 22.94 40.25 677.4 2.285 7.31729 0.149 -0.085 5.26 1.536 2.519 1.497 3.616 286.2 -1.85 2.04 21.73 39.85 660.2 6.51830 0.157 -0.088 4.77 1.59 20.13 41.06 655.8 2.738 5.88851 0.166 -0.091 4.32 1.487

Displacement DIS 2432.0 gms VCG Position 24.48 % B Disp. Coeff. CDL 5.63 cm @ Base Line 0.2003 2.81 deg Static trim TAOo

21.00 deg C 0.9798E-06 m2/s Water Temp. Density 997.994 kg/m3 Kin. Viscocity Vel. RT H TAO LC LK SWPH CV CT RT/DIS H/BPX TAO Cswph

m/s	gms	cm	deg	cm	cm	cm2		x10-3		Abs.	
1.093	203.4	0.45	1.76	54.34	64.80	1247.7	0.761	26.83727	0.084 0.021	4.57	2.829
1.454	367.4	0.28	4.36	44.28	56.75	1077.8	1.013	31.70681	0.151 0.013	7.17	2.444
1.829	390.8	-0.36	4.38	40.73	51.92	992.4	1.274	23.14512	0.161 -0.017	7.19	2.250
2.196	414.4	-1.42	5.04	34.94	44.68	853.4	1.530	19.79175	0.170 -0.068	7.85	1.935
2.541	398.2	-2.08	4.70	30.35	40.01	754.2	1.770	16.07990	0.164 -0.099	7.51	1.710
2.896	374.1	-2.30	3.53	27.05	38.32	700.7	2.018	12.51255	0.154 - 0.109	6.34	1.589
3.276	361.8	-2.35	2.61	24.95	37.84	673.1	2.282	9.84886	0.149 -0.112	5.42	1.526
3.608	375.2	-2.39	2.07	22.94	37.84	651.5	2.514	8.69407	0.154 - 0.114	4.88	1.477
3.926	393.9	-2.38	1.56	20.85	38.32	634.3	2.735	7.92205	0.162 - 0.113	4.37	1.438

Disp. Coeff. CDL 5.94 cm @ Base Line Displacement DIS 3042.0 gms 0.2506 25.83 % B VCG Position Static trim TAOo 4.00 deg

Water Temp. 22.00 deg C Density 997.772 kg/m3 Kin. Viscocity 0.9568E-06 m2/s

	wel m/s	RT gms	em cm	TAO deg	cm	Cm Cm	SWPH Cm2	CV	x10-3	RT/DIS	H/BPX	Abs.	Cswpn
-	1.092 1.460 1.810 2.190 2.558 2.889 3.268	244.4 532.8 566.3 630.9 588.8 517.2 485.9	0.52 0.32 -0.44 -1.85 -2.66 -2.91 -2.96	5.48 6.12 6.93 5.51 4.19 3.24	28.09 26.65	66.01 57.07 51.04 44.19 38.32 36.55 37.03	1284.0 1116.6 994.7 862.0 745.6 692.9 682.6	0.761 1.017 1.261 1.525 1.782 2.013 2.277	31.41273 44.03257 34.16512 30.02067 23.72647 17.57944 13.10374	0.175 0.186 0.207 0.194 0.170 0.160	0.015 -0.021 -0.088 -0.126 -0.139 -0.141	5.95 9.48 10.12 10.93 9.51 8.19 7.24	2.912 2.532 2.256 1.955 1.691 1.571 1.548
	3.618 3.905	476.5 478.2	-2.99 -2.97	2.23 1.86	23.83 22.46	35.58 44.60	636.9 718.8	2.521 2.721	11.23788 8.57551		-0.143 -0.141	6.23 5.86	1.444 1.630

	_		_		-		-			-		
Vel m/s	RT gms	H	TAO deg	LC	LK cm	SWPH cm2	Cv	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cswph
1.087	281.5	0.51	2.01	57.72	66.90	1292.9	0.757	36.22531	0.077	0.024	6.58	2.932
1.450	719.1	0.33	6.11	48.62	57.07	1124.1	1.010	59.84660	0.198	0.016	10.68	2.549
1.810	802.3	-0.61	7.06	41.78	48.78	969.3	1.261	49.67960	0.220	-0.029	11.63	2.198
2.156	869.4	-2.17	7.86	36.14	42.10	838.7	1.502	43.86714	0.239	-0.104	12.43	1.902
2.538	791.5	-3.19	6.67	31.56	37.75	743.0	1.768	32.52461	0.217	-0.152	11.24	1.685
2.886	691.1	-3.52	4.82	28.74	35.74	691.2	2.010	23.60918	0.190	-0.168	9.39	1.567
3.260	638.9	-3.53	3.58	25.76	34.05	641.2	2.272	18.43203	0.176	-0.168	8.15	1.454
3.616	603.1	-3.51	3.02	24.55	34.29	630.8	2.520	14.37478	0.166	-0.167	7.59	1.430
3.935	579.8	-3.50	2.30	24.15	34.86	632.5	2.741	11.64228	0.159	-0.167	6.87	1.434

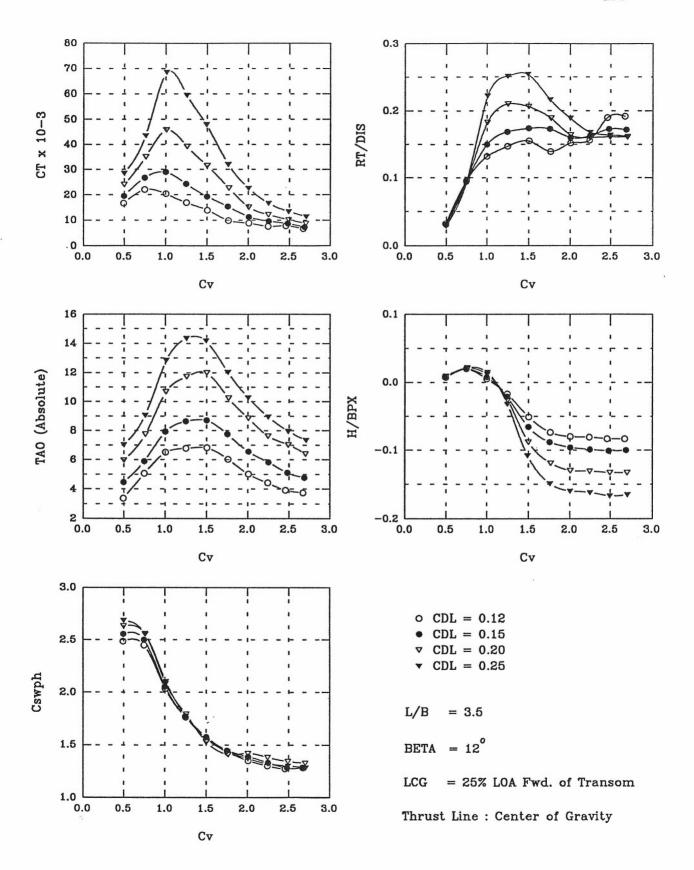


Figure B.17

					~							
Mode]	No. T-3	512										
L/B F	Ratio		.5		Length (Overal I	OA 80	.50 cm				
Deadi	rise	12	.00 deg	ſ		(Deck) I		.00 cm			1	.37
					Breath	(Chine) H	3PX 21	.00 cm			1	.37
LCG E	osition	25	.00 % I	.OA	20.13	om @ Tra	ansom					
n' 1												
Displ	acement 1		8.0 gm		Disp. Co			.1201				
	osition		.04 % E		6.45 CI	n (Base	Line					
	c trim TI Temp.		.04 deg		Donaitee	00*	CEO 1	/_ a _ v.:	_ 774		0.04575	
Water	Temp.	22	.50 deg	C	Density	991	.658 Kg	/m3 Ki	n. visc	ocity	0.945/E	2-06 m2/s
Vel	RT	н	TAO	LC	LK	SWPH	Cv	CT	PT/DTS	H/BPX	TAO	Cswph
m/s	gms	cm	deg	cm	cm	cm2	•	x10-3	111/010	, DI II	Abs.	CDWpii
0.707		0.17	0.33	38.64	63.60	1096.5	0.493	16.63130	0.032	0.008	3.37	2.486
1.073		0.42	2.02	42.26	58.77	1079.9	0.748	22.01466	0.096	0.020	5.06	2.449
1.437		0.10	3.47	35.42	48.30	897.3	1.001	20.39407	0.132	0.005	6.51	2.035
1.794		-0.37	3.74	30.19	42.26	776.7	1.250	16.87382		-0.017	6.78	1.761
2.158		-1.08	3.78	26.16	37.84	686.0	1.504	13.93366		-0.051	6.82	1.556
2.527			3.00	22.54	36.22	630.0	1.761	9.88547		-0.074	6.04	1.428
2.880		-1.69	1.98	20.13			2.006	8.82094		-0.080	5.02	1.350
3.216		-1.71	1.38	18.11			2.241	7.55652		-0.081	4.42	1.301
3.529 3.832		-1.75 -1.75	0.88	15.70 14.89	36.63 37.84	565.2	2.459	7.80862 6.63758		-0.083 -0.083	3.92 3.75	1.272 1.282
3.032	200.1	-1.75	0.71	14.03	37.04	303.2	2.070	0.03/30	0.192	-0.003	3.73	1.202
Displ	acement I	DIS 182	5.0 gm	s	Disp. Co	eff. C	DL 0	.1503				
	osition		.96 % B			a @ Base						
Stati	c trim TZ	100 3	.83 deg									
Water	Temp.	22	.50 deg	C	Density	997	.658 kg	m3 Ki	n. Visc	ocity	0.9457E	-06 m2/s
Vel	RT	H	TAO	LC	LK	SWPH	Cv	CT	RT/DIS	H/BPX	TAO	Cswph
m/s	gms	cm	deg	cm	cm	cm2		x10-3			Abs.	
0.710	56.6	0 15	0 63	41 06	63 60	1128.0	0 405	10 56720	0 021	0 007	4 46	2 550
1.069		0.15 0.42	0.63 2.07	41.86	63.60 59.17	1103.3	0.495 0.745	19.56720 26.67980	0.031	0.007	4.46 5.90	2.558
1.435		0.16	4.10	36.63	47.90	905.9	1.000	28.93713	0.150		7.93	2.054
1.790		-0.44	4.80	31.40	41.46	781.0	1.247	24.30368		-0.021	8.63	1.771
2.155		-1.39	4.87	28.58	36.22	694.7	1.502	19.36364		-0.066	8.70	1.575
2.518		-1.84	3.92	24.15	35.42	638.6	1.754	15.36474		-0.088	7.75	1.448
2.877		-2.03	2.73	22.14	35.02		2.005	11.29228		-0.096	6.56	1.389
3.228												
	230.3	-2.0/	2.01	20.13	34.62	586.8	2.249	9.59190	0.163	-0.099	5.84	1.331
3.561		-2.07 -2.12	2.01 1.27	20.13 18.11	34.62 34.62	586.8 565.2	2.249	9.59190 8.64447		-0.099 -0.101	5.84 5.10	1.331
	315.0			18.11		565.2 565.2		9.59190 8.64447 7.33906	0.173	-0.101 -0.100		
3.561 3.856	315.0 313.7	-2.12 -2.10	1.27 0.95	18.11 17.31	34.62 35.42	565.2 565.2	2.481 2.687	8.64447 7.33906	0.173	-0.101	5.10	1.282
3.561 3.856 Displ	315.0 313.7 acement I	-2.12 -2.10 DIS 243	1.27 0.95 2.0 gm	18.11 17.31	34.62 35.42 Disp. Co	565.2 565.2 eff. C	2.481 2.687	8.64447	0.173	-0.101	5.10	1.282
3.561 3.856 Displ VCG P	315.0 313.7 acement I osition	-2.12 -2.10 DIS 243 28	1.27 0.95 2.0 gm	18.11 17.31	34.62 35.42	565.2 565.2 eff. C	2.481 2.687	8.64447 7.33906	0.173	-0.101	5.10	1.282
3.561 3.856 Displ VCG P Stati	315.0 313.7 acement I osition c trim TA	-2.12 -2.10 DIS 243 28	1.27 0.95 2.0 gm .17 % B .51 deg	18.11 17.31 s	34.62 35.42 Disp. Co 6.48 cm	565.2 565.2 Deff. C	2.481 2.687 DL 0.	8.64447 7.33906	0.173 0.172	-0.101 -0.100	5.10 4.78	1.282 1.282
3.561 3.856 Displ VCG P Stati	315.0 313.7 acement I osition	-2.12 -2.10 DIS 243 28	1.27 0.95 2.0 gm	18.11 17.31 s	34.62 35.42 Disp. Co	565.2 565.2 Deff. C	2.481 2.687 DL 0.	8.64447 7.33906	0.173 0.172	-0.101 -0.100	5.10 4.78	1.282 1.282
3.561 3.856 Displ VCG P Stati Water	315.0 313.7 acement I osition c trim TA Temp.	-2.12 -2.10 DIS 243 28 AOO 5 22	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg	18.11 17.31 s	34.62 35.42 Disp. Co 6.48 cm	565.2 565.2 peff. Co Base 997	2.481 2.687 DL 0. Line	8.64447 7.33906 .2003 /m3 Ki	0.173 0.172	-0.101 -0.100	5.10 4.78 0.9568E	1.282 1.282
3.561 3.856 Displ VCG P Stati Water	315.0 313.7 acement I osition c trim TA Temp.	-2.12 -2.10 DIS 243 28 AOO 5 22	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg	18.11 17.31 s c	34.62 35.42 Disp. Co 6.48 cm	565.2 565.2 peff. Co Base 997 SWPH	2.481 2.687 DL 0.	8.64447 7.33906 .2003 /m3 Kir	0.173 0.172	-0.101 -0.100	5.10 4.78 0.9568E	1.282 1.282
3.561 3.856 Displ VCG P Stati Water Vel m/s	315.0 313.7 acement I osition c trim TA Temp. RT gms	-2.12 -2.10 DIS 243 28 AOO 5 22	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg	18.11 17.31 s	34.62 35.42 Disp. Co 6.48 cm Density	565.2 565.2 peff. Co Base 997	2.481 2.687 DL 0. Line	8.64447 7.33906 .2003 /m3 Ki	0.173 0.172	-0.101 -0.100	5.10 4.78 0.9568E	1.282 1.282
3.561 3.856 Displ VCG P Stati Water	315.0 313.7 acement I osition c trim TA Temp. RT gms	-2.12 -2.10 OIS 243 28 AOO 5 22 H	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg	18.11 17.31 s c	34.62 35.42 Disp. Co 6.48 cm Density	565.2 565.2 peff. Co Base 997 SWPH	2.481 2.687 DL 0. Line	8.64447 7.33906 .2003 /m3 Kir	0.173 0.172	-0.101 -0.100	5.10 4.78 0.9568E	1.282 1.282
3.561 3.856 Displ VCG P Stati Water Vel m/s	315.0 313.7 acement I osition c trim TA Temp. RT gms	-2.12 -2.10 DIS 243 28 AOO 5 22 H cm	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg	18.11 17.31 s C LC cm	34.62 35.42 Disp. Cc 6.48 cm Density LK cm	565.2 565.2 eeff. Con @ Base 997 SWPH cm2 1161.5	2.481 2.687 EDL 0. Line 7.772 kg/ Cv 0.499 0.760	8.64447 7.33906 .2003 /m3 Kin cr x10-3 	0.173 0.172 n. Visco RT/DIS	-0.101 -0.100 ocity H/BPX	5.10 4.78 0.9568E TAO Abs.	1.282 1.282 -06 m2/s Cswph
3.561 3.856 Displ VCG P Stati Water Vel m/s 	315.0 313.7 acement I osition c trim TF Temp. RT gms 	-2.12 -2.10 DIS 243 28 AOO 5 22 H cm	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg TAO deg 	18.11 17.31 s C LC cm	34.62 35.42 Disp. Cc 6.48 cm Density LK cm	565.2 565.2 eff. Con @ Base 997 SWPH cm2	2.481 2.687 DL 0. Line .772 kg. Cv	8.64447 7.33906 .2003 /m3 Kin CT x10-3	0.173 0.172 n. Visco RT/DIS	-0.101 -0.100 ocity H/BPX	5.10 4.78 0.9568E TAO Abs.	1.282 1.282 -06 m2/s Cswph 2.634 2.555 2.084
3.561 3.856 Displ VCG P Stati Water Vel m/s 0.716 1.091 1.442 1.803	315.0 313.7 acement I osition c trim TF Temp. RT gms 	-2.12 -2.10 DIS 243 28 00 5 22 H cm 	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg TAO deg 0.47 2.24 5.17 6.22	18.11 17.31 s C LC cm -45.48 47.09 38.64 33.00	34.62 35.42 Disp. Cc 6.48 cm Density LK cm 63.60 58.77 47.09 40.65	565.2 565.2 peff. C e Base 997 SWPH cm2 1161.5 1126.8 918.8 789.6	2.481 2.687 DL 0. Line .772 kg/ Cv 0.499 0.760 1.005 1.256	8.64447 7.33906 .2003 /m3 Kin CT x10-3 	0.173 0.172 n. Visce RT/DIS 0.030 0.098 0.183 0.210	-0.101 -0.100 ocity H/BPX 0.009 0.021 0.012 -0.026	5.10 4.78 0.9568E TAO Abs. 	1.282 1.282 -06 m2/s Cswph
3.561 3.856 Displ VCG P Stati Water Vel m/s 	315.0 313.7 acement I osition c trim TA Temp. RT gms 	-2.12 -2.10 DIS 243 28 AOO 5 22 H Cm 0.19 0.45 0.25 -0.54 -1.84	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg TAO deg 0.47 2.24 5.17 6.22 6.49	18.11 17.31 s C LC cm 45.48 47.09 38.64 33.00 28.18	34.62 35.42 Disp. Cc 6.48 cm Density LK cm 63.60 58.77 47.09 40.65 34.62	565.2 565.2 peff. C a @ Base 997 SWPH cm2 1161.5 1126.8 918.8 918.8 789.6 673.1	2.481 2.687 DL 0. Line 7.772 kg/ CV 0.499 0.760 1.005 1.256 1.501	8.64447 7.33906 .2003 /m3 Kin CT x10-3 24.06285 35.06549 45.87440 39.19751 31.52933	0.173 0.172 n. Visco RT/DIS 0.030 0.098 0.183 0.210 0.206	-0.101 -0.100 ocity H/BPX 0.009 0.021 0.012 -0.026 -0.088	5.10 4.78 0.9568E TAO Abs. 5.98 7.75 10.68 11.73 12.00	1.282 1.282 -06 m2/s Cswph
3.561 3.856 Displ VCG P Stati Water Vel m/s 0.716 1.091 1.442 1.803 2.154 2.534	315.0 313.7 acement I osition c trim TF Temp. RT gms 	-2.12 -2.10 DIS 243 28 200 5 22 H Cm 	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg TAO deg 	18.11 17.31 s C LC cm 45.48 47.09 38.64 33.00 28.18 24.95	34.62 35.42 Disp. Cc 6.48 cm Density LK cm 63.60 58.77 47.09 40.65 34.62 33.00	565.2 565.2 peff. C a @ Base 997 SWPH cm2 1161.5 1126.8 918.8 789.6 673.1 621.3	2.481 2.687 DL 0. Line .772 kg. Cv 0.499 0.760 1.005 1.256 1.501 1.765	8.64447 7.33906 .2003 /m3 Kin CT x10-3 24.06285 35.06549 45.87440 39.19751 31.52933 22.66281	0.173 0.172 n. Visco RT/DIS 0.030 0.098 0.183 0.210 0.226 0.189	-0.101 -0.100 ocity H/BPX 	5.10 4.78 0.9568E TAO Abs. 5.98 7.75 10.68 11.73 12.00 10.24	1.282 1.282 -06 m2/s Cswph
3.561 3.856 Displ VCG P Stati Water Vel m/s 	315.0 313.7 acement I osition c trim TA Temp. RT gms 	-2.12 -2.10 DIS 243 28 CO 5 22 H CM 0.19 0.45 0.25 -0.54 -1.84 -2.51 -2.72	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg TAO deg 	18.11 17.31 s C LC cm 45.48 47.09 38.64 33.00 28.18 24.95 24.55	34.62 35.42 Disp. Cc 6.48 cm Density LK cm 63.60 58.77 47.09 40.65 34.62 33.00 33.81	565.2 565.2 eff. Ca @ Base 997 SWPH cm2 1161.5 1126.8 918.8 789.6 673.1 621.3 625.6	2.481 2.687 DL 0. Line .772 kg/ Cv 0.499 0.760 1.005 1.256 1.501 1.765 2.004	8.64447 7.33906 .2003 /m3 Kin CT x10-3 24.06285 35.06549 45.87440 39.19751 31.52933 22.66281 15.13031	0.173 0.172 n. Visco RT/DIS 0.030 0.098 0.183 0.210 0.206 0.189 0.164	-0.101 -0.100 ocity H/BPX 0.009 0.021 0.012 -0.026 -0.088 -0.119 -0.130	5.10 4.78 0.9568E TAO Abs. 5.98 7.75 10.68 11.73 12.00 10.24 8.85	1.282 1.282 2.06 m2/s Cswph 2.634 2.555 2.084 1.790 1.526 1.409 1.419
3.561 3.856 Displ VCG P Stati Water Vel m/s 0.716 1.091 1.442 1.803 2.154 2.534 2.534 3.223	315.0 313.7 acement I osition c trim TF Temp. RT gms 	-2.12 -2.10 DIS 243 28 DO 5 22 H CM -0.19 0.45 0.25 -0.54 -1.84 -2.51 -2.72 -2.75	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg TAO deg 	18.11 17.31 s C LC cm 45.48 47.09 38.64 33.00 28.18 24.95 24.55 22.30	34.62 35.42 Disp. Cc 6.48 cm Density LK cm 63.60 58.77 47.09 40.65 34.62 33.00 33.81 34.53	565.2 565.2 peff. C @ Base 997 SWPH cm2 1161.5 1126.8 918.8 789.6 673.1 621.3 625.6 609.2	2.481 2.687 DL 0. Line .772 kg/ Cv 0.499 0.760 1.005 1.256 1.501 1.765 2.004 2.245	8.64447 7.33906 .2003 /m3 Kir CT x10-3 	0.173 0.172 n. Visco RT/DIS 0.030 0.098 0.183 0.210 0.206 0.189 0.164 0.160	-0.101 -0.100 ocity H/BPX -0.009 0.021 0.012 -0.026 -0.088 -0.119 -0.130 -0.131	5.10 4.78 0.9568E TAO Abs. 	1.282 1.282 -06 m2/s Cswph 2.634 2.555 2.084 1.790 1.526 1.409 1.419 1.382
3.561 3.856 Displ VCG P Stati Water Vel m/s 0.716 1.091 1.442 2.534 2.534 2.877 3.223 3.575	315.0 313.7 acement I osition c trim TF Temp. RT gms 	-2.12 -2.10 DIS 243 28 AOO 5 22 H Cm 	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg TAO deg 0.47 2.24 5.17 6.22 6.49 4.73 3.34 2.12 1.52	18.11 17.31 s C LC cm 45.48 47.09 38.64 33.00 28.18 24.55 24.55 22.30 21.09	34.62 35.42 Disp. Cc 6.48 cm Density LK cm 63.60 58.77 47.09 40.65 34.62 33.00 33.81 34.53 34.21	565.2 565.2 peff. C e Base 997 SWPH cm2 1161.5 1126.8 918.8 789.6 673.1 621.3 625.6 609.2 592.8	2.481 2.687 DL 0. Line .772 kg/ Cv 0.499 0.760 1.005 1.256 1.501 1.765 2.004 2.245 2.491	8.64447 7.33906 .2003 /m3 Kin CT x10-3 	0.173 0.172 n. Visco RT/DIS 0.030 0.098 0.183 0.210 0.206 0.189 0.164 0.160 0.161	-0.101 -0.100 Decity H/BPX -0.009 0.021 -0.026 -0.088 -0.119 -0.130 -0.131 -0.133	5.10 4.78 0.9568E TAO Abs. 	1.282 1.282 -06 m2/s Cswph
3.561 3.856 Displ VCG P Stati Water Vel m/s 0.716 1.091 1.442 1.803 2.154 2.534 2.534 3.223	315.0 313.7 acement I osition c trim TF Temp. RT gms 	-2.12 -2.10 DIS 243 28 DO 5 22 H CM -0.19 0.45 0.25 -0.54 -1.84 -2.51 -2.72 -2.75	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg TAO deg 	18.11 17.31 s C LC cm 45.48 47.09 38.64 33.00 28.18 24.55 24.55 22.30 21.09	34.62 35.42 Disp. Cc 6.48 cm Density LK cm 63.60 58.77 47.09 40.65 34.62 33.00 33.81 34.53	565.2 565.2 peff. C e Base 997 SWPH cm2 1161.5 1126.8 918.8 789.6 673.1 621.3 625.6 609.2 592.8	2.481 2.687 DL 0. Line .772 kg/ Cv 0.499 0.760 1.005 1.256 1.501 1.765 2.004 2.245	8.64447 7.33906 .2003 /m3 Kir CT x10-3 	0.173 0.172 n. Visco RT/DIS 0.030 0.098 0.183 0.210 0.206 0.189 0.164 0.160 0.161	-0.101 -0.100 Decity H/BPX -0.009 0.021 -0.026 -0.088 -0.119 -0.130 -0.131 -0.133	5.10 4.78 0.9568E TAO Abs. 	1.282 1.282 -06 m2/s Cswph
3.561 3.856 Displ VCG P Stati Water Vel m/s 	315.0 313.7 acement I osition c trim TF Temp. RT gms 	-2.12 -2.10 DIS 243 28 CM 5 22 H CM 0.19 0.45 0.25 -0.54 -1.84 -2.51 -2.72 -2.75 -2.78	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg TAO deg 	18.11 17.31 s C LC cm 45.48 47.09 38.64 33.00 28.18 24.95 24.55 22.30 21.09 20.37	34.62 35.42 Disp. Cc 6.48 cm Density LK cm 63.60 58.77 47.09 40.65 34.62 33.00 33.81 34.53 34.21	565.2 565.2 eff. Ca @ Base 997 SWPH cm2 1161.5 1126.8 918.8 789.6 673.1 621.3 625.6 609.2 592.8 585.1	2.481 2.687 DL 0. Line Cv 0.499 0.760 1.005 1.256 1.501 1.765 2.004 2.245 2.491 2.700	8.64447 7.33906 .2003 /m3 Kin CT x10-3 24.06285 35.06549 45.87440 39.19751 31.52933 22.66281 15.13031 12.10098 10.16165 8.76106	0.173 0.172 n. Visco RT/DIS 0.030 0.098 0.183 0.210 0.206 0.189 0.164 0.160 0.161	-0.101 -0.100 Decity H/BPX -0.009 0.021 -0.026 -0.088 -0.119 -0.130 -0.131 -0.133	5.10 4.78 0.9568E TAO Abs. 	1.282 1.282 1.282 -06 m2/s Cswph
3.561 3.856 Displ VCG P Stati Water Vel m/s 	315.0 313.7 acement I osition c trim TF Temp. RT gms 	-2.12 -2.10 DIS 243 28 CM 5 22 H CM	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg TAO deg 	18.11 17.31 s C LC cm 45.48 47.09 38.64 33.00 28.18 24.95 24.55 22.30 21.09 20.37	34.62 35.42 Disp. Cc 6.48 cm Density LK cm 63.60 58.77 47.09 40.65 34.62 33.00 33.81 34.53 34.21 34.21 Disp. Cc	565.2 565.2 Deff. Con Base 997 SWPH Cm2 1161.5 1126.8 918.8 789.6 673.1 621.3 625.6 609.2 592.8 585.1	2.481 2.687 DL 0. Line .772 kg/ Cv 0.499 0.760 1.005 1.256 1.501 1.765 2.004 2.245 2.491 2.700	8.64447 7.33906 .2003 /m3 Kin CT x10-3 	0.173 0.172 n. Visco RT/DIS 0.030 0.098 0.183 0.210 0.206 0.189 0.164 0.160 0.161	-0.101 -0.100 Decity H/BPX -0.009 0.021 -0.026 -0.088 -0.119 -0.130 -0.131 -0.133	5.10 4.78 0.9568E TAO Abs. 	1.282 1.282 1.282 -06 m2/s Cswph
3.561 3.856 Displ VCG P Stati Water Vel m/s 	315.0 313.7 acement I osition c trim TF Temp. RT gms 	-2.12 -2.10 DIS 243 28 AOO 5 22 H CM -0.19 0.45 0.25 -0.54 -1.84 -2.51 -2.72 -2.75 -2.78 -2.79 DIS 304 27	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg TAO deg 0.47 2.24 5.17 6.22 6.49 4.73 3.34 2.12 1.52 0.90 2.0 gm	18.11 17.31 s C LC cm 	34.62 35.42 Disp. Cc 6.48 cm Density LK cm 63.60 58.77 47.09 40.65 34.62 33.00 33.81 34.53 34.21	565.2 565.2 Deff. Con Base 997 SWPH Cm2 1161.5 1126.8 918.8 789.6 673.1 621.3 625.6 609.2 592.8 585.1	2.481 2.687 DL 0. Line .772 kg/ Cv 0.499 0.760 1.005 1.256 1.501 1.765 2.004 2.245 2.491 2.700	8.64447 7.33906 .2003 /m3 Kin CT x10-3 24.06285 35.06549 45.87440 39.19751 31.52933 22.66281 15.13031 12.10098 10.16165 8.76106	0.173 0.172 n. Visco RT/DIS 0.030 0.098 0.183 0.210 0.206 0.189 0.164 0.160 0.161	-0.101 -0.100 Decity H/BPX -0.009 0.021 -0.026 -0.088 -0.119 -0.130 -0.131 -0.133	5.10 4.78 0.9568E TAO Abs. 	1.282 1.282 1.282 -06 m2/s Cswph
3.561 3.856 Displ VCG P Stati Water Vel m/s 0.716 1.091 1.442 1.803 2.154 2.534 2.877 3.223 3.575 3.875 Displ VCG P Stati	315.0 313.7 acement I osition c trim TF Temp. RT gms 	-2.12 -2.10 DIS 243 28 200 5 22 H Cm 0.19 0.45 0.25 -0.54 -1.84 -2.51 -2.75 -2.78 -2.79 DIS 304 27 200 6	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg TAO deg 	18.11 17.31 s C LC cm 45.48 47.09 38.64 33.00 28.18 24.95 22.30 21.09 20.37	34.62 35.42 Disp. Cc 6.48 cm Density LK cm 63.60 58.77 47.09 40.65 34.62 33.00 33.81 34.53 34.21 34.21 Disp. Cc 6.34 cm	565.2 565.2 Deff. C @ Base 997 SWPH Cm2 1161.5 1126.8 918.8 789.6 673.1 621.3 625.6 609.2 592.8 585.1	2.481 2.687 DL 0. Line 7.772 kg/ CV 0.499 0.760 1.005 1.256 1.501 1.765 2.004 2.245 2.491 2.700 DL 0.	8.64447 7.33906 .2003 /m3 Kin CT x10-3 24.06285 35.06549 45.87440 39.19751 31.52933 22.66281 15.13031 12.10098 10.16165 8.76106	0.173 0.172 n. Visco RT/DIS 0.030 0.098 0.183 0.210 0.206 0.189 0.164 0.161	-0.101 -0.100 Decity H/BPX 0.009 0.012 -0.026 -0.088 -0.119 -0.130 -0.131 -0.133 -0.133	5.10 4.78 0.9568E TAO Abs. 5.98 7.75 10.68 11.73 12.00 10.24 8.85 7.63 7.03 6.41	1.282 1.282 1.282 -06 m2/s Cswph
3.561 3.856 Displ VCG P Stati Water Vel m/s 	315.0 313.7 acement I osition c trim TF Temp. RT gms 	-2.12 -2.10 DIS 243 28 20 5 22 H CM 0.19 0.45 0.25 -0.54 -1.84 -2.75 -2.72 -2.75 -2.78 -2.79 DIS 304 27 20 66 22	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg TAO deg 	18.11 17.31 s C LC cm 45.48 47.09 38.64 33.00 28.18 24.95 24.55 22.30 21.09 20.37	34.62 35.42 Disp. Cc 6.48 cm Density LK cm 63.60 58.77 47.09 40.65 34.62 33.00 33.81 34.53 34.21 Disp. Cc 6.34 cm	565.2 565.2 Deff. Come Base 997 SWPH Cm2 1161.5 1126.8 918.8 789.6 673.1 621.3 625.6 609.2 592.8 585.1 Deff. Come Base 997	2.481 2.687 DL 0. Line .772 kg/ Cv 0.499 0.760 1.005 1.256 1.501 1.765 2.004 2.245 2.491 2.700 DL 0. Line	8.64447 7.33906 .2003 /m3 Kir x10-3 24.06285 35.06549 45.87440 39.19751 31.52933 22.66281 15.13031 12.10098 10.16165 8.76106	0.173 0.172 n. Visco RT/DIS 0.030 0.098 0.183 0.210 0.206 0.189 0.164 0.160 0.161	-0.101 -0.100 ocity H/BPX 0.009 0.021 0.012 -0.026 -0.088 -0.119 -0.130 -0.131 -0.133 -0.133	5.10 4.78 0.9568E TAO Abs. 5.98 7.75 10.68 11.73 12.00 10.24 8.85 7.63 7.03 6.41	1.282 1.282 1.282 -06 m2/s Cswph
3.561 3.856 Displ VCG P Stati Water Vel m/s 	315.0 313.7 acement I osition c trim TF Temp. RT gms 	-2.12 -2.10 DIS 243 28 20 5 22 H Cm 0.19 0.45 0.25 -0.54 -1.84 -2.51 -2.72 -2.75 -2.78 -2.79 DIS 304 27 20 6 22 H	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg TAO deg 	18.11 17.31 s C LC cm 45.48 47.09 38.64 33.00 28.18 24.95 24.55 22.30 21.09 20.37 s	34.62 35.42 Disp. Cc 6.48 cm Density LK cm 63.60 58.77 47.09 40.65 34.62 33.00 33.81 34.53 34.21 34.21 Disp. Cc 6.34 cm	565.2 565.2 Deff. Con the Base of Ba	2.481 2.687 DL 0. Line 7.772 kg/ CV 0.499 0.760 1.005 1.256 1.501 1.765 2.004 2.245 2.491 2.700 DL 0.	8.64447 7.33906 .2003 /m3 Kir CT x10-3 24.06285 35.06549 45.87440 39.19751 31.52933 22.66281 15.13031 12.10098 10.16165 8.76106	0.173 0.172 n. Visco RT/DIS 0.030 0.098 0.183 0.210 0.206 0.189 0.164 0.160 0.161	-0.101 -0.100 Decity H/BPX 0.009 0.012 -0.026 -0.088 -0.119 -0.130 -0.131 -0.133 -0.133	5.10 4.78 0.9568E TAO Abs. 5.98 7.75 10.68 11.73 12.00 10.24 8.85 7.63 7.03 6.41	1.282 1.282 1.282 -06 m2/s Cswph
3.561 3.856 Displ VCG P Stati Water Vel m/s 	315.0 313.7 acement I osition c trim TF Temp. RT gms 	-2.12 -2.10 DIS 243 28 20 5 22 H CM 0.19 0.45 0.25 -0.54 -1.84 -2.75 -2.72 -2.75 -2.78 -2.79 DIS 304 27 20 66 22	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg TAO deg 	18.11 17.31 s C LC cm 45.48 47.09 38.64 33.00 28.18 24.95 24.55 22.30 21.09 20.37	34.62 35.42 Disp. Cc 6.48 cm Density LK cm 63.60 58.77 47.09 40.65 34.62 33.00 33.81 34.53 34.21 Disp. Cc 6.34 cm	565.2 565.2 Deff. Come Base 997 SWPH Cm2 1161.5 1126.8 918.8 789.6 673.1 621.3 625.6 609.2 592.8 585.1 Deff. Come Base 997	2.481 2.687 DL 0. Line .772 kg/ Cv 0.499 0.760 1.005 1.256 1.501 1.765 2.004 2.245 2.491 2.700 DL 0. Line	8.64447 7.33906 .2003 /m3 Kir x10-3 24.06285 35.06549 45.87440 39.19751 31.52933 22.66281 15.13031 12.10098 10.16165 8.76106	0.173 0.172 n. Visco RT/DIS 0.030 0.098 0.183 0.210 0.206 0.189 0.164 0.160 0.161	-0.101 -0.100 ocity H/BPX 0.009 0.021 0.012 -0.026 -0.088 -0.119 -0.130 -0.131 -0.133 -0.133	5.10 4.78 0.9568E TAO Abs. 5.98 7.75 10.68 11.73 12.00 10.24 8.85 7.63 7.03 6.41	1.282 1.282 1.282 -06 m2/s Cswph
3.561 3.856 Displ VCG P Stati Water Vel m/s 	315.0 313.7 acement I osition c trim TA Temp. RT gms 	-2.12 -2.10 DIS 243 28 20 5 22 H Cm 0.19 0.45 0.25 -0.54 -1.84 -2.51 -2.75 -2.75 -2.78 -2.79 DIS 304 27 20 6 22 H	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg TAO deg 	18.11 17.31 s C LC cm 45.48 47.09 38.64 33.00 28.18 24.95 24.95 22.30 21.09 20.37 s	34.62 35.42 Disp. Cc 6.48 cm Density LK cm 63.60 58.77 47.09 40.65 34.62 33.00 33.81 34.53 34.21 34.21 Disp. Cc 6.34 cm Density	565.2 565.2 997 SWPH cm2 1161.5 1126.8 918.8 789.6 673.1 621.3 625.6 609.2 592.8 585.1 eff. Con Base 997	2.481 2.687 DL 0. Line .772 kg/ Cv 0.499 0.760 1.005 1.256 1.501 1.765 2.004 2.245 2.491 2.700 DL 0. Line .772 kg/	8.64447 7.33906 .2003 /m3 Kin CT x10-3 24.06285 35.06549 45.87440 39.19751 31.52933 22.66281 15.13031 12.10098 10.16165 8.76106	0.173 0.172 n. Visco RT/DIS 0.030 0.098 0.183 0.210 0.206 0.189 0.164 0.161 0.161	-0.101 -0.100 Decity H/BPX 0.009 0.021 -0.026 -0.088 -0.119 -0.130 -0.131 -0.133 -0.133	5.10 4.78 0.9568E TAO Abs. 5.98 7.75 10.68 11.73 12.00 10.24 8.85 7.63 7.03 6.41	1.282 1.282 1.282 -06 m2/s Cswph
3.561 3.856 Displ VCG P Stati Water Vel m/s 	315.0 313.7 acement I osition c trim TF Temp. RT gms 	-2.12 -2.10 DIS 243 28 20 5 22 H CM -0.19 0.45 0.25 -0.54 -1.84 -2.51 -2.72 -2.75 -2.78 -2.79 DIS 304 27 CM CM CM CM -2.51 -2.72 -2.75 -2.78 -2.79	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg TAO deg 	18.11 17.31 s C LC cm 45.48 47.09 38.64 33.00 28.18 24.95 24.55 22.30 21.09 20.37 s	34.62 35.42 Disp. Cc 6.48 cm Density LK cm 63.60 58.77 47.09 40.65 33.81 34.53 34.21 Disp. Cc 6.34 cm Density LK cm	565.2 565.2 565.2 Deff. Con Base 997 SWPH cm2 1161.5 1126.8 918.8 789.6 673.1 621.3 625.6 609.2 592.8 585.1 Deff. Con Base 997 SWPH cm2	2.481 2.687 DL 0. Line Cv 0.499 0.760 1.005 1.256 1.501 1.765 2.004 2.245 2.491 2.700 DL 0. Line .772 kg/	8.64447 7.33906 .2003 /m3 Kin CT x10-3 24.06285 35.06549 45.87440 39.19751 31.52933 22.66281 15.13031 12.10098 10.16165 8.76106 .2506 /m3 Kin CT x10-3	0.173 0.172 n. Visco RT/DIS 0.030 0.098 0.183 0.210 0.206 0.189 0.164 0.160 0.161	-0.101 -0.100 ocity H/BPX -0.026 -0.086 -0.130 -0.131 -0.133 -0.133	5.10 4.78 0.9568E TAO Abs. 5.98 7.75 10.68 11.73 12.00 10.24 8.85 7.63 7.03 6.41	1.282 1.282 1.282 -06 m2/s Cswph
3.561 3.856 Displ VCG P Stati Water Vel m/s 	315.0 313.7 acement I osition c trim TF Temp. RT gms	-2.12 -2.10 DIS 243 28 CO 5 22 H CM -0.19 0.45 0.25 -0.54 -1.84 -2.51 -2.72 -2.75 -2.78 -2.79 DIS 304 27 CM CM -0.20 0.46	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg TAO deg 	18.11 17.31 s C LC cm 45.48 47.09 38.64 33.00 28.18 24.95 22.30 21.09 20.37 s	34.62 35.42 Disp. Cc 6.48 cm Density LK cm 63.60 58.77 47.09 40.65 34.62 33.00 33.81 34.53 34.21 Disp. Cc 6.34 cm Density LK cm	565.2 565.2 565.2 Deff. Con Base 997 SWPH Cm2 1161.5 1126.8 918.8 789.6 673.1 621.3 625.6 609.2 592.8 585.1 Deff. Con Base 997 SWPH Cm2 1184.6 1130.7	2.481 2.687 DL 0. Line .772 kg/ Cv 0.499 0.760 1.005 1.256 1.501 1.765 2.004 2.245 2.491 2.700 DL 0. Line .772 kg/ Cv	8.64447 7.33906 .2003 /m3 Kir CT x10-3 24.06285 35.06549 45.87440 39.19751 31.52933 22.66281 15.13031 12.10098 10.16165 8.76106 .2506 /m3 Kir CT x10-3 28.46135 43.55815	0.173 0.172 n. Visco RT/DIS 0.030 0.098 0.183 0.210 0.206 0.189 0.164 0.160 0.161 0.161	-0.101 -0.100 ocity H/BPX 0.009 0.021 0.012 -0.026 -0.088 -0.119 -0.133 -0.133 -0.133	5.10 4.78 0.9568E TAO Abs. 5.98 7.75 10.68 11.73 12.00 10.24 8.85 7.63 7.03 6.41 0.9568E TAO Abs.	1.282 1.282 1.282 -06 m2/s Cswph
3.561 3.856 Displ VCG P Stati Water Vel m/s 	315.0 313.7 acement I osition c trim TF Temp. RT gms	-2.12 -2.10 DIS 243 28 LOO 5 22 H Cm -0.19 0.45 0.25 -0.54 -1.84 -2.51 -2.72 -2.75 -2.78 -2.79 DIS 304 27 LOO 6 22 H Cm -0.20 0.46 0.32	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg TAO deg 	18.11 17.31 s C LC cm 45.48 47.09 38.64 33.00 28.18 24.95 24.95 22.30 21.09 20.37 s	34.62 35.42 Disp. Cc 6.48 cm Density LK cm 63.60 58.77 47.09 40.65 34.62 33.00 33.81 34.53 34.21 34.21 Disp. Cc 6.34 cm Density LK cm	565.2 565.2 565.2 Deff. Co. Base 997 SWPH Cm2 1161.5 1126.8 918.8 789.6 673.1 621.3 625.6 609.2 592.8 585.1 Deff. Co. Base 997 SWPH Cm2 1184.6 1130.7 927.5	2.481 2.687 DL 0. Line .772 kg/ Cv 0.499 0.760 1.005 1.256 1.501 1.765 2.004 2.245 2.491 2.700 DL 0. Line .772 kg/ Cv	8.64447 7.33906 .2003 .2003 .2003 .2003 .2003 .2003 .2003 .210-3 .24.06285 .35.06549 .45.87440 .39.19751 .31.52933 .22.66281 .15.13031 .12.10098 .10.16165 .8.76106 .2506 .2506 .2506 .2506 .2506 .2506 .2506 .2506 .2506 .2506 .2506 .2506 .2506 .2506 .2506	0.173 0.172 n. Visco RT/DIS 0.030 0.098 0.183 0.210 0.206 0.189 0.164 0.160 0.161 0.161	-0.101 -0.100 Ocity H/BPX 0.009 0.021 0.012 -0.026 -0.088 -0.119 -0.130 -0.131 -0.133 -0.133	5.10 4.78 0.9568E TAO Abs. 	1.282 1.282 1.282 -06 m2/s Cswph 2.634 2.555 2.084 1.790 1.526 1.409 1.382 1.344 1.327 -06 m2/s Cswph 2.686 2.564 2.103
3.561 3.856 Displ VCG P Stati Water Vel m/s 	315.0 313.7 acement I osition c trim TF Temp. RT gms 72.8 239.3 446.0 511.6 501.0 459.6 398.5 389.4 391.6 391.4 acement I osition c trim TF Temp. RT gms	-2.12 -2.10 DIS 243 28 20 5 22 H Cm 0.19 0.45 0.25 -0.54 -1.84 -2.51 -2.72 -2.75 -2.78 -2.79 DIS 304 27 00 6 22 H Cm 0.20 0.46 0.32 -0.67	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg TAO deg 0.47 2.24 5.17 6.22 6.49 4.73 3.34 2.12 1.52 0.90 2.0 gm .57 % B .54 deg .00 deg TAO deg 	18.11 17.31 s C LC cm 45.48 47.09 38.64 33.00 28.18 24.95 22.30 21.09 20.37 s C LC cm 48.30 47.90 39.85 33.81	34.62 35.42 Disp. Cc 6.48 cm Density LK cm 63.60 58.77 47.09 40.65 34.62 33.00 33.81 34.53 34.21 34.21 Disp. Cc 6.34 cm Density LK cm	565.2 565.2 565.2 Deff. Co. Base 997 SWPH Cm2 1161.5 1126.8 918.8 789.6 673.1 621.3 625.3 629.2 592.8 585.1 Deff. Co. Base 997 SWPH Cm2 1184.6 1130.7 927.5 780.9	2.481 2.687 DL 0. Line .772 kg/ Cv 0.499 0.760 1.005 1.256 1.501 1.765 2.004 2.245 2.491 2.700 DL 0. Line .772 kg/ Cv	8.64447 7.33906 .2003 .2003 .2003 .2003 .2003 .2003 .2003 .210-3 .24.06285 .35.06549 .45.87440 .39.19751 .31.52933 .22.66281 .51.3031 .12.10098 .10.16165 .8.76106 .2506	0.173 0.172 n. Visco RT/DIS 0.030 0.098 0.183 0.210 0.206 0.189 0.164 0.161 0.161	-0.101 -0.100 ocity H/BPX 0.009 0.021 0.012 -0.026 -0.088 -0.119 -0.130 -0.131 -0.133 -0.133	5.10 4.78 0.9568E TAO Abs. 5.98 7.75 10.68 11.73 12.00 10.24 8.85 7.63 7.03 6.41 0.9568E TAO Abs.	1.282 1.282 1.282 -06 m2/s Cswph
3.561 3.856 Displ VCG P Stati Water Vel m/s 	315.0 313.7 acement I osition c trim TF Temp. RT gms 	-2.12 -2.10 DIS 243 28 200 5 22 H Cm 0.19 0.45 0.25 -0.54 -1.84 -2.51 -2.72 -2.75 -2.78 -2.79 DIS 304 27 CM CM CM CM 0.20 0.46 0.32 -0.67 -2.27	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg TAO deg 	18.11 17.31 s C LC cm 45.48 47.09 38.64 33.00 28.18 24.95 24.95 22.30 21.09 20.37 s	34.62 35.42 Disp. Cc 6.48 cm Density LK cm 63.60 58.77 47.09 40.65 33.81 34.53 34.21 Disp. Cc 6.34 cm Density LK cm	565.2 565.2 565.2 Peff. Carl Base 997 SWPH cm2 1161.5 1126.8 918.8 789.6 673.1 621.3 625.6 609.2 592.8 585.1 Peff. Carl Base 997 SWPH cm2 1184.6 1130.7 927.5 780.9 690.4	2.481 2.687 DL 0.4 Line Cv 0.499 0.760 1.005 1.256 1.501 1.765 2.004 2.245 2.491 2.700 DL 0.4 Line .772 kg/ Cv	8.64447 7.33906 .2003 /m3 Kin CT x10-3 24.06285 35.06549 45.87440 39.19751 31.52933 22.66281 15.13031 12.10098 10.16165 8.76106 .2506 /m3 Kin CT x10-3 28.46135 43.55815 68.53592 59.53710 48.03150	0.173 0.172 n. Visco RT/DIS 0.030 0.098 0.183 0.210 0.206 0.164 0.160 0.161 0.161	-0.101 -0.100 ocity H/BPX 0.009 0.021 0.012 -0.088 -0.119 -0.133 -0.133 -0.133 -0.133	5.10 4.78 0.9568E TAO Abs. 	1.282 1.282 1.282 -06 m2/s Cswph 2.634 2.555 2.084 1.790 1.526 1.409 1.382 1.344 1.327 -06 m2/s Cswph 2.686 2.564 2.103
3.561 3.856 Displ VCG P Stati Water Vel m/s 	315.0 313.7 acement I osition c trim TF Temp. RT gms	-2.12 -2.10 DIS 243 28 20 5 22 H Cm 0.19 0.45 0.25 -0.54 -1.84 -2.51 -2.72 -2.75 -2.78 -2.79 DIS 304 27 00 6 22 H Cm 0.20 0.46 0.32 -0.67	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg TAO deg 0.47 2.24 5.17 6.22 6.49 4.73 3.34 2.12 1.52 0.90 2.0 gm .57 % B .54 deg .00 deg TAO deg 	18.11 17.31 s C LC cm 45.48 47.09 38.64 33.00 28.18 24.95 22.30 21.09 20.37 s C LC cm 48.30 47.90 39.85 33.81	34.62 35.42 Disp. Cc 6.48 cm Density LK cm 63.60 58.77 47.09 40.65 34.62 33.00 33.81 34.53 34.21 34.21 Disp. Cc 6.34 cm Density LK cm	565.2 565.2 565.2 Deff. Co. Base 997 SWPH Cm2 1161.5 1126.8 918.8 789.6 673.1 621.3 625.3 629.2 592.8 585.1 Deff. Co. Base 997 SWPH Cm2 1184.6 1130.7 927.5 780.9	2.481 2.687 DL 0. Line .772 kg/ Cv 0.499 0.760 1.005 1.256 1.501 1.765 2.004 2.245 2.491 2.700 DL 0. Line .772 kg/ Cv	8.64447 7.33906 .2003 .2003 .2003 .2003 .2003 .2003 .2003 .210-3 .24.06285 .35.06549 .45.87440 .39.19751 .31.52933 .22.66281 .51.3031 .12.10098 .10.16165 .8.76106 .2506	0.173 0.172 n. Visco RT/DIS 0.030 0.098 0.183 0.210 0.164 0.160 0.161 0.161	-0.101 -0.100 ocity H/BPX 0.009 0.021 0.012 -0.026 -0.088 -0.119 -0.133 -0.133 -0.133 -0.133	5.10 4.78 0.9568E TAO Abs. 	1.282 1.282 1.282 2.282 2.084 1.790 1.526 1.419 1.382 1.344 1.327 2.686 2.564 2.103 1.771 1.565
3.561 3.856 Displ VCG P Stati Water Vel m/s 	315.0 313.7 acement I osition c trim TF Temp. RT gms	-2.12 -2.10 DIS 243 28 CM 5 22 H CM 0.19 0.45 0.25 -0.54 -1.84 -2.51 -2.72 -2.75 -2.78 -2.79 DIS 304 27 CM CM 0.20 0.46 0.32 -0.67 -2.27 -3.13	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg TAO deg 	18.11 17.31 s C LC cm 45.48 47.09 38.64 33.00 28.18 24.95 22.30 21.09 20.37 s C LC cm	34.62 35.42 Disp. Cc 6.48 cm Density LK cm 63.60 58.77 47.09 40.65 33.81 34.62 33.00 33.81 34.53 34.21 Disp. Cc 6.34 cm Density LK cm	565.2 565.2 565.2 Deff. Company of the second of the se	2.481 2.687 DL 0. Line .772 kg/ Cv 0.499 0.760 1.005 1.256 1.765 2.004 2.245 2.491 2.700 DL 0. Line .772 kg/ Cv	8.64447 7.33906 .2003 /m3 Kir	0.173 0.172 n. Visco RT/DIS 0.030 0.098 0.183 0.210 0.206 0.189 0.164 0.160 0.161 0.161	-0.101 -0.100 OCITY H/BPX 0.009 0.021 0.012 -0.026 -0.088 -0.119 -0.133 -0.133 -0.133 OCITY H/BPX 0.010 0.022 0.015 -0.032 -0.108 -0.149 -0.160	5.10 4.78 0.9568E TAO Abs. 	1.282 1.282 1.282 -06 m2/s Cswph 2.634 2.555 2.084 1.790 1.526 1.409 1.382 1.344 1.327 -06 m2/s Cswph 2.686 2.564 2.103 1.771 1.565 1.438
3.561 3.856 Displ VCG P Stati Water Vel m/s 	315.0 313.7 acement I osition c trim TF Temp. RT gms	-2.12 -2.10 DIS 243 28 CM 5 22 H CM -0.19 0.45 0.25 -0.54 -1.84 -2.75 -2.75 -2.78 -2.79 DIS 304 27 CM CM -0.67 -0.20 0.46 0.32 -0.67 -2.27 -3.13 -3.37	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg TAO deg 	18.11 17.31 s C LC cm 45.48 47.09 38.64 33.00 28.18 24.95 24.55 22.30 21.09 20.37 s C LC cm 48.30 47.90 39.85 33.81 29.38 24.59 20.37	34.62 35.42 Disp. Cc 6.48 cm Density LK cm 63.60 58.77 47.09 40.65 34.62 33.00 33.81 34.53 34.21 34.21 Disp. Cc 6.34 cm Density LK cm	565.2 565.2 565.2 Deff. Co. Base 997 SWPH Cm2 1161.5 1126.8 918.8 789.6 673.1 621.3 625.6 609.2 592.8 585.1 Deff. Co. Base 997 SWPH Cm2 1184.6 1130.7 927.5 780.9 690.4 634.3 604.1 582.5	2.481 2.687 DL 0. Line .772 kg/ 0.760 1.005 1.256 1.501 1.765 2.004 2.245 2.491 2.700 DL 0. Line .772 kg/ CV	8.64447 7.33906 .2003 .2003 .2003 .2003 .2003 .210-3 .24.06285 .35.06549 .45.87440 .39.19751 .31.52933 .22.66281 .15.13031 .12.10098 .10.16165 .8.76106 .2506	0.173 0.172 n. Visco RT/DIS 0.030 0.098 0.183 0.210 0.206 0.189 0.161 0.161 0.161 0.161 0.161 0.220 0.097 0.222 0.251 0.254 0.189 0.168	-0.101 -0.100 OCITY H/BPX 0.009 0.021 0.012 -0.026 -0.088 -0.119 -0.133 -0.133 -0.133 OCITY H/BPX 0.010 0.022 0.015 -0.032 -0.108 -0.149 -0.160	5.10 4.78 0.9568E TAO Abs. 	1.282 1.282 1.282 -06 m2/s Cswph 2.634 2.555 2.084 1.790 1.526 1.409 1.419 1.382 1.344 1.327 -06 m2/s Cswph 2.686 2.564 2.103 1.771 1.565 1.438 1.370
3.561 3.856 Displ VCG P Stati Water Vel m/s 	315.0 313.7 acement I osition c trim TF Temp. RT gms 72.8 239.3 446.0 511.6 501.0 459.6 398.5 389.4 391.6 391.4 acement I osition c trim TF Temp. RT gms 87.7 295.7 676.3 763.5 773.7 656.7 573.4 511.2 499.3	-2.12 -2.10 DIS 243 28 28 00 5 22 H Cm 0.19 0.45 0.25 -0.54 -1.84 -2.51 -2.72 -2.75 -2.78 -2.79 DIS 304 27 0.20 0.46 0.32 -0.67 -2.27 -3.13 -3.37 -3.40	1.27 0.95 2.0 gm .17 % B .51 deg .00 deg TAO deg 	18.11 17.31 s C LC cm 	34.62 35.42 Disp. Cc 6.48 cm Density LK cm 63.60 58.77 47.09 40.65 34.62 33.00 33.81 34.53 34.21 34.21 Disp. Cc 6.34 cm Density LK cm	565.2 565.2 565.2 eff. Can a Base 997 SWPH cm2 1161.5 1126.8 918.8 789.6 673.1 625.6 609.2 592.8 585.1 eff. Can a Base 997 SWPH cm2 1184.6 1130.7 927.5 780.9 690.4 634.3 604.1 582.5 573.9	2.481 2.687 DL 0. Line .772 kg/ Cv 0.499 0.760 1.005 1.256 1.501 1.765 2.004 2.245 2.491 2.700 DL 0. Line .772 kg/ Cv	8.64447 7.33906 .2003 .2003 .2003 .2003 .2003 .2003 .2003 .210-3 .24.06285 .35.06549 .45.87440 .39.19751 .31.52933 .22.66281 .15.13031 .12.10098 .10.16165 .8.76106 .2506	0.173 0.172 n. Visco RT/DIS 0.030 0.098 0.183 0.210 0.206 0.189 0.164 0.161 0.161 0.161 0.29 0.097 0.029 0.097 0.254 0.216 0.189 0.168 0.164	-0.101 -0.100 ocity H/BPX 0.009 0.021 0.012 -0.026 -0.088 -0.119 -0.133 -0.133 ocity H/BPX H/BPX 0.010 0.022 0.015 -0.032 -0.108 -0.149 -0.160 -0.162 -0.167	5.10 4.78 0.9568E TAO Abs. 	1.282 1.282 1.282 -06 m2/s Cswph 2.634 2.555 2.084 1.790 1.526 1.409 1.382 1.344 1.327 -06 m2/s Cswph 2.686 2.564 2.103 1.771 1.565 1.438 1.370 1.321

<u>Table B.17</u> L/B = 3.5 ; β = 12°; L_{cg} = 25%; Thrust Line : Centre of Gravity

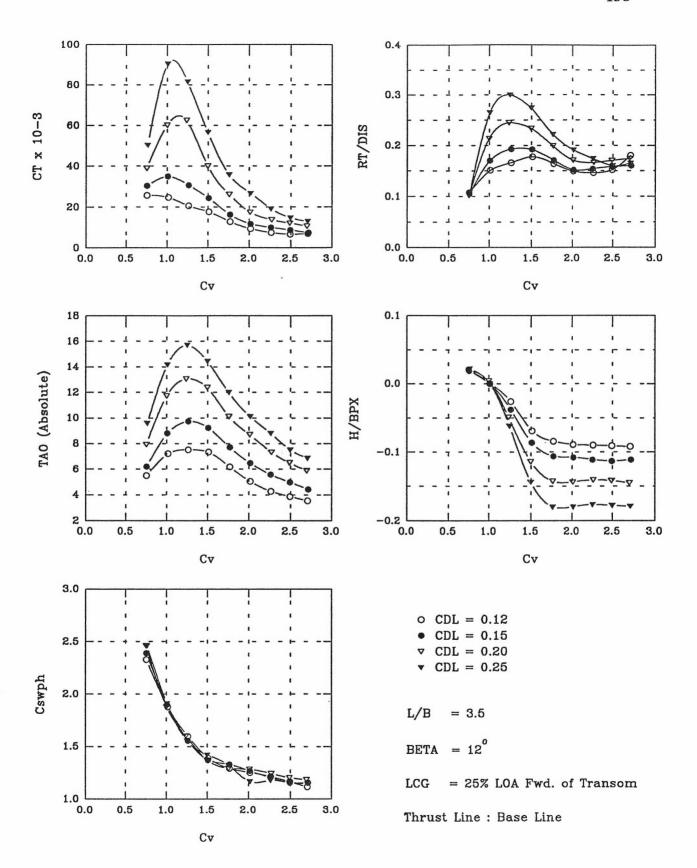


Figure B.18

Model N	lo. T-35	112										
L/B Rat		3	.5		Length (Overal I	OB 40	.50 cm				
Deadris	se .	12	.00 deg	Í	Breath ((Deck) E	3 23	.00 cm			120	`
			entre entre		Breath	(Chine) E	3PX 21	.00 cm			139	,
LCG Pos	sition	25	.00 % I	.OA	20.13	em @ Tra	ansom					
Displac	cement I	OIS 145	8.0 gm	ıs	Disp. Co 6.45 cm	eff. C	CDL 0	.1201				
VCG Pos	ition	28	.04 % B	3	6.45 cm	n @ Base	Line					
Static	trim TA	100 3	.04 deg	_		007	770 1	/m3 Ki	_ ***		0 0550=	
water 1	remp.	22	.uu aeg	C	Density	997	.112 kg	/m3 K1	n. visc	ocity	0.9568E	-06 m2/s
Vel	Dill	Ħ	ሞልር	TC	T.K	SWPH	Cv	CT	PT/DTS	H/BPX	TAO	Cswph
m/s	ama.	Cm 11	dea	CM	LK cm	cm2	CV	x10-3	KI/DIO	III DI A	Abs.	CSWPII
1.082	157.0	0.41	2.46	40.25	55.55	1026.5	0.754	25.70817	0.108	0.020	5.50	2.328
1.454	220.6	0.01	4.17	32.60	44.68	828.4	1.013	24.76270	0.151	0.000	7.21	1.878
1.811	241.9	-0.54	4.48	27.37	38.24	703.3	1.262	20.61636	0.166	-0.026	7.52	1.595
2.174	259.3	-1.44	4.29	22.94	34.21	612.7	1.514	17.61012	0.178	-0.069	7.33	1.389
2.541	239.2	-1.76	3.15	20.53	32.60	569.5	1.770	20.61636 17.61012 12.79278 9.29330 7.40648 6.64757 6.94544	0.164	-0.084	6.19	1.291
2.890	218.0	-1.87	2.01	18.52	33.00	552.3	2.013	9.29330	0.149	-0.089	5.05	1.252
3.245	212.2	-1.89	1.24	16.90	33.00	535.0	2.261	7.40648	0.146	-0.090	4.28	1.213
3.576	222.0	-1.92	0.83	12.89	33.00	401 0	2.492	6.04/3/	0.152	-0.091	3.87	1.164
3.887	202.3	-1.94	0.50	12.40	33.41	491.9	2.708	0.74344	0.100	-0.092	3.34	1.115
Displac	ement T	TS 182	5.0 cm	g	Disn. Co	eff. C	DT. O.	1503				
VCG Pos	ition	27	.96 % B		Disp. Co 6.43 cm	Base	Line	1200				
Water T	emp.	22	.00 deg	C	Density	997	.772 kg	m3 Ki	n. Visc	ocity	0.9568E	-06 m2/s
Vel	. RT	H cm	TAO	LC	LK	SWPH	Cv	CT	RT/DIS	H/BPX	TAO	Cswph
				cm	cm	cm2					Abs.	
1.085								30.32620				2.390
1.444		0.01	4.97	34.21	43.87	837.0	1.006	34.94438	0.170	0.001	8.80	1.898
1.812		-0.79	5.91	28.18	35.82	686.0	1.262	30./9546	0.193	-0.038	9.74	1.556
2.164		-1.81	3.41	24.15	32.20	604.1	1.308	16 25201	0.192	0.086	7 71	1.370
2.892		-2.22	2.65	10 00	32.76	202.3	2 015	10.23231	0.171	-0.106	6.19	1.329 1.266
3.239		-2.28	2.05	13.00	32.20	220.2	2.013	11.00432	0.132	-0.100	0.40	1.200
		_2 32	1 75	17 71	31 00	531 6	2 256	0 03040	0 154	_0 111	5 50	1 205
		-2.32 -2.36	1.75	17.71	31.88	531.6 509.1	2.256	9.93840	0.154	-0.111 -0.113	5.58 4.98	1.205
3.577	288.4	-2.32 -2.36 -2.33	1.75 1.15	17.71 15.62	31.88 31.88 32.76	531.6 509.1 510.0	2.256 2.492 2.715	9.93840 8.70297 7.38876	0.154 0.158 0.160	-0.111 -0.113 -0.111	5.58 4.98 4.43	1.205 1.155
	288.4	-2.32 -2.36 -2.33	1.75 1.15 0.60	17.71 15.62 14.81	31.88 31.88 32.76	531.6 509.1 510.0	2.256 2.492 2.715	34.94438 30.79546 24.41259 16.25291 11.68432 9.93840 8.70297 7.38876	0.154 0.158 0.160	-0.111 -0.113 -0.111	5.58 4.98 4.43	1.205 1.155 1.156
3.577 3.898	288.4 291.1 ement D	IS 243	2.0 qm	s				9.93840 8.70297 7.38876	0.154 0.158 0.160	-0.111 -0.113 -0.111	5.58 4.98 4.43	1.205 1.155 1.156
3.577 3.898 Displac VCG Pos	288.4 291.1 ement D	IS 243:	2.0 gm	s					0.154 0.158 0.160	-0.111 -0.113 -0.111	5.58 4.98 4.43	1.205 1.155 1.156
3.577 3.898 Displac VCG Pos	288.4 291.1 ement D ition	IS 243:	2.0 gm .17 % B	s	Disp. Co	eff. C	DL 0.	2003				
3.577 3.898 Displac VCG Pos	288.4 291.1 ement D ition	IS 243:	2.0 gm .17 % B	s	Disp. Co	eff. C	DL 0.					
3.577 3.898 Displac VCG Pos Static Water T	288.4 291.1 ement D ition trim TA	243: 28: 00 5: 21:	2.0 gm .17 % B .51 deg .50 deg	s C	Disp. Co 6.48 cm Density	peff. C Base 997	EDL 0. Line	2003 /m3 Ki:	n. Visc	ocity	0.9682E	-06 m2/s
3.577 3.898 Displac VCG Pos Static Water T	288.4 291.1 ement D ition trim TA emp.	TS 2433 283 00 55 213	2.0 gm .17 % B .51 deg .50 deg	s C LC	Disp. Co 6.48 cm Density	peff. Con Base	EDL 0. Line .885 kg/	2003 m3 Ki:	n. Visc		0.9682E TAO	
3.577 3.898 Displac VCG Pos Static Water T Vel m/s	288.4 291.1 ement D ition trim TA emp. RT gms	TS 2433 283 00 55 213 H	2.0 gm .17 % B .51 deg .50 deg TAO deg	s C LC cm	Disp. Co 6.48 cm Density LK cm	peff. C Base 997 SWPH cm2	DL 0. Line .885 kg/	2003 /m3 Ki: CT x10-3	n. Visco RT/DIS	ocity H/BPX	0.9682E TAO Abs.	-06 m2/s Cswph
3.577 3.898 Displac VCG Pos Static Water T Vel m/s	288.4 291.1 ement D ition trim TA emp. RT gms	IS 2432 28 00 5 21 H cm	2.0 gm .17 % B .51 deg .50 deg TAO deg	s C LC cm	Disp. Co 6.48 cm Density LK cm	peff. C n @ Base 997 SWPH cm2	DL 0. Line .885 kg/	7n3 Ki. CT x10-3	n. Visco	ocity H/BPX	0.9682E TAO Abs.	-06 m2/s Cswph
3.577 3.898 Displac VCG Pos Static Water T Vel m/s	288.4 291.1 ement D ition trim TA emp. RT gms	IS 2433 283 00 5 213 H cm	2.0 gm .17 % B .51 deg .50 deg TAO deg	C LC CM	Disp. Co 6.48 cm Density LK cm	peff. Con Passes 997 SWPH cm2	DL 0. Line Cv	2003 'm3 Ki: CT x10-3	n. Visco	H/BPX	0.9682E TAO Abs.	-06 m2/s Cswph 2.461
3.577 3.898 Displac VCG Pos Static Water T Vel m/s 	288.4 291.1 ement Dition trim TA emp. RT gms 248.6 519.3	IS 2433 283 00 5 213 H cm	2.0 gm .17 % B .51 deg .50 deg TAO deg	C LC CM	Disp. Co 6.48 cm Density LK cm	peff. Con Passes 997 SWPH cm2	DL 0. Line Cv	2003 'm3 Ki: CT x10-3	n. Visco	H/BPX	0.9682E TAO Abs.	-06 m2/s Cswph 2.461 1.878
3.577 3.898 Displace VCG Posstatic Water T Vel m/s 1.076 1.431 1.772	288.4 291.1 ement Dition trim TA emp. RT gms 248.6 519.3 594.8	IS 2433 283 00 5 213 H cm	2.0 gm .17 % B .51 deg .50 deg TAO deg	C LC CM	Disp. Co 6.48 cm Density LK cm	peff. Con Passes 997 SWPH cm2	DL 0. Line Cv	2003 'm3 Ki: CT x10-3	n. Visco	H/BPX	0.9682E TAO Abs.	-06 m2/s Cswph 2.461 1.878 1.350
3.577 3.898 Displac VCG Pos Static Water T Vel m/s 	288.4 291.1 ement D ition trim TA emp. RT gms 	IS 2433 283 00 5 213 H cm	2.0 gm .17 % B .51 deg .50 deg TAO deg	C LC CM	Disp. Co 6.48 cm Density LK cm	peff. Con Passes 997 SWPH cm2	DL 0. Line Cv	2003 'm3 Ki: CT x10-3	n. Visco	H/BPX	0.9682E TAO Abs.	-06 m2/s Cswph 2.461 1.878
3.577 3.898 Displac VCG Pos Static Water T Vel m/s 	288.4 291.1 ement D ition trim TA emp. RT gms 	243: 2800 55 21: H Cm 0.41 0.08 -1.04 -2.40 -3.00	2.0 gm .17 % B .51 deg .50 deg TAO deg 2.43 6.22 7.56 6.86 4.61	E LC CM 45.48 35.02 28.58 24.95 22.54	Disp. Co 6.48 cm Density LK cm	997 SWPH Cm2 1085.5 828.4 595.4 604.1 569.5	Cv 0.750 0.997 1.235 1.497 1.760	7n3 Ki. CT x10-3	0.102 0.214 0.245 0.234 0.199	0.020 0.004 -0.049 -0.114	7.94 11.73 13.07 10.12	-06 m2/s Cswph
3.577 3.898 Displac VCG Pos Static Water T Vel m/s 	288.4 291.1 ement Dition trim TA emp. RT gms 248.6 519.3 594.8 568.0 484.5 415.9	243: 2800 55 21: H Cm 0.41 0.08 -1.04 -2.40 -3.00	2.0 gm .17 % B .51 deg .50 deg TAO deg 	LC cm 45.48 35.02 28.58 24.95 22.54 21.73	Disp. Cc 6.48 cm Density LK cm 56.35 42.26 26.97 31.40 30.59	997 SWPH cm2 1085.5 828.4 595.4 604.1 569.5 565.2	Cv 0.750 0.997 1.235 1.497 1.760	2003 (m3 Ki: CT x10-3 38.87409 60.16249 62.53648 40.02685 26.21566	n. Visco RT/DIS 0.102 0.214 0.245 0.234 0.199	0.020 0.004 -0.049 -0.114 -0.143	7.94 11.73 13.07 10.12	-06 m2/s Cswph
3.577 3.898 Displac VCG Pos Static Water T Vel m/s 	288.4 291.1 ement Dition trim TA emp. RT gms 248.6 519.3 594.8 568.0 484.5 415.9 402.5	243: 28: 00 5: 11: H cm 0.41 0.08 -1.04 -2.40 -3.00 -3.02	2.0 gm .17 % B .51 deg .50 deg TAO deg 	IC CM 45.48 35.02 28.58 24.95 22.54 21.73 19.32	Disp. Cc 6.48 cm Density LK cm 56.35 42.26 26.97 31.40 30.59 30.99	997 SWPH cm2 1085.5 828.4 595.4 604.1 569.5 565.2	Cv 0.750 0.997 1.235 1.497 1.760 2.008 2.266	2003 CT x10-3 38.87409 60.16249 62.53648 40.02685 26.21566 17.42571	n. Visco RT/DIS 0.102 0.214 0.245 0.234 0.199 0.171 0.166	0.020 0.004 -0.049 -0.114 -0.143	0.9682E TAO Abs. 7.94 11.73 13.07 12.37 10.12 8.70 7.33	-06 m2/s Cswph
3.577 3.898 Displac VCG Pos Static Water T Vel m/s 	288.4 291.1 ement Dition trim TA emp. RT gms 	243: 28. 00 5: 21: H cm 0.41 0.08 -1.04 -2.40 -3.00 -3.00 -3.02 -2.97	2.0 gm .17 % B .51 deg .50 deg TAO deg 	C LC CM 35.02 28.58 24.95 22.54 21.73 19.32 18.11	Disp. Cc 6.48 cm Density LK cm 56.35 42.26 26.97 31.40 30.59 30.99 31.80	997 SWPH cm2	0.750 0.997 1.235 1.497 1.760 2.008 2.266	2003 CT x10-3 38.87409 60.16249 62.53648 40.02685 26.21566 17.42571 13.65637	0.102 0.214 0.245 0.234 0.199 0.171 0.166 0.170	0.020 0.004 -0.049 -0.114 -0.143 -0.144	0.9682E TAO Abs. 7.94 11.73 13.07 12.37 10.12 8.70 7.33 6.50	-06 m2/s Cswph 2.461 1.878 1.350 1.370 1.291 1.282 1.243
3.577 3.898 Displac VCG Pos Static Water T Vel m/s 1.076 1.431 1.772 2.149 2.526 2.881 3.252 3.569 3.872	288.4 291.1 ement Dition trim TA emp. RT gms 248.6 519.3 594.8 568.0 484.5 415.9 402.5 414.4 423.4	243: 283: 285: 21: H Cm 0.41 0.08 -1.04 -2.40 -3.00 -3.02 -2.97 -2.99 -3.04	2.0 gm .17 % B .51 deg .50 deg TAO deg 2.43 6.22 7.56 6.86 4.61 3.19 1.82 0.99 0.37	LC Cm 45.48 35.02 28.58 24.95 22.54 21.73 19.32 18.11 17.31	Disp. Cc 6.48 cm Density LK cm 56.35 42.26 26.97 31.40 30.59 30.99 31.80 31.40	997 SWPH Cm2 1085.5 828.4 595.4 604.1 569.5 565.2 548.0 530.7	Cv 0.750 0.997 1.235 1.497 1.760 2.008 2.266 2.487 2.697	%m3 Kingstands CT	0.102 0.214 0.245 0.234 0.199 0.171 0.166 0.170	0.020 0.004 -0.049 -0.114 -0.143 -0.144	0.9682E TAO Abs. 7.94 11.73 13.07 12.37 10.12 8.70 7.33 6.50	-06 m2/s Cswph
3.577 3.898 Displac VCG Pos Static Water T Vel m/s 1.076 1.431 1.772 2.149 2.526 2.881 3.252 3.569 3.872 Displac	288.4 291.1 ement Dition trim TA emp. RT gms 248.6 519.3 594.8 568.0 484.5 415.9 402.5 414.4 423.4	US 2433 28. 00 5. 21. H cm 	2.0 gm .17 % B .51 deg .50 deg TAO deg 	LC Cm 45.48 35.02 28.58 24.95 22.54 21.73 19.32 18.11 17.31	Disp. Cc 6.48 cm Density LK cm 56.35 42.26 26.97 31.40 30.59 30.99 31.80 31.40 Disp. Cc	997 SWPH cm2 1085.5 828.4 595.4 604.1 569.5 565.2 548.0 530.7 522.1	Cv 0.750 0.997 1.235 1.497 1.760 2.008 2.266 2.487 2.697	CT x10-3 38.87409 60.16249 62.53648 40.02685 26.21566 17.42571 13.65637 12.05264	0.102 0.214 0.245 0.234 0.199 0.171 0.166 0.170	0.020 0.004 -0.049 -0.114 -0.143 -0.144	0.9682E TAO Abs. 7.94 11.73 13.07 12.37 10.12 8.70 7.33 6.50	-06 m2/s Cswph
3.577 3.898 Displac VCG Pos Static Water T Vel m/s 1.076 1.431 1.772 2.149 2.526 2.881 3.252 3.569 3.872 Displac VCG Pos	288.4 291.1 ement D ition trim TA emp. RT gms 	US 243: 28. 00 5. 21. H cm 0.41 0.08 -1.04 -2.40 -3.00 -3.02 -2.97 -2.99 -3.04 US 3042 27.	2.0 gm .17 % B .51 deg .50 deg TAO deg 	S C LC CM 35.02 28.58 24.95 22.54 21.73 19.32 18.11 17.31	Disp. Cc 6.48 cm Density LK cm 56.35 42.26 26.97 31.40 30.59 30.99 31.80 31.40	997 SWPH cm2 1085.5 828.4 595.4 604.1 569.5 565.2 548.0 530.7 522.1	Cv 0.750 0.997 1.235 1.497 1.760 2.008 2.266 2.487 2.697	%m3 Kingstands CT	0.102 0.214 0.245 0.234 0.199 0.171 0.166 0.170	0.020 0.004 -0.049 -0.114 -0.143 -0.144	0.9682E TAO Abs. 7.94 11.73 13.07 12.37 10.12 8.70 7.33 6.50	-06 m2/s Cswph
3.577 3.898 Displac VCG Pos Static Water T Vel m/s 	288.4 291.1 ement D ition trim TA emp. RT gms 	US 243: 28 00 5. 21 H Cm 0.41 0.08 -1.04 -2.40 -3.00 -3.02 -2.97 -2.97 -2.99 -3.04 US 3042 27 00 66	2.0 gm .17 % B .51 deg .50 deg TAO deg 	LC CM 45.48 35.02 28.58 24.95 22.54 21.73 19.32 18.11 17.31	Disp. Co 6.48 cm Density LK cm 56.35 42.26 26.97 31.40 30.59 30.99 31.80 31.40 31.40 Disp. Co 6.34 cm	997 SWPH cm2 1085.5 828.4 595.4 604.1 569.5 565.2 548.0 730.7 522.1	Cv	%3 Ki CT x10-3 38.87409 60.16249 62.53648 40.02685 26.21566 17.42571 13.65637 12.05264 10.63860	0.102 0.214 0.245 0.234 0.199 0.171 0.166 0.170	0.020 0.020 0.004 -0.049 -0.114 -0.143 -0.141 -0.141	0.9682E TAO Abs. 7.94 11.73 13.07 12.37 10.12 8.70 7.33 6.50 5.88	-06 m2/s Cswph 2.461 1.878 1.350 1.370 1.291 1.282 1.243 1.203 1.184
3.577 3.898 Displac VCG Pos Static Water T Vel m/s 	288.4 291.1 ement D ition trim TA emp. RT gms 	US 243: 28 00 5. 21 H Cm 0.41 0.08 -1.04 -2.40 -3.00 -3.02 -2.97 -2.97 -2.99 -3.04 US 3042 27 00 66	2.0 gm .17 % B .51 deg .50 deg TAO deg 	LC CM 45.48 35.02 28.58 24.95 22.54 21.73 19.32 18.11 17.31	Disp. Cc 6.48 cm Density LK cm 56.35 42.26 26.97 31.40 30.59 30.99 31.80 31.40 Disp. Cc	997 SWPH cm2 1085.5 828.4 595.4 604.1 569.5 565.2 548.0 730.7 522.1	Cv	%m3 Kingstands CT	0.102 0.214 0.245 0.234 0.199 0.171 0.166 0.170	0.020 0.020 0.004 -0.049 -0.114 -0.143 -0.141 -0.141	0.9682E TAO Abs. 7.94 11.73 13.07 12.37 10.12 8.70 7.33 6.50 5.88	-06 m2/s Cswph 2.461 1.878 1.350 1.370 1.291 1.282 1.243 1.203 1.184
3.577 3.898 Displace VCG Pos Static Water T Vel m/s 1.076 1.431 1.772 2.149 2.526 2.881 3.252 3.569 3.872 Displace VCG Pos Static Water T	288.4 291.1 ement Dition trim TA emp. RT gms 248.6 519.3 594.8 568.0 484.5 415.9 402.5 414.4 423.4 ement Dition trim TA emp.	US 2433 285 200 55 21. H Cm 	2.0 gm .17 % B .51 deg .50 deg TAO deg 	LC Cm 45.48 35.02 28.58 24.95 22.54 21.73 19.32 18.11 17.31 s	Disp. Co 6.48 cm Density LK cm 56.35 42.26 26.97 31.40 30.59 30.99 31.80 31.40 31.40 Disp. Co 6.34 cm	997 SWPH Cm2 1085.5 828.4 595.4 604.1 569.5 565.2 548.0 530.7 522.1 Deff. C	Cv 0.750 0.997 1.235 1.497 1.760 2.008 2.266 2.487 2.697 EDL 0. Line 1.885 kg/	2003 CT x10-3 38.87409 60.16249 62.53648 40.02685 26.21566 17.42571 13.65637 12.05264 10.63860 2506	0.102 0.214 0.245 0.234 0.199 0.171 0.166 0.170 0.174	0.020 0.004 -0.049 -0.114 -0.143 -0.144 -0.141 -0.145	0.9682E TAO Abs. 7.94 11.73 13.07 12.37 10.12 8.70 7.33 6.50 5.88	-06 m2/s Cswph 2.461 1.878 1.350 1.370 1.291 1.282 1.243 1.203 1.184
3.577 3.898 Displace VCG Posstatic Water T Vel m/s 1.076 1.431 1.772 2.149 2.526 2.881 3.252 3.569 3.872 Displace VCG Posstatic Water T Vel	288.4 291.1 ement D ition trim TA emp. 248.6 519.3 594.8 568.0 484.5 415.9 402.5 414.4 423.4 ement D ition trim TA emp.	US 2433 28.00 5.5 21.1 H cm 0.41 0.08 -1.04 -2.40 -3.00 -3.02 -2.97 -2.99 -3.04 US 27.00 65.21.	2.0 gm .17 % B .51 deg .50 deg TAO deg 	LC Cm 45.48 35.02 28.58 24.95 22.54 21.73 19.32 18.11 17.31 s	Disp. Cc 6.48 cm Density LK cm 56.35 42.26 26.97 31.40 30.59 30.99 31.80 31.40 31.40 Disp. Cc 6.34 cm	997 SWPH Cm2 1085.5 828.4 595.4 604.1 569.5 565.2 548.0 530.7 522.1 ceff. C	Cv	7m3 King CT x10-3 38.87409 60.16249 62.53648 40.02685 26.21566 17.42571 13.65637 12.05264 10.63860 2506	0.102 0.214 0.245 0.234 0.199 0.171 0.166 0.170 0.174	0.020 0.020 0.004 -0.049 -0.114 -0.143 -0.141 -0.141	0.9682E TAO Abs. 7.94 11.73 13.07 12.37 10.12 8.70 7.33 6.50 5.88	-06 m2/s Cswph 2.461 1.878 1.350 1.370 1.291 1.282 1.243 1.203 1.184
3.577 3.898 Displace VCG Pos Static Water T Vel m/s 1.076 1.431 1.772 2.149 2.526 2.881 3.252 3.569 3.872 Displace VCG Pos Static Water T	288.4 291.1 ement Dition trim TA emp. RT gms 248.6 519.3 594.8 568.0 484.5 415.9 402.5 414.4 423.4 ement Dition trim TA emp.	US 2433 285 200 55 21. H Cm 	2.0 gm .17 % B .51 deg .50 deg TAO deg 	LC Cm 45.48 35.02 28.58 24.95 22.54 21.73 19.32 18.11 17.31 s	Disp. Co 6.48 cm Density LK cm 56.35 42.26 26.97 31.40 30.59 30.99 31.80 31.40 31.40 Disp. Co 6.34 cm	997 SWPH Cm2 1085.5 828.4 595.4 604.1 569.5 565.2 548.0 530.7 522.1 Deff. C	0.750 0.997 1.235 1.497 1.760 2.008 2.266 2.487 2.697	2003 CT x10-3 38.87409 60.16249 62.53648 40.02685 26.21566 17.42571 13.65637 12.05264 10.63860 2506	0.102 0.214 0.245 0.234 0.199 0.171 0.166 0.170 0.174	0.020 0.004 -0.049 -0.114 -0.143 -0.144 -0.141 -0.145	0.9682E TAO Abs. 7.94 11.73 13.07 12.37 10.12 8.70 7.33 6.50 5.88	-06 m2/s Cswph 2.461 1.878 1.350 1.370 1.291 1.282 1.243 1.203 1.184
3.577 3.898 Displace VCG Posstatic Water T Vel m/s 1.076 1.431 1.772 2.149 2.526 2.881 3.252 3.569 3.872 Displace VCG Posstatic Water T Vel m/s	288.4 291.1 ement D ition trim TA emp. RT gms 	O 243: 283: 285: 21: H Cm 0.41 0.08 -1.04 -2.40 -3.00 -3.02 -2.97 -2.99 -3.04 IS 3042 277 CO 6.0 21: H Cm	2.0 gm .17 % B .51 deg .50 deg TAO deg 2.43 6.22 7.56 6.86 4.61 3.19 1.82 0.99 0.37 2.0 gm .57 % B .57 % deg TAO	S C LC CM C CM C CM C CM C CM C CM C CM	Disp. Co 6.48 cm Density LK cm 56.35 42.26 26.97 31.40 30.59 31.80 31.40 31.40 Disp. Co 6.34 cm Density	997 SWPH Cm2 1085.5 828.4 595.4 604.1 569.5 565.2 548.0 530.7 522.1 Deff. C	0.750 0.997 1.235 1.497 1.760 2.008 2.266 2.487 2.697 EDL 0. Line	2003 (m3 Kings) CT x10-3 38.87409 60.16249 62.53648 40.02685 26.21566 17.42571 13.65637 12.05264 10.63860 2506 (m3 Kings) CT x10-3	0.102 0.214 0.245 0.234 0.199 0.171 0.166 0.170 0.174	0.020 0.004 -0.049 -0.114 -0.143 -0.144 -0.141 -0.142 -0.145	0.9682E TAO Abs. 7.94 11.73 13.07 12.37 10.12 8.70 7.33 6.50 5.88	-06 m2/s Cswph
3.577 3.898 Displac VCG Pos Static Water T Vel m/s 1.076 1.431 1.772 2.149 2.526 2.881 3.252 3.569 3.872 Displac VCG Pos Static Water T Vel m/s	288.4 291.1 ement D ition trim TA emp. RT gms 	US 243: 283 00 5. 21. H Cm 0.41 0.08 -1.04 -2.40 -3.00 -3.02 -2.97 -2.99 -3.04 US 3042 27. 00 66 21. H Cm 0.47	2.0 gm .17 % B .51 deg .50 deg TAO deg -2.43 6.22 7.56 6.86 4.61 3.19 1.82 0.99 0.37 2.0 gm .57 % B .54 deg TAO deg	LC Cm 45.48 35.02 28.58 24.95 22.54 21.73 19.32 18.11 17.31 s	Disp. Cc 6.48 cm Density LK cm 56.35 42.26 26.97 31.40 30.59 30.99 31.80 31.40 31.40 Disp. Cc 6.34 cm Density	997 SWPH Cm2 1085.5 828.4 595.4 604.1 569.5 565.2 548.0 530.7 522.1 Deff. Cm Base 997 SWPH Cm2	0.750 0.997 1.235 1.497 1.760 2.008 2.266 2.487 2.697 2.697 2.008	2003 (m3 Kings) CT x10-3 38.87409 60.16249 62.53648 40.02685 26.21566 17.42571 13.65637 12.05264 10.63860 2506 (m3 Kings) CT x10-3 50.35249	0.102 0.214 0.245 0.234 0.199 0.171 0.166 0.170 0.174	0.020 0.004 -0.049 -0.114 -0.143 -0.141 -0.142 -0.145	0.9682E TAO Abs. 7.94 11.73 13.07 12.37 10.12 8.70 7.33 6.50 5.88	-06 m2/s Cswph
3.577 3.898 Displace VCG Posstatic Water T Vel m/s 1.076 1.431 1.772 2.149 2.526 2.881 3.252 3.569 3.872 Displace VCG Posstatic Water T Vel m/s	288.4 291.1 ement D ition trim TA emp. 248.6 519.3 594.8 568.0 484.5 415.9 402.5 414.4 423.4 ement D ition trim TA emp. RT gms	US 243: 28. 00 5. 21. H Cm 0.41 0.08 -1.04 -2.40 -3.00 -3.02 -2.97 -2.99 -3.04 IS 3042 27. 00 6. 21. H Cm 0.47 0.02	2.0 gm .17 % B .51 deg .50 deg TAO deg 	LC Cm 45.48 35.02 28.58 24.95 22.54 21.73 19.32 18.11 17.31 S C LC Cm -46.29 36.22	Disp. Co 6.48 cm Density LK cm 56.35 42.26 26.97 31.40 30.59 31.80 31.40 31.40 Disp. Co 6.34 cm Density	997 SWPH Cm2 1085.5 828.4 595.4 604.1 569.5 565.2 548.0 530.7 522.1 beff. Cm Base 997 SWPH Cm2 1085.2 841.3	0.750 0.997 1.235 1.497 1.760 2.008 2.266 2.487 2.697 EDL 0. Line	2003 2003 2003 CT x10-3 38.87409 60.16249 62.53648 40.02685 26.21566 17.42571 13.65637 12.05264 10.63860 2506 2506 2506 CT x10-3 50.35249 90.44013	n. Visco RT/DIS 0.102 0.214 0.245 0.234 0.199 0.171 0.166 0.170 0.174	0.020 0.004 -0.049 -0.114 -0.143 -0.144 -0.141 -0.145 ocity H/BPX	0.9682E TAO Abs. 7.94 11.73 13.07 12.37 10.12 8.70 7.33 6.50 5.88	-06 m2/s Cswph
3.577 3.898 Displac VCG Pos Static Water T Vel m/s 1.076 1.431 1.772 2.149 2.526 2.881 3.252 3.569 3.872 Displac VCG Pos Static Water T Vel m/s	288.4 291.1 ement D ition trim TA emp. RT gms 	US 243: 28. 00 5. 21. H Cm 0.41 0.08 -1.04 -2.40 -3.00 -3.02 -2.97 -2.99 -3.04 US 3042 27. 00 6. 21. H Cm 0.47 0.02 -1.29	2.0 gm .17 % B .51 deg .50 deg TAO deg -2.43 6.22 7.56 6.86 4.61 3.19 1.82 0.99 0.37 2.0 gm .57 % B .54 deg TAO deg	LC Cm 45.48 35.02 28.58 24.95 22.54 21.73 19.32 18.11 17.31 S C LC Cm 46.29 36.22 30.19	Disp. Cc 6.48 cm Density LK cm 56.35 42.26 26.97 31.40 30.59 30.99 31.80 31.40 Disp. Cc 6.34 cm LK cm	997 SWPH Cm2 1085.5 828.4 595.4 604.1 569.5 565.2 548.0 530.7 522.1 ceff. Cc Base 997 SWPH Cm2 1085.2 841.3 686.0	Cv 0.750 0.997 1.235 1.497 1.760 2.008 2.266 2.487 2.697 EDL 0. Line .885 kg/	2003 (m3 Kings) CT x10-3 38.87409 60.16249 62.53648 40.02685 26.21566 17.42571 13.65637 12.05264 10.63860 2506 (m3 Kings) CT x10-3 50.35249	n. Visco RT/DIS 0.102 0.214 0.245 0.199 0.171 0.166 0.170 0.174 n. Visco RT/DIS 0.109 0.265 0.300	H/BPX 0.020 0.004 -0.049 -0.114 -0.143 -0.144 -0.145 ocity H/BPX 0.022 0.001 -0.062	0.9682E TAO Abs. 7.94 11.73 13.07 12.37 10.12 8.70 7.33 6.50 5.88 0.9682E TAO Abs. 9.58 14.17	-06 m2/s Cswph
3.577 3.898 Displace VCG Posstatic Water T Vel m/s 1.076 1.431 1.772 2.149 2.526 2.881 3.252 3.569 3.872 Displace VCG Posstatic Water T Vel m/s	288.4 291.1 ement D ition trim TA emp. 248.6 519.3 594.8 568.0 484.5 415.9 402.5 414.4 423.4 ement D ition trim TA emp. RT gms	Oo 21. H Cm 0.41 0.08 -1.04 -2.40 -3.00 -3.02 -2.97 -2.99 -3.04 IS 3042 27 Co 66 21. H Cm 0.47 0.02 -1.29 -3.03	2.0 gm .17 % B .51 deg .50 deg TAO deg -2.43 6.22 7.56 6.86 4.61 3.19 1.82 0.99 0.37 2.0 gm .57 % B .54 deg .50 deg	C LC Cm	Disp. Cc 6.48 cm Density LK cm 56.35 42.26 26.97 31.40 30.59 30.99 31.80 31.40 Disp. Cc 6.34 cm Density LK cm	997 SWPH Cm2 1085.5 828.4 595.4 604.1 569.5 565.2 548.0 7522.1 Deff. Ce 8 Base 997 SWPH Cm2 1085.2 841.3 686.0 625.6	0.750 0.997 1.235 1.497 1.760 2.008 2.266 2.487 2.697 EDL 0. Line 0.761 1.006 1.247	CT x10-3 38.87409 60.16249 62.53648 40.02685 26.21566 17.42571 13.65637 12.05264 10.63860 2506 CT x10-3 50.35249 90.44013 81.55484	0.102 0.214 0.234 0.199 0.171 0.166 0.170 0.174	H/BPX 0.020 0.004 -0.049 -0.114 -0.143 -0.144 -0.145 ocity H/BPX 0.022 0.001 -0.062	0.9682E TAO Abs. 7.94 11.73 13.07 10.12 8.70 7.33 6.50 5.88 0.9682E TAO Abs. 9.58 14.17 15.71	-06 m2/s Cswph
3.577 3.898 Displace VCG Posstatic Water Towns	288.4 291.1 ement Dition trim TA emp. 248.6 519.3 594.8 568.0 484.5 415.9 402.5 414.4 423.4 ement Dition trim TA emp. RT gms 331.2 806.5 912.0 834.0	US 243: 28. 00 5. 21. H Cm 0.41 0.08 -1.04 -2.40 -3.00 -3.02 -2.97 -2.99 -3.04 US 3042 27. 00 6. 21. H Cm 0.47 0.02 -1.29	2.0 gm .17 % B .51 deg .50 deg TAO deg -2.43 6.22 7.56 6.86 4.61 3.19 1.82 0.99 0.37 2.0 gm 5.57 % B .57 % deg -50 deg TAO deg -3.04 7.63 9.17 7.91	LC Cm 45.48 35.02 28.58 24.95 22.54 21.73 19.32 18.11 17.31 S C LC Cm 46.29 36.22 30.19	Disp. Co 6.48 cm Density LK cm 56.35 42.26 26.97 31.40 30.59 31.80 31.40 31.40 Disp. Co 6.34 cm Density LK cm	997 SWPH Cm2 1085.5 828.4 595.4 604.1 569.5 565.2 548.0 530.7 522.1 ceff. Cc Base 997 SWPH Cm2 1085.2 841.3 686.0	0.750 0.997 1.235 1.497 1.760 2.008 2.266 2.487 2.697 EDL 0. Line 6.885 kg/	%m3 Ki CT x10-3 38.87409 60.16249 62.53648 40.02685 26.21566 17.42571 13.65637 12.05264 10.63860 2506 %m3 Ki CT x10-3 50.35249 90.44013 81.55484 56.66972	0.102 0.214 0.245 0.234 0.199 0.171 0.166 0.170 0.174	0.020 0.049 -0.144 -0.143 -0.144 -0.145 -0.145 -0.145	0.9682E TAO Abs. 7.94 11.73 13.07 12.37 10.12 8.70 7.33 6.50 5.88 0.9682E TAO Abs. 9.58 14.17 15.71 14.45	-06 m2/s Cswph 2.461 1.878 1.350 1.370 1.291 1.282 1.243 1.203 1.184 -06 m2/s Cswph 2.461 1.908 1.556 1.419
3.577 3.898 Displace VCG Posstatic Water Towns	288.4 291.1 ement Dition trim TA emp. RT gms 	IS 243: 283: 2843: 285: 21: H Cm 0.41 0.08 -1.04 -2.40 -3.00 -3.02 -2.97 -2.99 -3.04 IS 3042 277 00 6 21: H Cm 0.47 0.02 -1.29 -3.03 -3.78	2.0 gm .17 % B .51 deg .50 deg TAO deg -2.43 6.22 7.56 6.86 4.61 3.19 1.82 0.99 0.37 2.0 gm .57 % B .54 deg -3.04 7.63 9.17 7.91 5.46	LC Cm 45.48 35.02 28.58 24.95 22.54 21.73 19.32 18.11 17.31 S C LC Cm 46.29 36.22 30.19 26.57 23.75	Disp. Co 6.48 cm Density LK cm 56.35 42.26 26.97 31.40 30.59 31.40 31.40 Disp. Co 6.34 cm Density LK cm	997 SWPH Cm2 1085.5 828.4 595.4 604.1 569.5 565.2 548.0 530.7 522.1 Deff. Cm Base 997 SWPH Cm2 1085.2 841.3 686.0 625.6 582.5	0.750 0.750 0.997 1.235 1.497 1.760 2.008 2.266 2.487 2.697 EDL 0. Line 4.885 kg/ Cv	2003 CT x10-3 38.87409 60.16249 62.53648 40.02685 26.21566 17.42571 13.65637 12.05264 10.63860 2506 CT x10-3 50.35249 90.44013 81.55484 56.66972 35.73913	n. Visco RT/DIS 0.102 0.214 0.245 0.234 0.199 0.171 0.166 0.170 0.174 n. Visco RT/DIS 0.109 0.265 0.300 0.274 0.222 0.191	0.020 0.049 -0.144 -0.143 -0.144 -0.145 -0.145 -0.145	0.9682E TAO Abs. 7.94 11.73 13.07 12.37 10.12 8.70 7.33 6.50 5.88 0.9682E TAO Abs. 9.58 14.17 15.71 14.45 12.00	-06 m2/s Cswph
3.577 3.898 Displace VCG Pos Static Water T Vel m/s 1.076 1.431 1.772 2.149 2.526 2.881 3.252 3.569 3.872 Displace VCG Pos Static Water T Vel m/s Vel m/s 1.092 1.444 1.790 2.151 2.523 2.889	288.4 291.1 ement Dition trim TA emp. RT gms 	IS 243: 288 00 55 21. H Cm 0.41 0.08 -1.04 -2.40 -3.00 -3.02 -2.97 -2.99 -3.04 IS 3042 27.00 6.21 H Cm 0.47 0.02 -1.29 -3.03 -3.78 -3.78	2.0 gm .17 % B .51 deg .50 deg TAO deg 	LC Cm 45.48 35.02 28.58 24.95 22.54 21.73 19.32 18.11 17.31 S C LC Cm 46.29 36.22 30.19 26.57 19.32 19.80	Disp. Cc 6.48 cm Density LK cm 56.35 42.26 26.97 31.40 30.59 31.40 31.40 31.40 Disp. Cc 6.34 cm Density LK cm	997 SWPH Cm2 1085.5 828.4 595.4 604.1 569.5 565.2 548.0 530.7 522.1 eff. Ca @ Base 997 SWPH Cm2	0.750 0.997 1.235 1.497 1.760 2.008 2.266 2.487 2.697 2.697 2.00 2.008 1.266 1.497 1.760 2.008 2.266 2.487 2.697	2003 CT x10-3 38.87409 60.16249 62.53648 40.02685 26.21566 17.42571 13.65637 12.05264 10.63860 2506 CT x10-3 50.35249 90.44013 81.55484 56.66972 35.73913 26.69096	n. Visco RT/DIS 0.102 0.214 0.245 0.234 0.199 0.171 0.166 0.170 0.174 n. Visco RT/DIS 0.109 0.265 0.300 0.274 0.222 0.191 0.174	0.020 0.004 -0.049 -0.114 -0.143 -0.144 -0.145 -0.145 -0.145	0.9682E TAO Abs. 7.94 11.73 13.07 12.37 10.12 8.70 7.33 6.50 5.88 0.9682E TAO Abs. 9.58 14.17 15.71 14.45 12.00 10.11	-06 m2/s Cswph
3.577 3.898 Displace VCG Posstatic Water T Vel m/s 1.076 1.431 1.772 2.149 2.526 2.881 3.252 3.569 3.872 Displace VCG Posstatic Water T Vel m/s 1.092 1.444 1.790 2.151 2.523 2.889 3.237	288.4 291.1 ement Dition trim TA emp. RT gms 	IS 243: 28. 00 5. 21. H Cm 0.41 0.08 -1.04 -2.40 -3.00 -3.02 -2.97 -2.99 -3.04 IS 3042 27. 00 6. 21. H Cm 0.47 0.02 -1.29 -3.03 -3.78 -3.78 -3.72	2.0 gm .17 % B .51 deg .50 deg .50 deg .50 deg .50 6.86 4.61 3.19 1.82 0.99 0.37 2.0 gm .57 % deg .57 % deg	C LC cm	Disp. Cc 6.48 cm Density LK cm 56.35 42.26 26.97 31.40 30.59 30.99 31.80 31.40 Disp. Cc 6.34 cm LK cm Density LK cm	997 SWPH cm2 1085.5 828.4 595.4 604.1 569.5 565.2 548.0 7522.1 Deff. Ce 8 Base 997 SWPH cm2 1085.2 841.3 686.0 625.6 582.5 513.5 513.5 513.6	Cv 0.750 0.997 1.235 1.497 1.760 2.008 2.266 2.487 2.697 EDL 0. Line 885 kg/	2003 CT x10-3 38.87409 60.16249 62.53648 40.02685 26.21566 17.42571 13.65637 12.05264 10.63860 2506 CT x10-3 50.35249 90.44013 81.55484 56.66972 35.73913 26.69096 19.14230	n. Visco RT/DIS 0.102 0.214 0.234 0.199 0.171 0.166 0.170 0.174 n. Visco RT/DIS 0.265 0.300 0.274 0.222 0.191 0.174	0.020 0.004 -0.049 -0.114 -0.141 -0.141 -0.145 -0.145 -0.145 -0.145 -0.145	0.9682E TAO Abs. 7.94 11.73 13.07 12.37 10.12 8.70 7.33 6.50 5.88 0.9682E TAO Abs. 9.58 14.17 15.71 14.45 12.00 10.11 8.80	-06 m2/s Cswph

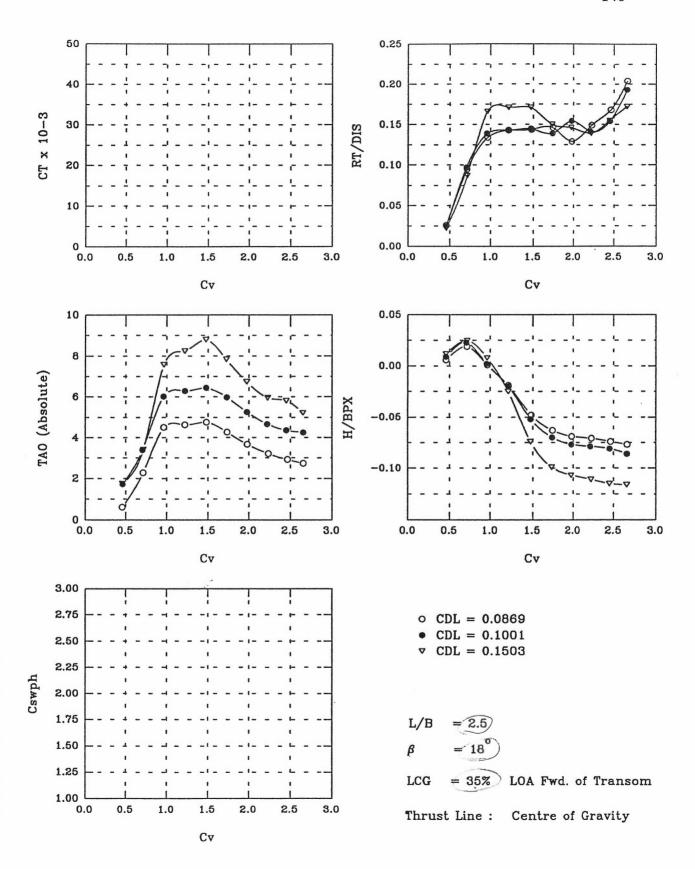


Figure B.19

LCG Position

Water Temp.

Water Temp.

Deadrise

35.00 % LOA

Length Overal LOA Breath (Deck) B Breath (Chine) BPX 20.13 cm @ Transom 57.50 cm 23.00 cm 21.00 cm

0.0869

Displacement DIS 1055.0 gms VCG Position 25.13 % B Static trim TAOO 0.53 deg

21.00 deg C

Disp. Coeff. CDL 5.78 cm @ Base Line

21.00 deg C 997.994 kg/m3 Kin. Viscocity 0.9798E-06 m2/s Density

Vel m/s	RT gms	H	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	СТ ж10-3	RT/DIS	н/врх	TAO Abs.	Cwsph
0.657	27.5	0.13	0.08	0.00	0.00	0.0	0.458	0.00000	0.026	0.006	0.61	0.000
1.023	100.7	0.40	1.76	0.00	0.00	0.0	0.713	0.00000	0.095	0.019	2.29	0.000
1.383	141.5	0.03	3.97	0.00	0.00	0.0	0.963	0.00000	0.134	0.001	4.50	0.000
1.746	150.5	-0.39	4.10	0.00	0.00	0.0	1.217	0.00000	0.143	-0.019	4.63	0.000
2.129	151.4	-1.00	4.23	0.00	0.00	0.0	1.483	0.00000	0.144	-0.048	4.76	0.000
2.491	154.1	-1.32	3.74	0.00	0.00	0.0	1.736	0.00000	0.146	-0.063	4.27	0.000
2.842	135.9	-1.45	3.14	0.00	0.00	0.0	1.980	0.00000	0.129	-0.069	3.67	0.000
3.205	157.5	-1.50	2.68	0.00	0.00	0.0	2.233	0.00000	0.149	-0.071	3.21	0.000
3.536	177.7	-1.56	2.39	0.00	0.00	0.0	2.464	0.00000	0.168	-0.074	2.92	0.000
3.811	214.7	-1.61	2.21	0.00	0.00	0.0	2.655	0.00000	0.204	-0.077	2.74	0.000

Displacement DIS 1216.0 gms VCG Position 24.91 % B Static trim TAOo 1.64 deg

Disp. Coeff. CDL 0.1001 5.73 cm @ Base Line

997.994 kg/m3 Kin. Viscocity 0.9798E-06 m2/s Density

Vel m/s	RT gms	H	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
0.659	30.1	0.19	0.09	0.00	0.00	0.0	0.459	0.00000	0.025	0.009	1.73	0.000
1.009	118.4	0.48	1.74	0.00	0.00	0.0	0.703	0.00000	0.097	0.023	3.38	0.000
1.375	169.4	0.03	4.38	0.00	0.00	0.0	0.958	0.00000	0.139	0.002	6.02	0.000
1.749	173.9	-0.41	4.65	0.00	0.00	0.0	1.219	0.00000	0.143	-0.020	6.29	0.000
2.118	176.6	-1.08	4.80	0.00	0.00	0.0	1.476	0.00000	0.145	-0.052	6.44	0.000
2.488	169.1	-1.46	4.33	0.00	0.00	0.0	1.734	0.00000	0.139	-0.070	5.97	0.000
2.836	187.2	-1.62	3.62	0.00	0.00	0.0	1.976	0.00000	0.154	-0.077	5.26	0.000
3.182	171.9	-1.66	3.03	0.00	0.00	0.0	2.217	0.00000	0.141	-0.079	4.67	0.000
3.516	187.8	-1.71	2.72	0.00	0.00	0.0	2.450	0.00000	0.154	-0.081	4.36	0.000
3.809	234.7	-1.81	2.62	0.00	0.00	0.0	2.654	0.00000	0.193	-0.086	4.26	0.000

Displacement DIS 1825.0 gms VCG Position 25.13 % B 1.72 deg 21.00 deg C Static trim TAOo Water Temp.

Disp. Coeff. CDL 0.1503 5.78 cm @ Base Line

997.994 kg/m3 Kin. Viscocity 0.9798E-06 m2/s Density

Vel m/s	RT gms	H cm	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
0.656	39.8	0.25	0.04	0.00	0.00	0.0	0.457	0.00000	0.022	0.012	1.76	0.000
1.025	158.6	0.53	1.69	0.00	0.00	0.0	0.714	0.00000	0.087	0.025	3.41	0.000
1.380	303.1	0.18	5.85	0.00	0.00	0.0	0.962	0.00000	0.166	0.008	7.57	0.000
1.745	312.1	-0.52	6.53	0.00	0.00	0.0	1.216	0.00000	0.171	-0.025	8.25	0.000
2.114	312.7	-1.55	7.09	0.00	0.00	0.0	1.473	0.00000	0.171	-0.074	8.81	0.000
2.476	274.3	-2.08	6.12	0.00	0.00	0.0	1.725	0.00000	0.150	-0.099	7.84	0.000
2.830	266.6	-2.24	5.02	0.00	0.00	0.0	1.971	0.00000	0.146	-0.107	6.74	0.000
3.192	253.7	-2.33	4.23	0.00	0.00	0.0	2.224	0.00000	0.139	-0.111	5.95	0.000
3.513	282.0	-2.41	4.09	0.00	0.00	0.0	2.448	0.00000	0.155	-0.115	5.81	0.000
3.802	313.6	-2.44	3.50	0.00	0.00	0.0	2.649	0.00000	0.172	-0.116	5.22	0.000

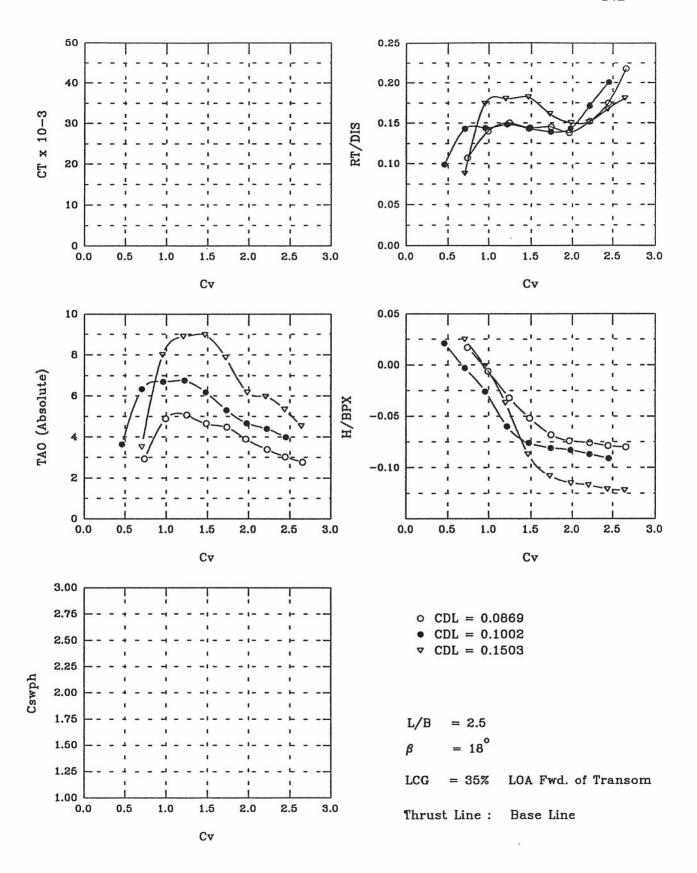


Figure B.20

0.0869

143

Breath (Chine) BPX LCG Position 35.00 % LOA 20.13 cm @ Transom

Displacement DIS 1055.0 gms Disp. Coeff. CDL 25.13 % B VCG Position 5.78 cm @ Base Line

Static trim TAOo 0.53 deg Water Temp. 21.50 deg C Density 997.885 kg/m3 Kin. Viscocity 0.9682E-06 m2/s

Vel m/s	RT gms	H cm	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
1.055 1.423 1.788 2.132 2.492 2.816 3.188	113.2 148.0 158.2 152.1 153.0 145.2 160.3	0.36 -0.12 -0.68 -1.09 -1.43 -1.56	2.39 4.36 4.52 4.11 3.94 3.37 2.85	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	0.0 0.0 0.0 0.0 0.0	0.735 0.991 1.246 1.486 1.736 1.962 2.221	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.150 0.144 0.145 0.138 0.152	0.017 -0.006 -0.032 -0.052 -0.068 -0.074 -0.076	2.92 4.89 5.05 4.64 4.47 3.90 3.38	0.000 0.000 0.000 0.000 0.000 0.000
3.507 3.810	185.0 230.2	-1.65 -1.68	2.50 2.24	0.00	0.00	0.0	2.444 2.654	0.00000		-0.079 -0.080	3.03 2.77	0.000

Disp. Coeff. CDL 5.73 cm @ Base Line 0.1002 Displacement DIS 1216.0 gms

24.91 % B VCG Position 1.64 deg Static trim TAOo

Density 997.885 kg/m3 Kin. Viscocity 0.9682E-06 m2/s Water Temp. 21.50 deg C CV RT/DIS H/BPX Vel RT H LC LK WSPH CT TAO TAO . Cwsph m/s x10-3 gms CM Rel. Cm CM cm2 Abs. 1.003 120.3 0.44 1.99 0.00 0.00 0.0 0.699 0.00000 0.099 0.021 3.63 0.000 1.371 173.9 -0.06 4.69 0.00 0.00 0.0 0.955 0.00000 0.143 -0.003 6.33 0.000

1.725 175.0 -0.55 5.06 0.00 0.00 0.0 1.202 0.00000 0.144 -0.026 6.70 0.000 1.469 0.148 -0.060 0.000 -1.25 0.0 0.00000 2.108 179.8 0.00 0.00 6.75 5.11 0.000 0.00000 2.459 174.5 -1.604.54 0.00 0.00 0.0 1.713 0.143 -0.076 6.18 0.139 -0.081 2.811 169.2 -1.713.66 0.00 0.00 0.0 1.959 0.00000 5.30 0.000 4.67 3.168 173.4 -1.75 3.03 0.00 0.00 0.0 2.208 0.00000 0.143 -0.083 0.000 0.00000 0.171 -0.087 0.00000 0.201 -0.091 3.495 207.8 -1.83 2.76 0.00 0.00 0.0 2.435 4.40 0.000 0.000 3.782 -1.90 3.98

0.0 2.635 245.0 2.34 0.00 0.00 Displacement DIS 1825.0 gms Disp. Coeff. CDL 0.1503 25.13 % B VCG Position 5.78 cm @ Base Line

1.72 deg Static trim TAOo Kin. Viscocity 0.9682E-06 m2/s Water Temp. 21.50 deg C Density 997.885 kg/m3

Vel RT H TAO LC LK WSPH CV CT RT/DIS H/BPX TAO Cwsph m/s qms CM Rel. CM CM cm2 x10-3 Abs. 1.007 161.1 0.52 1.79 0.00 0.00 0.0 0.702 0.00000 0.088 0.025 3.51 0.000 0.00000 0.000 1.363 -0.01 0.00 0.00 0.174 -0.001 8.00 0.0 0.950 317.0 6.28 0.180 -0.037 0.000 1.725 329.3 -0.79 7.17 0.00 0.00 0.0 1.202 0.00000 8.89 2.103 333.0 -1.83 7.26 0.00 0.00 0.0 1.465 0.00000 0.182 -0.087 8.98 0.000 0.161 -0.108 2.469 0.00 1.720 0.00000 7.87 0.000 294.6 -2.276.15 0.00 0.0 0.150 -0.115 0.000 2.842 273.8 -2.42 4.46 0.00 0.00 0.0 1.980 0.00000 6.18 0.0 2.203 0.0 2.435 0.00000 3.162 276.1 0.00 0.00 0.151 -0.117 5.97 0.000 -2.45 4.25 0.167 -0.121 3.494 305.2 -2.55 3.62 0.00 0.00 0.00000 5.34 0.000 3.786 330.0 -2.56 0.00 0.00 0.0 2.638 0.00000 0.181 -0.122 4.54 0.000 2.82

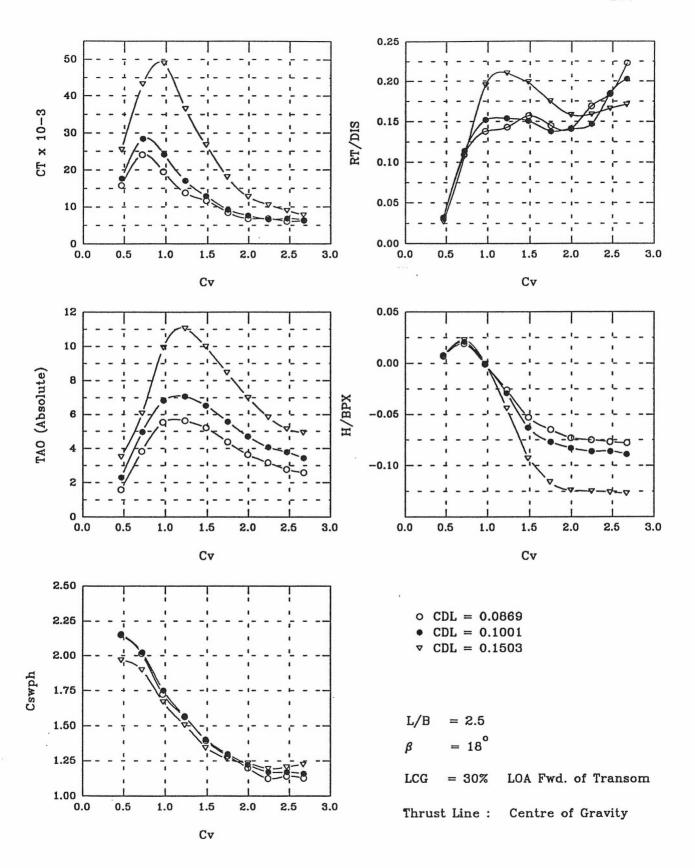


Figure B.21

TOUGH MO. T TOTO					
L/B Ratio	2.5	Length Overal	LOA	57.50	CM
Deadrise	18.00 deg	Breath (Deck)		23.00	
		Breath (Chine)	BPX	21.00	CM
LCG Position	30.00 % LOA	17.25 cm @ T	ransom		

Displacement DIS 1055.0 gms Disp. Coeff. CDL 0.0869 VCG Position 25.87 % B 5.95 cm @ Base Line Static trim TAOo 1.27 deg

Water Temp. 21.00 deg C Density 997.994 kg/m3 Kin. Viscocity 0.9798E-06 m2/s Vel RT H TAO LC T.K WSPH CV CT RT/DIS H/BPX TAO Cwaph m/s qms cm Rel. cm x10-3 Abs. CM cm2 0.032 0.007 0.669 33.9 0.14 947.0 1.59 2.148

0.466 0.32 31.63 52.89 15.76165 1.028 115.0 0.39 2.57 33.06 47.77 888.6 0.716 24.08283 0.109 0.019 3.84 2.015 1.391 146.0 -0.03 4.27 25.88 43.13 759.5 0.969 19.53279 0.138 -0.001 5.54 1.722 1.767 150.7 -0.55 4.36 40.25 689.4 1.231 13.76586 0.143 -0.026 5.63 1.563 22.43 2.133 17.83 38.03 11.62414 0.157 -0.053 1.393 165.2 -1.123.94 614.4 1.486 5.21 2.509 8.43887 0.145 -0.065 152.9 -1.37 3.11 14.66 36.80 566.1 1.748 4.38 1.284 2.857 149.1 -1.53 36.56 1.991 6.79113 0.141 - 0.0733.64 1.199 2.37 11.50 528.7 6.84359 0.169 -0.075 3.214 178.1 -1.581.91 37.27 2.239 3.18 1.123 7.76 495.3 3.540 194.6 -1.61 1.51 6.61 39.10 502.8 2.467 6.06960 0.184 - 0.0772.78 1.140 3.839 235.3 -1.63 1.31 40.79 2.675 6.32475 0.223 -0.078 2.58 1.126 4.31 496.4

Displacement DIS 1216.0 gms Disp. Coeff. CDL 0.1001 VCG Position 25.61 % B 5.89 cm @ Base Line Static trim TAOO 1.97 deg

Water Temp. 21.00 deg C Density 997.994 kg/m3 Kin. Viscocity 0.9798E-06 m2/s

Vel RT TAO LC T.K WSPH CT RT/DIS H/BPX TAO H Cwsph x10-3 m/s Abs. ams CM Rel. CID CID cm2 2.156 38.4 0.670 0.18 0.34 31.63 53.14 950.8 0.467 17.70563 0.032 0.008 2.31 47.64 28.47129 1.035 138.6 0.45 3.01 33.64 892.4 0.721 0.114 0.021 4.98 2.023 1.397 185.4 -0.03 4.85 27.31 42.84 771.7 0.974 24.18729 0.152 -0.001 6.82 1.750 0.154 -0.029 7.07 1.568 1.762 186.7 -0.625.10 23.00 39.86 691.4 1.228 17.09965 0.151 -0.063 2.127 183.4 -1.314.56 18.69 37.53 618.4 1.482 12.89327 6.53 1.402 168.1 2.509 -1.61 3.61 15.81 36.22 572.4 1.748 9.17003 0.138 -0.077 5.58 1.298 2.859 171.7 -1.75 2.74 12.94 36.04 538.8 1.992 7.66605 0.141 -0.083 4.71 1.222 3.219 179.0 -1.80 10.06 36.87 516.3 2.243 6.57691 0.147 -0.086 4.08 1.171 2.11 3.545 8.05 6.84013 0.185 -0.086 3.79 225.4 -1.801.82 38.81 515.5 2.470 1.169 3.836 0.203 -0.089 3.44 1.159 246.7 -1.86 1.47 5.75 40.68 510.9 2.673 6.44949

Displacement DIS 1825.0 gms Disp. Coeff. CDL 0.1503 VCG Position 25.61 % B 5.89 cm @ Base Line Static trim TAOO 3.24 deq

Water Temp. 21.00 deg C Density 997.994 kg/m3 Kin. Viscocity 0.9798E-06 m2/s

Vel RT Н LC WSPH CV CT RT/DIS H/BPX TAO Cwsph TAO LK x10-3 m/s gms cm Rel. CM CM cm2 Abs. 867.9 0.667 50.1 0.15 0.27 31.63 47.27 0.465 25.46517 0.027 0.007 3.51 1.968 1.031 195.8 0.48 2.83 34.50 42.22 837.5 0.718 43.21615 0.107 0.023 6.07 1.899 0.195 -0.000 1.395 -0.01 735.5 0.972 9.94 1.668 356.4 6.70 28.75 38.20 48.92541 1.764 384.0 -0.91 25.01 35.36 663.8 1.229 36.54740 0.210 -0.044 11.06 1.505 7.82 9.99 362.5 591.4 1.479 0.199 -0.093 2.123 -1.956.75 21.28 32.49 26.75076 1.341 2.123 362.5 -1.95 6.75 21.28 32.49 591.4 1.479 26.75076 0.199 -0.093 9.99 1.341 2.495 318.7 -2.43 5.23 18.69 31.91 556.6 1.738 18.08218 0.175 -0.116 8.47 1.262 2.858 287.8 -2.59 3.76 16.39 33.06 544.0 1.991 12.73434 0.158 -0.124 7.00 1.233 3.215 290.9 2.240 0.159 -0.125 5.84 1.193 14.09 526.1 10.52127 -2.62 2.60 33.74 1.205 0.166 -0.126 3.539 303.7 -2.65 1.91 12.36 35.94 531.3 2.466 8.97198 5.15 7.76190 0.171 -0.127 3.830 312.5 -2.66 1.69 10.92 38.13 539.6 2.668 4.93 1.224

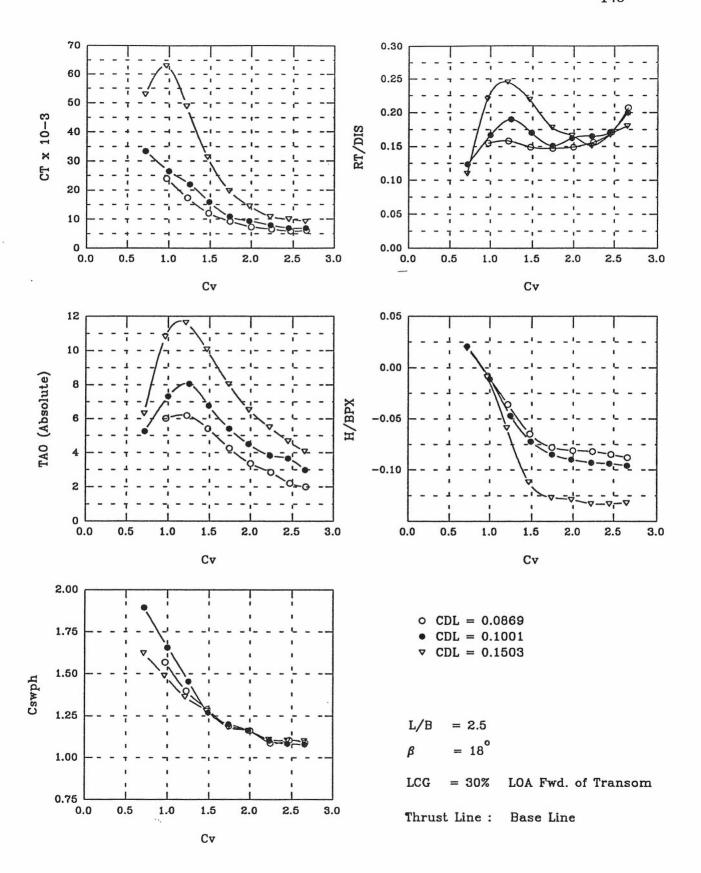


Figure B.22

LCG Position 30.00 % LOA

17.25 cm @ Transom

Disp. Coeff. CDL 5.95 cm @ Base Line 0.0869

Displacement DIS 1055.0 gms VCG Position 25.87 % B

1.27 deg Static trim TAOo Water Temp. 21.00 deg C Density 997.994 kg/m3 Kin. Viscocity 0.9798E-06 m2/s

Vel m/s	RT gms	H cm	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
1.394	164.0	-0.16	4.74	24.67	38.24	691.6	0.972	23.97511	0.155	-0.008	6.01	1.568
1.753	166.4	-0.77	4.92	20.13	35.94	616.7	1.221	17.26743	0.158	-0.036	6.19	1.398
2.124	157.5	-1.36	4.14	16.79	34.90	568.6	1.480	12.06868	0.149	-0.065	5.41	1.289
2.502	155.2	-1.64	3.00	13.22	34.50	525.0	1.743	9.28533	0.147	-0.078	4.27	1.190
2.868	157.2	-1.71	2.09	11.50	35.09	512.4	1.998	7.33096	0.149	-0.081	3.36	1.162
3.219	164.9	-1.71	1.58	7.19	36.40	479.5	2.243	6.52430	0.156	-0.082	2.85	1.087
3.542	180.7	-1.78	0.94	5.75	38.53	487.0	2.468	5.81283	0.171	-0.085	2.21	1.104
3.821	218.0	-1.86	0.74	3.16	40.50	480.4	2.662	6.11204	0.207	-0.088	2.01	1.089

Disp. Coeff. CDL 0.1001 5.89 cm @ Base Line Displacement DIS 1216.0 gms

25.61 % B VCG Position Static trim TAOo 1.97 deg

Water Temp. 21.00 deg C Density 997.994 kg/m3 Kin. Viscocity 0.9798E-06 m2/s

Vel m/s	RT gms	H Cm	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	СТ х10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
1.030	150.8	0.45	3.29	30.67	45.54	836.2	0.718	33.41932	0.124	0.021	5.26	1.896
1.436	202.8	-0.24	5.35	25.59	40.83	730.1	1.000	26.47791	0.167	-0.011	7.32	1.656
1.795	230.8	-1.00	6.09	21.26	37.03	641.2	1.250	21.96890	0.190	-0.047	8.06	1.454
2.139	206.6	-1.52	4.79	17.25	33.64	559.8	1.490	15.85929	0.170	-0.072	6.76	1.269
2.499	183.1	-1.78	3.44	14.66	33.53	530.1	1.741	10.87379	0.151	-0.085	5.41	1.202
2.834	196.4	-1.89	2.54	12.08	34.50	512.3	1.975	9.38158	0.162	-0.090	4.51	1.162
3.199	201.1	-1.94	1.87	10.06	34.16	486.4	2.229	7.94178	0.165	-0.093	3.84	1.103
3.512	208.4	-1.98	1.70	7.47	35.94	477.5	2.447	6.95466	0.171	-0.094	3.67	1.083
3.811	243.2	-2.02	1.01	5.17	38.07	475.7	2.655	6.92116	0.200	-0.096	2.98	1.079

Disp. Coeff. CDL 0.1503 5.89 cm @ Base Line Displacement DIS 1825.0 gms VCG Position 25.61 % B

3.24 deg 21.00 deg C Static trim TAOo

Water Temp. 997.994 kg/m3 Density Kin. Viscocity 0.9798E-06 m2/s

	Vel m/s	RT gms	H cm	TAO Rel.	LC cm	LK cm	WSPH cm2	CA	CT x10-3	RT/DIS	н/врх	TAO Abs.	Cwsph
•	1.021 1.380 1.731 2.104 2.486 2.836 3.189 3.512 3.801	200.9 401.0 447.9 399.4 324.4 302.5 275.0 305.6 328.6	0.41 -0.20 -1.25 -2.35 -2.67 -2.71 -2.80 -2.80	3.07 7.57 8.39 6.83 4.80 3.28 2.26 1.45	29.82 26.49 23.00 20.52 17.25 15.53 12.94 11.21 9.78	35.35 33.27 31.63 30.84 30.19 31.05 31.58 33.06 34.32	715.2 657.0 600.9 564.9 521.8 512.3 489.7 487.0 485.0	0.712 0.962 1.206 1.466 1.732 1.976 2.222 2.447	52.93862 62.96442 48.88689 31.38546 19.77070 14.43758 10.85422 9.99902	0.220 0.245 0.219 0.178 0.166 0.151 0.167	0.019 -0.009 -0.059 -0.112 -0.127 -0.129 -0.133 -0.133	6.31 10.81 11.63 10.07 8.04 6.52 5.50 4.69 4.08	1.622 1.490 1.363 1.281 1.183 1.162 1.110 1.104
	3.001	320.0	-2.11	0.04	3.10	34.32	403.0	2.040	9.22030	0.100	-0.132	4.00	1.100

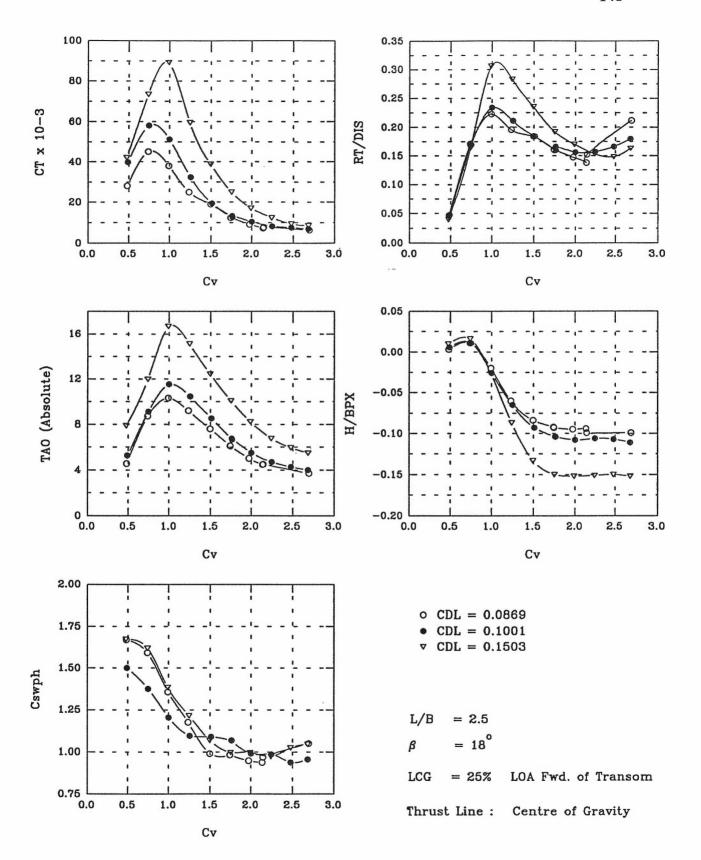


Figure B.23

Model No L/B Rati Deadrise LCG Posi Displace VCG Posi	io e ition ement D	2 18 25 IS 105	5 .00 deg .00 % L	OA s	14.38 C	Deck) B Chine) B m @ Tra	PX 21 nsom	.50 cm .00 cm .00 cm			1	149
Static t Water Te		.00 3	.92 deg		Density			/m3 Ki	n. Visc	ocity	0.1016E	-05 m2/s
Vel m/s	RT gms	H	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	СТ ж10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
0.690 1.061 1.425 1.771 2.150 2.500 2.504 2.832 3.069 3.079 3.864	206.7 193.6 169.5 169.0 155.4 145.1 160.5	-2.00 -1.97	0.64 4.81 6.40 5.29 3.68 2.19 2.16 1.08 0.55 0.58	21.85 25.01 20.43 16.52 12.36 10.64 10.64 6.61 6.04	28.75 31.34 31.63 33.06	735.9 701.6 598.9 518.9 436.4 433.3 437.4 414.3	0.481 0.739 0.992 1.234 1.498 1.742 1.744 1.973 2.138 2.145	27.99144 45.02802 38.01115 24.96577 18.86593 12.229673 12.22858 9.12601 7.30763 7.79508 6.36566	0.171 0.223 0.196 0.184 0.161 0.160 0.147 0.138 0.152	-0.020 -0.060 -0.084 -0.092 -0.093 -0.095 -0.094		1.669 1.591 1.358 1.177 0.990 0.982 0.982 0.947 0.939 0.968 1.051
Displace VCG Posi			6.0 gm		Disp. Co			.1001				
Static t Water Te			.45 deg		Density	998	.206 kg	/m3 Ki	n. Visc	ocity	0.1004E	-05 m2/s
Vel m/s	RT gms	H	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	CT x10-3		H/BPX	TAO Abs.	Cwsph
0.701 1.074 1.436 1.799 2.171 2.532 2.525 2.870 3.226 3.557 3.848	57.9 206.8 285.0 256.8 223.9 194.5 202.1 189.6	0.12 0.24 -0.55 -1.35 -1.95 -2.19 -2.18 -2.26 -2.23 -2.25	0.81 4.69 7.09 6.00 4.09	23.58 27.03 20.70 16.39 15.93 14.66 9.49 8.26 4.31	29.18 28.18 27.60 27.60 27.83 28.18 28.18 30.19 31.32 33.35 35.13	580.2 607.1 531.3 483.9 481.3 471.2 471.2 436.4 435.4	0.489 0.748 1.000 1.253 1.513 1.764 1.759 2.000 2.248 2.478	39.88205 58.07320 51.15565 32.23207 19.39039 12.65079 13.22416 10.36424 8.28098 7.56907 6.88013	0.048 0.170 0.234 0.211 0.184 0.160 0.156 0.157	0.006 0.011 -0.026 -0.065 -0.093 -0.104 -0.108 -0.106 -0.107 -0.111	5.26 9.14 11.54 10.45 8.54 6.65 6.74 5.51	1.316 1.377 1.205 1.097 1.069 1.069 0.990 0.987 0.939 0.955
Displace VCG Posi Static t	ition	25	5.0 gm .61 % B .81 deg		Disp. Co 5.89 cm	@ Base	Line	.1503				
Water Te	emp. RT		.00 deg		Density		.206 kg.	/m3 Ki: CT		H/BPX	0.1004E-	environment v
m/s	gms	H CM	TAO Rel.	LC cm	LK cm	WSPH cm2		x10-3			Abs.	Cwsph
0.682 1.061 1.420 1.785 2.147 2.512 2.853 3.215 3.554 3.848	73.5 300.0 557.6 516.9 428.0 350.8 310.4 278.6 269.3 297.3	0.21 0.34 -0.55 -1.82 -2.79 -3.15 -3.19 -3.16 -3.14	1.06 5.17 9.85 8.32 5.64 3.27 1.43 -0.05 -0.86 -1.33	27.03 30.19	40.13 34.89 31.05	737.8 714.1 610.2 535.9 471.2 439.6 439.6	0.475 0.739	42.03624 73.42946 89.12012 59.48695 38.71648 24.85908 17.05494 12.34355 9.26881 8.55335	0.040 0.164 0.306 0.283 0.235 0.192 0.170 0.153 0.148		7.87 11.98 16.66 15.13 12.45 10.08 8.24 6.76 5.95 5.48	1.673 1.619 1.384 1.215 1.069 0.997 0.997 0.973 1.025 1.046

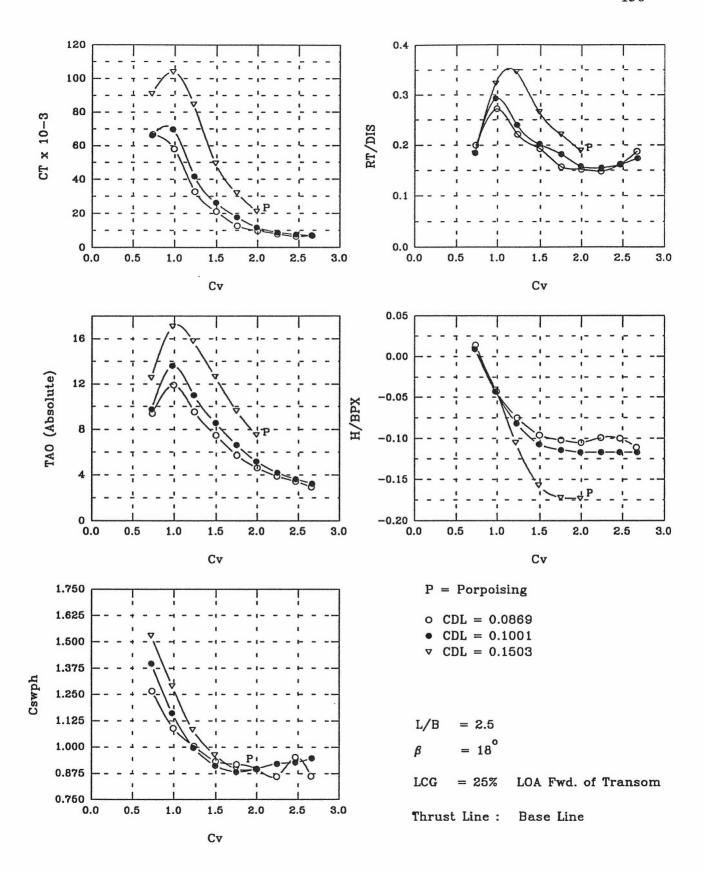


Figure B.24

Model No. T-2518 2.5 Length Overal LOA Breath (Deck) B L/B Ratio 57.50 cm Deadrise 18.00 deg 23.00 cm 151 Breath (Chine) BPX 21.00 cm 25.00 % LOA LCG Position 14.38 cm @ Transon Displacement DIS 1055.0 gms VCG Position 25.96 % B Disp. Coeff. CDL 5.97 cm @ Base Line 0.0869 3.92 deg Static trim TAOO Water Temp. 20.50 deg C Density 998.101 kg/m3 Kin. Viscocity 0.9916E-06 m2/s Vel RT H TAO WSPH RT/DIS H/BPX LC CT TAO Cwsph m/s cm qms Cm Rel. x10-3 Abs. CM cm2 1.054 210.7 0.30 5.48 24.44 558.3 0.734 66.80870 0.200 0.014 9.40 26.32 1.266 0.272 -0.043 1.422 287.2 -0.90 7.98 17.84 480.4 58.09867 25.83 0.991 11.90 1.089 1.237 1.776 232.7 -1.58 5.61 14.38 25.88 442.8 32.76419 0.221 -0.075 9.53 1.004 2.147 203.4 -2.02 3.57 11.50 25.88 411.1 1.496 21.10811 0.193 -0.096 7.49 0.932 2.511 1.750 165.3 -2.13 1.80 9.49 27.31 404.8 12.72887 0.157 -0.102 5.72 0.918 2.868 160.2 -2.20 0.69 7.76 28.18 395.3 1.998 9.68215 0.152 -0.105 4.61 0.896 3.215 156.7 -2.09 7.84998 0.148 -0.099 -0.04 29.91 379.6 2.240 3.88 0.861 4.60 3.541 6.38417 171.0 -2.11 -0.496.35 31.81 419.8 2.467 0.162 -0.100 3.43 0.952 0.187 -0.111 3.816 197.3 -2.32 -0.98 0.86 33.69 380.0 2.659 7.00798 2.94 0.862 Displacement DIS 1216.0 gms Disp. Coeff. CDL 0.1001 5.89 cm @ Base Line 25.61 % B VCG Position Static trim TAOo 4.45 deg Water Temp. 998.101 kg/m3 Kin. Viscocity 0.9916E-06 m2/s 20.50 deg C Density CT Vel RT H TAO LC LK WSPH CV RT/DIS H/BPX TAO Cwsph x10-3 m/s Rel. Abs. qms CM CM CM cm2 1.041 224.6 0.19 5.29 24.55 31.45 615.9 0.725 66.21155 0.185 0.009 9.74 1.397 1.401 512.3 0.976 69.68270 0.293 -0.043 356.6 -0.90 9.16 19.26 27.31 13.61 1.162 1.768 291.9 -1.736.54 15.24 24.72 439.6 1.232 41.75806 0.240 -0.082 10.99 0.997 -2.25 402.3 26.19231 0.202 -0.107 2.141 245.6 4.12 12.31 24.27 1.491 8.57 0.912 2.509 -2.40 25.30 389.0 1.748 395.3 1.989 17.77198 0.182 -0.114 0.882 221.4 2.17 10.06 6.62 2.855 192.6 -2.46 0.74 8.63 27.31 11.74571 0.158 -0.117 5.19 0.896 406.1 2.242 408.6 2.465 3.218 188.1 -2.45 -0.26 8.17 28.75 8.79441 0.155 -0.117 4.19 0.921 3.538 195.9 -2.46 -0.81 8.40 28.75 7.53107 0.161 -0.117 3.64 0.927 3.827 212.1 -2.46 -1.21 9.20 28.75 417.5 2.666 6.81986 0.174 -0.117 3.24 0.947 Displacement DIS 1825.0 gms Disp. Coeff. CDL 5.89 cm @ Base Line 0.1503 25.61 % B VCG Position Static trim TAOo 6.81 deg Water Temp. 20.50 deg C Density 998.101 kg/m3 Kin. Viscocity 0.9916E-06 m2/s Vel RT H TAO LC T.K WSPH CV CT RT/DIS H/BPX TAO Cwsph m/s gms CM Rel. CM x10-3 Abs. CM Cm2 1.036 335.1 0.19 5.76 28.18 33.21 674.7 0.722 90.99901 0.184 0.009 12.57 1.530 1.400 590.3 -0.84 28.26 569.1 0.976 104.00810 0.323 -0.040 23.47 17.09 1.290 10.28 1.751 631.6 -2.21 8.98 18.69 24.72 477.5 1.220 84.74731 0.346 -0.105 15.79 1.083 2.114 600.6 -3.91 5.86 15.63 23.16 426.7 1.473 61.93186 0.329 -0.186 12.67 0.968 2.131 485.4 -3.30 5.85 15.49 23.11 424.6 1.485 395.3 1.744 49.48265 0.266 -0.157 12.66 0.963 2.504 402.7 -3.62 12.94 23.00 31.94937 0.221 - 0.1722.81 0.896 9.62 2.850

344.9 -3.63

** Porpoising

0.72 11.50 24.44

395.3 1.986

21.11404 0.189 -0.173

7.53

0.896

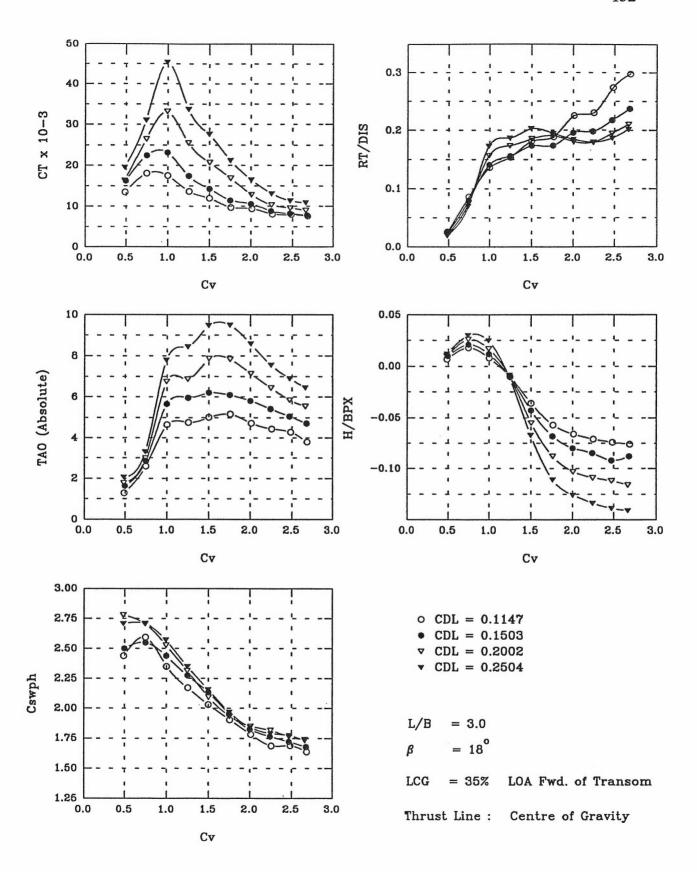


Figure B.25

Model No. T-3018 L/B Ratio 3.0 Length Overal LOA 69.00 cm Deadrise 18.00 deg Breath (Deck) B 23.00 cm 153 Breath (Chine) BPX 21.00 cm LCG Position 35.00 % LOA 24.15 cm @ Transom Displacement DIS 1393.0 qms Disp. Coeff. CDL 0.1147 29.26 % B VCG Position 6.73 cm @ Base Line Static trim TAOo 1.25 deg Water Temp. 19.80 deg C Density 998.267 kg/m3 Kin. Viscocity 0.1009E-05 m2/s Vel RT WSPH H TAO TC T.K CV CT RT/DTS H/RPX TAO Cwsph m/s x10-3 oms CT Rel. CM CM cm2 Ahe. 0.698 36.0 0.15 0.04 34.50 61.89 1075.0 0.487 13.50519 0.026 0.007 1.29 2.438 0.018 1.070 120.0 0.39 1.35 48.30 58.24 1143.5 18.00398 0.086 2.593 0.746 2.60 1.435 189.9 0.18 3.39 39.68 55.20 1036.8 1.000 17.48697 0.136 0.008 4.64 2.351 1.799 214.9 34.16 956.8 1.253 13.63633 0.154 -0.010 -0.213.51 52.85 4.76 2.170 2.157 5.01 253.5 -0.76 3.76 0.182 -0.036 30.36 50.99 895.0 1.503 11.96389 2.030 2.527 263.8 -1.193.91 26.56 49.68 839.4 1.761 9.66970 0.189 -0.057 5.16 1.903 785.9 2.886 314.0 -1.393.48 22.43 48.99 2.011 9.42490 0.225 -0.066 4.73 1.782 3.239 320.4 -1.50 3.20 18.97 48.65 744.0 2.256 8.07083 0.230 -0.071 4.45 1.687 3.04 3.566 -1.562.484 7.93207 0.274 -0.074 4.29 1.688 382.0 18.29 49.34 744.3 3.854 414.5 -1.592.54 15.53 50.03 721.9 2.685 7.59784 0.298 -0.076 3.79 1.637 Displacement DIS 1825.0 gms CDL Disp. Coeff. 0.1503 28.39 % B 6.53 cm. @ Base Line VCG Position Static trim TAOo 1.52 deg Water Temp. 998.267 kg/m3 0.1009E-05 m2/s 19.80 deg C Density Kin. Viscocity Vel WSPH RT H TAO LC LK CV CT RT/DIS H/BPX TAO Cwsph gms m/s Rel. x10-3Abs. CM CM CM cm2 0.709 45.9 0.22 0.12 37.95 61.69 1103.4 0.494 16.25651 0.025 0.010 1.64 2.502 1.069 0.745 0.080 2.551 146.8 0.45 1.33 44.85 59.00 1124.9 22.44107 0.021 2.85 0.994 1.426 257.9 0.24 55.55 1075.8 23.16548 0.141 0.012 2.439 4.13 43.82 5.65 1.793 284.9 -0.21 4.44 37.74 53.82 1002.5 1.249 17.36895 0.156 -0.010 5.96 2.273 2.155 317.5 -0.91 4.68 33.47 52.10 940.8 1.501 14.28497 0.174 -0.043 6.20 2.133 2.518 318.2 -1.434.57 28.29 49.89 860.4 1.754 11.46251 0.174 -0.068 6.09 1.951 2.871 804.5 2.000 10.58814 0.196 -0.080 5.81 1.824 357.2 -1.68 4.29 24.84 48.30 8.81085 3.217 0.198 -0.085 361.0 -1.783.90 22.43 48.30 778.0 2.242 5.42 1.764 3.546 396.9 -1.933.54 20.70 48.30 759.0 2.471 8.17284 0.217 -0.092 5.06 1.721 3.843 432.2 -1.85 3.20 18.63 48.65 740.2 2.677 7.77126 0.237 -0.088 4.72 1.678 Displacement DIS 2432.0 gms VCG Position 28.52 % B CDL 0.2002 Disp. Coeff. 6.56 cm @ Base Line Static trim TAOo 1.69 deg 998.308 kg/m3 Water Temp. 19.50 deg C Density Kin. Viscocity 0.1016E-05 m2/s Vel RT H TAO LC LK WSPH CV CT RT/DIS H/BPX TAO Cwsph x10-3 m/s ams CM Rel. CID CM cm2 Abs. 2.780 0.691 48.5 0.21 0.09 44.85 67.01 1226.0 0.481 16.28161 0.020 0.010 1.78 1.064 182.0 0.56 1.30 55.20 60.03 1193.8 0.741 26.48850 0.075 0.026 2.99 2.707 1.423 380.8 0.36 5.06 47.61 56.24 1115.0 0.992 33.13839 0.157 0.017 6.75 2.528 1.786 5.17 42.09 51.64 1020.3 25.54617 6.86 2.314 422.9 -0.201.244 0.174 - 0.0092.157 451.8 -1.166.18 35.45 48.69 922.4 1.503 20.69364 0.186 -0.055 7.87 2.092 2.519 463.4 -1.85 6.15 31.05 46.58 852.8 1.755 16.82501 0.191 -0.088 7.84 1.934 2.876 816.1 2.004 1.851 440.7 -2.16 5.45 27.98 46.23 12.83174 0.181 -0.103 7.14 3.226 437.9 -2.29 4.75 25.88 46.92 800.7 2.248 10.32523 0.180 -0.109 6.44 1.816 3.546 475.0 9.54285 0.195 -0.112 5.85 1.764 -2.364.16 23.46 47.27 778.0 2.471 3.821 511.4 -2.44 3.85 22.08 47.61 766.6 2.662 8.97832 0.210 -0.116 5.54 1.738 3042.0 gms Displacement DIS Disp. Coeff. CDL 0.2504 6.37 cm @ Base Line 27.70 % B VCG Position Static trim TAOo 1.95 deg Water Temp. 19.50 deg C Density 998.308 kg/m3 Kin. Viscocity 0.1016E-05 m2/s Vel WSPH CT RT TAO LC RT/DIS H/BPX TAO H LK CV Cwsph x10-3m/s ams CM Rel. CI Cm · cm2 Abs. 0.692 56.8 0.25 51.75 62.10 1194.4 0.482 19.53178 0.019 0.012 2.06 2.708 0.11 31.06665 1.061 212.6 0.63 1.35 59.00 61.07 1193.9 0.739 0.070 0.030 3.30 2.707 1.419 527.4 0.52 5.84 49.68 56.93 1133.9 0.989 45.38473 0.173 0.025 7.79 2.571 1.789 568.5 -0.24 6.49 43.13 52.39 1036.4 1.246 33.69921 0.187 - 0.0118.44 2.350 27.64867 0.203 -0.067 9.48 2.156 2.149 617.5 -1.407.53 37.95 49.01 950.8 1.497 2.518 592.6 -2.33 7.55 32.78 46.23 867.5 1.754 21.17193 0.195 -0.111 9.50 1.967 2.873 2.001 16.46877 0.185 -0.126 8.59 1.841 561.3 -2.65 6.64 28.98 44.85 811.7 3.225 547.8 -2.81 5.61 26.91 44.85 789.4 2.247 13.11586 0.180 -0.134 7.56 1.790 781.8 0.187 -0.139 6.90 3.548 4.95 24.84 2.472 11.35547 1.773 568.5 -2.9246.23 3.819 614.8 -2.96 4.50 22.77 46.58 762.8 2.661 10.86055 0.202 - 0.1416.45 1.730

<u>Table B.25</u> L/B = 3.0; β = 18°; L_{cg} = 35%; Thrust Line: Centre of Gravity

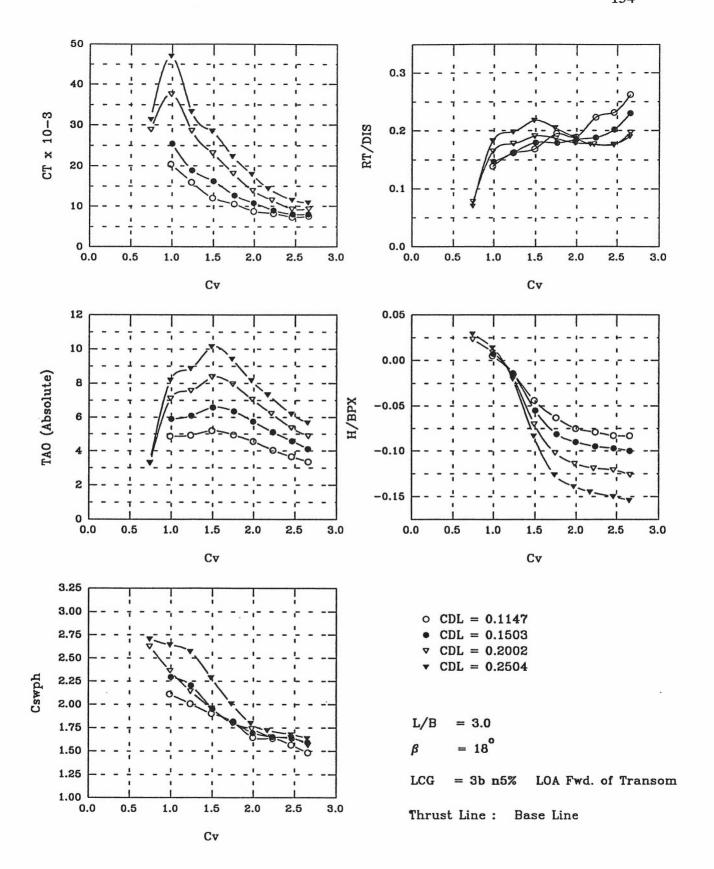


Figure B.26

					_							
Model 1	No. T-30	18										
L/B Ra		3	. 0		Length (veral I	ΩA 69	.00 cm				
Deadri			.00 deg	ī	Breath (.00 cm			1	55
						Chine) E		.00 cm			1.	55
LCG Po	sition	35	.00 % I	.OA		m @ Tra						
	cement D				Disp. Co			.1147				
VCG Po			.26 % E		6.73 cm	a @ Base	Line					
	trim TA		.25 deg									-
Water	Temp.	19	.50 deg	C	Density	998	.308 kg	/m3 Ki	n. Visc	ocity	0.1016E	-05 m2/s
*** 7	DM.	••	m						/	** /pp.	===	1
Vel	RT	H	TAO	LC	LK	WSPH	CV	CT	RT/DIS	H/BPX		Cwsph
m/s	gms	cm	Rel.	cm	CM	cm2		x10-3			Abs.	
1.412	193.1	0.11	3.63	30.70			0.984			0.005	4.88	2.111
1.774		-0.29	3.68	28.64			1.236			-0.014		2.008
2.138	235.8		3.95	26.56	49.68		1.490			-0.044		1.903
2.514		-1.31		24.50			1.751	10.56055		-0.063	4.96	1.816
2.859	263.5	-1.57			46.58		1.992	8.73864	0.189	-0.075	4.57	1.644
3.206	310.4	-1.66		17.94		721.1	2.234	8.22965	0.223	-0.079	4.05	1.635
3.529		-1.74	2.41	15.18	47.61		2.459	7.34739	0.231	-0.083	3.66	1.566
3.816	364.7	-1.75	2.12	12.08	47.27	652.7	2.658	7.54245	0.262	-0.083	3.37	1.480
n:		T 100										
	cement D				Disp. Co			.1503				
VCG Pos	sition trim TA		.39 % B		6.53 CH	ı @ Base	Line					
Water '			.52 deg .50 deg		Dengity	999	308 kg	/m3 Ki	n Wiece	ocity	0.10168	_05 m2/a
Water	remp.	19	. Ju deg	C	Densicy	330	.300 kg	/MJ KI	II. ATSC	ocicy	0.10101	-03 M2/S
Vel	RT	н	TAO	LC	LK	WSPH	CV	CT	RT/DIS	H/BPX	TAO	Cwsph
m/s	gms	cm	Rel.	cm	cm	cm2	1077.00	x10-3	,		Abs.	<u>-</u>
1.430	268.3	0.14	4.37	37.95	54.51	1012.2	0.997	25.46206	0.147	0.007	5.89	2.295
1.784	297.8	-0.32	4.57	36.22		972.3	1.243	18.92450	0.163	-0.015	6.09	2.205
2.154	329.1	-1.15	5.06	30.02	48.30	860.6	1.501	16.19799	0.180	-0.055	6.58	1.951
2.520	326.1	-1.69	4.83	25.88	46.58	797.0	1.756	12.66311	0.179	-0.081	6.35	1.807
2.861		-1.90	4.23	23.11	44.85		1.993	10.82373	0.185	-0.090	5.75	1.695
3.209	342.7			21.39	44.85		2.235	8.97783		-0.095	5.12	1.652
3.537	367.8	-2.05	3.08	18.97			2.464	8.01629		-0.097		1.635
3.812	419.1	-2.11	2.60	16.22	47.61	702.1	2.656	8.07399	0.230	-0.100	4.12	1.592
Dienla	cement D	TC 2/2) A am	~	Disp. Co	off C	DL 0	.2002				
VCG Po	gition	243	.52 % B	.5	6.56 cm			.2002				
	trim TA				0.50 Ca	e Dasc	DINC					
Water '		19	50 deg	C	Density	998	.308 kg	/m3 Ki	n. Visc	ocity	0.1016E-	-05 m2/s
			•							-		
Vel	RT	H	TAO	LC	LK	WSPH	CV	CT	RT/DIS	H/BPX		Champh .
m/s	gms	cm	2 - 7			****					TAO	Cwsph
			Rel.	cm	cm	cm2		x10-3	•		Abs.	Cwspn
1.059					cm							
1.416	190.6	0.49	1.61	43.69	62.34	Cm2	0.738	x10-3 	0.078	0.023	Abs. 3.30	2.625
	400.1	0.49 0.19	1.61 5.41	43.69 39.47	62.34 55.78	Cm2 1157.6 1042.3	0.738 0.987	x10-3 28.86681 37.60378	0.078 0.165	0.009	Abs. 3.30 7.10	2.625 2.363
1.774	400.1 432.8	0.49 0.19 -0.38	1.61 5.41 5.88	43.69 39.47 35.60	62.34 55.78 50.57	Cm2 1157.6 1042.3 945.2	0.738 0.987 1.236	x10-3 28.86681 37.60378 28.59488	0.078 0.165 0.178	0.009 -0.018	Abs. 3.30 7.10 7.57	2.625 2.363 2.143
1.774 2.137	400.1 432.8 464.4	0.49 0.19 -0.38 -1.47	1.61 5.41 5.88 6.69	43.69 39.47 35.60 32.03	62.34 55.78 50.57 46.65	1157.6 1042.3 945.2 864.1	0.738 0.987 1.236 1.489	x10-3 28.86681 37.60378 28.59488 23.13800	0.078 0.165 0.178 0.191	0.009 -0.018 -0.070	3.30 7.10 7.57 8.38	2.625 2.363 2.143 1.959
1.774 2.137 2.496	400.1 432.8 464.4 455.5	0.49 0.19 -0.38 -1.47 -2.15	1.61 5.41 5.88 6.69 6.27	43.69 39.47 35.60 32.03 28.64	62.34 55.78 50.57 46.65 43.47	1157.6 1042.3 945.2 864.1 792.8	0.738 0.987 1.236 1.489 1.739	x10-3 28.86681 37.60378 28.59488 23.13800 18.12077	0.078 0.165 0.178 0.191 0.187	0.009 -0.018 -0.070 -0.102	3.30 7.10 7.57 8.38 7.96	2.625 2.363 2.143 1.959 1.798
1.774 2.137 2.496 2.839	400.1 432.8 464.4 455.5 435.2	0.49 0.19 -0.38 -1.47 -2.15 -2.40	1.61 5.41 5.88 6.69 6.27 5.37	43.69 39.47 35.60 32.03 28.64 26.22	62.34 55.78 50.57 46.65 43.47 43.47	Cm2 1157.6 1042.3 945.2 864.1 792.8 766.6	0.738 0.987 1.236 1.489 1.739 1.978	x10-3 28.86681 37.60378 28.59488 23.13800 18.12077 13.84432	0.078 0.165 0.178 0.191 0.187 0.179	0.009 -0.018 -0.070 -0.102 -0.114	3.30 7.10 7.57 8.38 7.96 7.06	2.625 2.363 2.143 1.959 1.798 1.738
1.774 2.137 2.496 2.839 3.177	400.1 432.8 464.4 455.5 435.2 429.5	0.49 0.19 -0.38 -1.47 -2.15 -2.40 -2.50	1.61 5.41 5.88 6.69 6.27 5.37 4.54	43.69 39.47 35.60 32.03 28.64 26.22 23.11	62.34 55.78 50.57 46.65 43.47 43.47	Cm2 1157.6 1042.3 945.2 864.1 792.8 766.6 728.6	0.738 0.987 1.236 1.489 1.739 1.978 2.214	x10-3 	0.078 0.165 0.178 0.191 0.187 0.179	0.009 -0.018 -0.070 -0.102 -0.114 -0.119	3.30 7.10 7.57 8.38 7.96 7.06 6.23	2.625 2.363 2.143 1.959 1.798 1.738
1.774 2.137 2.496 2.839 3.177 3.525	400.1 432.8 464.4 455.5 435.2 429.5 427.3	0.49 0.19 -0.38 -1.47 -2.15 -2.40 -2.50 -2.55	1.61 5.41 5.88 6.69 6.27 5.37 4.54 3.69	43.69 39.47 35.60 32.03 28.64 26.22 23.11 21.39	62.34 55.78 50.57 46.65 43.47 43.47 43.13	1157.6 1042.3 945.2 864.1 792.8 766.6 728.6 724.8	0.738 0.987 1.236 1.489 1.739 1.978 2.214 2.456	x10-3 28.86681 37.60378 28.59488 23.13800 18.12077 13.84432 11.47690 9.32278	0.078 0.165 0.178 0.191 0.187 0.179 0.177	0.009 -0.018 -0.070 -0.102 -0.114 -0.119 -0.121	3.30 7.10 7.57 8.38 7.96 7.06 6.23 5.38	2.625 2.363 2.143 1.959 1.798 1.738 1.652 1.644
1.774 2.137 2.496 2.839 3.177	400.1 432.8 464.4 455.5 435.2 429.5	0.49 0.19 -0.38 -1.47 -2.15 -2.40 -2.50 -2.55	1.61 5.41 5.88 6.69 6.27 5.37 4.54 3.69	43.69 39.47 35.60 32.03 28.64 26.22 23.11 21.39	62.34 55.78 50.57 46.65 43.47 43.47	1157.6 1042.3 945.2 864.1 792.8 766.6 728.6 724.8	0.738 0.987 1.236 1.489 1.739 1.978 2.214	x10-3 	0.078 0.165 0.178 0.191 0.187 0.179 0.177	0.009 -0.018 -0.070 -0.102 -0.114 -0.119 -0.121	3.30 7.10 7.57 8.38 7.96 7.06 6.23	2.625 2.363 2.143 1.959 1.798 1.738
1.774 2.137 2.496 2.839 3.177 3.525 3.816	400.1 432.8 464.4 455.5 435.2 429.5 427.3 478.2	0.49 0.19 -0.38 -1.47 -2.15 -2.40 -2.50 -2.55 -2.65	1.61 5.41 5.88 6.69 6.27 5.37 4.54 3.69 3.21	43.69 39.47 35.60 32.03 28.64 26.22 23.11 21.39 19.32	62.34 55.78 50.57 46.65 43.47 43.47 43.13 44.51 43.47	1157.6 1042.3 945.2 864.1 792.8 766.6 728.6 724.8 690.7	0.738 0.987 1.236 1.489 1.739 1.978 2.214 2.456 2.659	x10-3 28.86681 37.60378 28.59488 23.13800 18.12077 13.84432 11.47690 9.32278 9.34202	0.078 0.165 0.178 0.191 0.187 0.179 0.177	0.009 -0.018 -0.070 -0.102 -0.114 -0.119 -0.121	3.30 7.10 7.57 8.38 7.96 7.06 6.23 5.38	2.625 2.363 2.143 1.959 1.798 1.738 1.652 1.644
1.774 2.137 2.496 2.839 3.177 3.525 3.816	400.1 432.8 464.4 455.5 435.2 429.5 427.3 478.2 cement D	0.49 0.19 -0.38 -1.47 -2.15 -2.40 -2.50 -2.55 -2.65	1.61 5.41 5.88 6.69 6.27 5.37 4.54 3.69 3.21	43.69 39.47 35.60 32.03 28.64 26.22 23.11 21.39 19.32	62.34 55.78 50.57 46.65 43.47 43.13 44.51 43.47 Disp. Co	1157.6 1042.3 945.2 864.1 792.8 766.6 728.6 724.8 690.7	0.738 0.987 1.236 1.489 1.739 1.978 2.214 2.456 2.659	x10-3 28.86681 37.60378 28.59488 23.13800 18.12077 13.84432 11.47690 9.32278	0.078 0.165 0.178 0.191 0.187 0.179 0.177	0.009 -0.018 -0.070 -0.102 -0.114 -0.119 -0.121	3.30 7.10 7.57 8.38 7.96 7.06 6.23 5.38	2.625 2.363 2.143 1.959 1.798 1.738 1.652 1.644
1.774 2.137 2.496 2.839 3.177 3.525 3.816 Displac	400.1 432.8 464.4 455.5 435.2 429.5 427.3 478.2 cement D	0.49 0.19 -0.38 -1.47 -2.15 -2.40 -2.50 -2.55 -2.65 IS 3042	1.61 5.41 5.88 6.69 6.27 5.37 4.54 3.69 3.21	43.69 39.47 35.60 32.03 28.64 26.22 23.11 21.39 19.32	62.34 55.78 50.57 46.65 43.47 43.47 43.13 44.51 43.47	1157.6 1042.3 945.2 864.1 792.8 766.6 728.6 724.8 690.7	0.738 0.987 1.236 1.489 1.739 1.978 2.214 2.456 2.659	x10-3 28.86681 37.60378 28.59488 23.13800 18.12077 13.84432 11.47690 9.32278 9.34202	0.078 0.165 0.178 0.191 0.187 0.179 0.177	0.009 -0.018 -0.070 -0.102 -0.114 -0.119 -0.121	3.30 7.10 7.57 8.38 7.96 7.06 6.23 5.38	2.625 2.363 2.143 1.959 1.798 1.738 1.652 1.644
1.774 2.137 2.496 2.839 3.177 3.525 3.816 Displac	400.1 432.8 464.4 455.5 435.2 429.5 427.3 478.2 cement D sition trim TA	0.49 0.19 -0.38 -1.47 -2.15 -2.40 -2.55 -2.65 IS 3042 27 Oo 10	1.61 5.41 5.88 6.69 6.27 5.37 4.54 3.69 3.21	43.69 39.47 35.60 32.03 28.64 26.22 23.11 21.39 19.32	62.34 55.78 50.57 46.65 43.47 43.13 44.51 43.47 Disp. Co	1157.6 1042.3 945.2 864.1 792.8 766.6 728.6 724.8 690.7	0.738 0.987 1.236 1.489 1.739 1.978 2.214 2.456 2.659	x10-3 28.86681 37.60378 28.59488 23.13800 18.12077 13.84432 11.47690 9.32278 9.34202	0.078 0.165 0.178 0.191 0.187 0.179 0.177 0.176 0.197	0.009 -0.018 -0.070 -0.102 -0.114 -0.119 -0.121 -0.126	Abs. 3.30 7.10 7.57 8.38 7.96 7.06 6.23 5.38 4.90	2.625 2.363 2.143 1.959 1.798 1.738 1.652 1.644
1.774 2.137 2.496 2.839 3.177 3.525 3.816 Displace VCG Postatic	400.1 432.8 464.4 455.5 435.2 429.5 427.3 478.2 cement D sition trim TA	0.49 0.19 -0.38 -1.47 -2.15 -2.40 -2.55 -2.65 IS 3042 27 Oo 10	1.61 5.41 5.88 6.69 6.27 5.37 4.54 3.69 3.21 2.0 gm	43.69 39.47 35.60 32.03 28.64 26.22 23.11 21.39 19.32	62.34 55.78 50.57 46.65 43.47 43.13 44.51 43.47 Disp. Co 6.37 cm	1157.6 1042.3 945.2 864.1 792.8 766.6 728.6 724.8 690.7	0.738 0.987 1.236 1.489 1.739 2.214 2.456 2.659 DL 0	x10-3 28.86681 37.60378 28.59488 23.13800 18.12077 13.84432 11.47690 9.32278 9.34202	0.078 0.165 0.178 0.191 0.187 0.179 0.177 0.176 0.197	0.009 -0.018 -0.070 -0.102 -0.114 -0.119 -0.121 -0.126	Abs. 3.30 7.10 7.57 8.38 7.96 7.06 6.23 5.38 4.90	2.625 2.363 2.143 1.959 1.798 1.738 1.652 1.644 1.566
1.774 2.137 2.496 2.839 3.177 3.525 3.816 Display VCG Postatic Water	400.1 432.8 464.4 455.5 435.2 429.5 427.3 478.2 cement D sition trim TA	0.49 0.19 -0.38 -1.47 -2.15 -2.40 -2.55 -2.65 IS 3042 27 Oo 10	1.61 5.41 5.88 6.69 6.27 5.37 4.54 3.69 3.21 2.0 gm	43.69 39.47 35.60 32.03 28.64 26.22 23.11 21.39 19.32	62.34 55.78 50.57 46.65 43.47 43.13 44.51 43.47 Disp. Co 6.37 cm	1157.6 1042.3 945.2 864.1 792.8 766.6 728.6 724.8 690.7	0.738 0.987 1.236 1.489 1.739 2.214 2.456 2.659 DL 0	x10-3 28.86681 37.60378 28.59488 23.13800 18.12077 13.84432 11.47690 9.32278 9.34202 .2504 /m3 Kin	0.078 0.165 0.178 0.191 0.187 0.179 0.177 0.176 0.197	0.009 -0.018 -0.070 -0.102 -0.114 -0.119 -0.121 -0.126	Abs. 3.30 7.10 7.57 8.38 7.96 7.06 6.23 5.38 4.90 0.1016E-TAO	2.625 2.363 2.143 1.959 1.798 1.738 1.652 1.644 1.566
1.774 2.137 2.496 2.839 3.177 3.525 3.816 Display VCG Postatic Water	400.1 432.8 464.4 455.5 435.2 429.5 427.3 478.2 cement D sition trim TA	0.49 0.19 -0.38 -1.47 -2.15 -2.40 -2.50 -2.55 -2.65 IS 3042 27.00 19.00	1.61 5.41 5.88 6.69 6.27 5.37 4.54 3.69 3.21 2.0 gm 7.70 % B .95 deg	43.69 39.47 35.60 32.03 28.64 26.22 23.11 21.39 19.32	62.34 55.78 50.57 46.65 43.47 43.47 43.13 44.51 43.47 Disp. Co 6.37 cm	1157.6 1042.3 945.2 864.1 792.8 766.6 728.6 728.6 690.7 eff. C	0.738 0.987 1.236 1.489 1.739 1.978 2.214 2.456 2.659 DL 0 Line .308 kg	x10-3 28.86681 37.60378 28.59488 23.13800 18.12077 13.84432 11.47690 9.32278 9.34202 .2504	0.078 0.165 0.178 0.191 0.187 0.179 0.177 0.176 0.197	0.009 -0.018 -0.070 -0.102 -0.114 -0.119 -0.121	Abs. 3.30 7.10 7.57 8.38 7.96 7.06 6.23 5.38 4.90 0.1016E-	2.625 2.363 2.143 1.959 1.798 1.738 1.652 1.644 1.566
1.774 2.137 2.496 2.839 3.177 3.525 3.816 Displac VCG Postatic Water Vel m/s	400.1 432.8 464.4 455.5 435.2 429.5 427.3 478.2 cement D sition trim TA Temp.	0.49 0.19 -0.38 -1.47 -2.15 -2.40 -2.55 -2.65 IS 3042 277 Oo 1.9	1.61 5.48 6.69 6.27 5.37 4.54 3.69 3.21 2.0 gm 70 % B 95 deg TAO Rel.	43.69 39.47 35.60 32.03 28.64 26.22 23.11 21.39 19.32	62.34 55.78 50.57 46.65 43.47 43.13 44.51 43.47 Disp. Co 6.37 cm Density	1157.6 1042.3 945.2 864.1 792.8 766.6 728.6 724.8 690.7 eff. C	0.738 0.987 1.236 1.489 1.739 2.214 2.456 2.659 DL 0 Line .308 kg	x10-3 28.86681 37.60378 28.59488 23.13800 18.12077 13.84432 11.47690 9.32278 9.34202 .2504 /m3 Kin	0.078 0.165 0.178 0.191 0.187 0.179 0.177 0.176 0.197	0.009 -0.018 -0.070 -0.102 -0.114 -0.119 -0.121 -0.126	Abs. 3.30 7.10 7.57 8.38 7.96 7.06 6.23 5.38 4.90 0.1016E-TAO Abs.	2.625 2.363 2.143 1.959 1.738 1.652 1.644 1.566 Cwsph
1.774 2.137 2.496 2.839 3.177 3.525 3.816 Display VCG Postatic Water Wel m/s	400.1 432.8 464.4 455.5 435.2 429.5 427.3 478.2 cement D sition trim TA Temp. RT gms	0.49 0.19 -0.38 -1.47 -2.15 -2.40 -2.50 -2.55 -2.65 IS 3042 277 Oo 1. 19. H cm	1.61 5.41 5.88 6.69 6.27 5.37 4.54 3.69 3.21 2.0 gm 770 % B 95 deg 550 deg	43.69 39.47 35.60 32.03 28.64 26.22 23.11 21.39 19.32 s	62.34 55.78 50.57 46.65 43.47 43.47 43.13 44.51 43.47 Disp. Co 6.37 cm LK cm	Cm2 1157.6 1042.3 945.2 864.1 792.8 766.6 728.6 724.8 690.7 eff. C @ Base 998 WSPH Cm2 1193.8	0.738 0.987 1.236 1.489 1.739 1.978 2.214 2.456 2.659 DL 0 Line .308 kg	x10-3 28.86681 37.60378 28.59488 23.13800 18.12077 13.84432 11.47690 9.32278 9.34202 .2504 /m3 Kin CT x10-3 31.39283	0.078 0.165 0.178 0.191 0.187 0.177 0.176 0.197	0.009 -0.018 -0.070 -0.102 -0.114 -0.119 -0.121 -0.126	Abs. 3.30 7.10 7.57 8.38 7.96 7.06 6.23 5.38 4.90 0.1016E-TAO Abs. 3.29	2.625 2.363 2.143 1.959 1.798 1.738 1.652 1.644 1.566 Cwsph
1.774 2.137 2.496 2.839 3.177 3.525 3.816 Display VCG Postatic Water Vel m/s	400.1 432.8 464.4 455.5 435.2 429.5 427.3 478.2 cement D sition trim TA Temp. RT gms	0.49 0.19 -0.38 -1.47 -2.15 -2.40 -2.55 -2.65 IS 3042 27.00 19.00 H Cm	1.61 5.41 5.88 6.69 6.27 5.37 4.54 3.69 3.21 2.0 gm 7.0 % B .95 deg TAO Rel.	43.69 39.47 35.60 32.03 28.64 26.22 23.11 21.39 19.32 s	62.34 55.78 50.57 46.65 43.47 43.47 43.13 44.51 43.47 Disp. Co 6.37 cm Density LK cm	Cm2 1157.6 1042.3 945.2 864.1 792.8 766.6 728.6 724.8 690.7 eff. C @ Base 998 WSPH Cm2 1193.8 1165.4	0.738 0.987 1.236 1.489 1.739 1.978 2.214 2.456 2.659 DL 0 Line .308 kg	x10-3 28.86681 37.60378 28.59488 23.13800 18.1207 13.84432 11.47690 9.32278 9.34202 .2504 /m3 Kin CT x10-3 31.39283 47.01761	0.078 0.165 0.178 0.191 0.187 0.179 0.176 0.197	0.009 -0.018 -0.070 -0.102 -0.114 -0.119 -0.121 -0.126 DCITY H/BPX	Abs. 3.30 7.10 7.57 8.38 7.96 7.06 6.23 5.38 4.90 0.1016E- TAO Abs. 3.29 8.18	2.625 2.363 2.143 1.959 1.798 1.738 1.652 1.644 1.566 Cwsph
1.774 2.137 2.496 2.839 3.177 3.525 3.816 Displact VCG Postatic Water Vel m/s 1.056 1.412 1.768	400.1 432.8 464.4 455.5 435.2 429.5 427.3 478.2 cement D sition trim TA Temp. RT gms 212.8 556.2 601.1	0.49 0.19 -0.38 -1.47 -2.15 -2.40 -2.55 -2.65 IS 3042 27.00 H cm 	1.61 5.41 5.88 6.69 6.27 5.37 4.54 3.69 3.21 2.0 gm 70 % B .95 deg 50 deg TAO Rel.	43.69 39.47 35.60 32.03 28.64 26.22 23.11 21.39 19.32 s	62.34 55.78 50.57 46.65 43.47 43.13 44.51 43.47 Disp. Co 6.37 cm Density LK cm	Cm2 1157.6 1042.3 945.2 864.1 792.8 766.6 724.8 690.7 eff. C @ Base 998 WSPH Cm2 1193.8 1165.4 1134.1	0.738 0.987 1.236 1.489 1.739 1.978 2.214 2.456 2.659 DL 0 Line .308 kg CV	x10-3 28.86681 37.60378 28.59488 23.13800 18.12077 13.84432 11.47690 9.32278 9.34202 .2504 /m3 Kin CT x10-3 31.39283 47.01761 33.31902	0.078 0.165 0.178 0.191 0.187 0.177 0.176 0.197 0.197	0.009 -0.018 -0.070 -0.102 -0.114 -0.119 -0.121 -0.126 Deity H/BPX	Abs. 3.30 7.10 7.57 8.38 7.96 7.06 6.23 5.38 4.90 0.1016E- TAO Abs. 3.29 8.18 8.86	2.625 2.363 2.143 1.959 1.798 1.738 1.652 1.644 1.566 Cwsph
1.774 2.137 2.496 2.839 3.177 3.525 3.816 Displac VCG Postatic Water Vel m/s 1.056 1.412 1.768 2.128	400.1 432.8 464.4 455.5 427.3 478.2 cement D sition trim TA Temp. RT gms 	0.49 0.19 -0.38 -1.47 -2.15 -2.40 -2.55 -2.65 IS 3042 27 Oo 10 19 H cm -0.62 0.30 -0.43 -1.75	1.61 5.48 6.69 6.27 5.37 4.54 3.69 3.21 2.0 gm 770 % B 995 deg TAO Rel. 	43.69 39.47 35.60 32.03 28.64 26.22 23.11 21.39 19.32 S	62.34 55.78 50.57 46.65 43.47 43.13 44.51 43.47 Disp. Co 6.37 cm Density LK cm	Cm2 1157.6 1042.3 945.2 864.1 792.8 766.6 724.8 690.7 eff. C @ Base 998 WSPH Cm2 1193.8 1165.4 1134.1 1009.1	0.738 0.987 1.236 1.489 1.739 2.214 2.456 2.659 DL 0 Line .308 kg CV	x10-3	0.078 0.165 0.178 0.191 0.187 0.179 0.176 0.197	0.009 -0.018 -0.070 -0.102 -0.114 -0.119 -0.121 -0.126 Decity H/BPX -0.029 0.014 -0.020 -0.083	Abs. 3.30 7.10 7.57 8.38 7.96 6.23 5.38 4.90 0.1016E- TAO Abs. 3.29 8.18 8.86 10.15	2.625 2.363 2.143 1.959 1.798 1.738 1.652 1.644 1.566 Cwsph
1.774 2.137 2.496 2.839 3.177 3.525 3.816 Displac VCG Postatic Water Vel m/s 1.056 1.412 1.768 2.128 2.483	400.1 432.8 464.4 455.5 435.2 429.5 427.3 478.2 cement D sition trim TA Temp. RT gms 	0.49 0.19 -0.38 -1.47 -2.15 -2.40 -2.55 -2.65 IS 3042 277 Oo 1.9 H Cm -0.62 0.30 -0.43 -1.75 -2.64	1.61 5.48 6.69 6.27 5.37 4.54 3.69 3.21 2.0 gm 7.70 % B 9.95 deg TAO Rel. 1.34 6.23 6.23 6.91 8.20 7.47	43.69 39.47 35.60 32.03 28.64 26.22 23.11 21.39 19.32 s C LC cm 55.20 50.37 45.54 40.71 34.50	62.34 55.78 50.57 46.65 43.47 43.13 44.51 43.47 Disp. Co 6.37 cm Density LK cm	Cm2 1157.6 1042.3 945.2 864.1 792.8 766.6 724.8 690.7 eff. C @ Base 998 WSPH Cm2 1193.8 1165.4 1134.1 1009.1 886.2	0.738 0.987 1.236 1.489 1.739 2.214 2.456 2.659 DL 0 Line .308 kg CV	x10-3	0.078 0.165 0.178 0.191 0.187 0.179 0.176 0.197	0.009 -0.018 -0.070 -0.102 -0.114 -0.119 -0.126 Decity H/BPX -0.029 0.014 -0.020 -0.083 -0.126	Abs. 3.30 7.10 7.57 8.38 7.96 7.06 6.23 5.38 4.90 0.1016E- TAO Abs. 3.29 8.18 8.86 10.15 9.42	2.625 2.363 2.143 1.959 1.738 1.652 1.644 1.566 Cwsph -05 m2/s Cwsph
1.774 2.137 2.496 2.839 3.177 3.525 3.816 Display VCG Postatic Water Vel m/s 1.056 1.412 1.768 2.128 2.483 2.822	400.1 432.8 464.4 455.5 427.3 478.2 cement D sition trim TA Temp. RT gms 212.8 556.2 601.1 663.5 622.4 575.9	0.49 0.19 -0.38 -1.47 -2.15 -2.40 -2.50 -2.55 -2.65 IS 3042 277 Oo 19 H cm 	1.61 5.41 5.88 6.69 6.27 5.37 4.54 3.69 3.21 2.0 gm 7.70 % B 9.5 deg 5.50 deg TAO Rel. 1.34 6.23 6.91 8.20 7.47 6.21	43.69 39.47 35.60 32.03 28.64 26.22 23.11 21.39 19.32 s C LC m 55.20 50.37 45.54 40.71 34.50 30.02	62.34 55.78 50.57 46.65 43.47 43.47 43.13 44.51 43.47 Disp. Co 6.37 cm Density LK cm	Cm2 1157.6 1042.3 945.2 864.1 792.8 766.6 728.6 724.8 690.7 eff. C 8 Base 998 WSPH Cm2 1193.8 1165.4 1134.1 1009.1 886.2 792.5	0.738 0.987 1.236 1.489 1.739 1.978 2.214 2.456 2.659 DL 0 Line .308 kg CV	x10-3	0.078 0.165 0.178 0.191 0.187 0.177 0.176 0.197 0.197	0.009 -0.018 -0.070 -0.102 -0.114 -0.119 -0.126 -0.126 -0.029 0.014 -0.020 -0.083 -0.126 -0.139	Abs. 3.30 7.10 7.57 8.38 7.96 7.06 6.23 5.38 4.90 0.1016E- TAO Abs. 3.29 8.18 8.86 10.15 9.42 8.16	2.625 2.363 2.143 1.959 1.798 1.652 1.644 1.566 -05 m2/s Cwsph -2.707 2.643 2.572 2.288 2.009 1.797
1.774 2.137 2.496 2.839 3.177 3.525 3.816 Display VCG Postatic Water Vel m/s 1.056 1.412 1.768 2.128 2.483 2.822 3.112	400.1 432.8 464.4 455.5 427.3 478.2 cement D sition trim TA Temp. RT gms 	0.49 0.19 -0.38 -1.47 -2.15 -2.40 -2.50 -2.55 -2.65 IS 3042 27.00 19.0 H cm -0.62 0.30 -0.43 -1.75 -2.64 -2.91 -3.06	1.61 5.41 5.88 6.69 6.27 5.37 4.54 3.69 3.21 2.0 gm 7.70 % B 9.95 deg TAO Rel. 1.34 6.23 6.91 8.20 7.47 6.21 5.39	43.69 39.47 35.60 32.03 28.64 26.22 23.11 21.39 19.32 s C LC cm 555.20 50.37 45.54 40.71 34.50 30.02 27.60	62.34 55.78 50.57 46.65 43.47 43.13 44.51 43.47 Disp. Co 6.37 cm Density LK cm 60.03 59.69 59.34 51.75 46.23 42.09 41.40	Cm2 1157.6 1042.3 945.2 864.1 792.8 766.6 728.6 724.8 690.7 eff. C @ Base 998 WSPH Cm2 1193.8 1165.4 1134.1 1009.1 886.2 792.5 759.0	0.738 0.987 1.236 1.489 1.739 1.978 2.214 2.456 2.659 DL 0 Line .308 kg CV	x10-3 28.86681 37.60378 28.59488 23.13800 18.12077 13.84432 11.47690 9.32278 9.34202 .2504 /m3 Kin CT x10-3 31.39283 47.01761 33.31902 28.53060 22.38868 17.93103 14.40343	0.078 0.165 0.178 0.191 0.187 0.177 0.176 0.197 0.197 0.198 0.218 0.218 0.205 0.189 0.177	0.009 -0.018 -0.070 -0.102 -0.114 -0.119 -0.121 -0.126 DCITY H/BPX -0.029 0.014 -0.020 -0.083 -0.126 -0.139 -0.145	Abs. 3.30 7.10 7.57 8.38 7.96 7.06 6.23 5.38 4.90 0.1016E- TAO Abs. 3.29 8.18 8.86 10.15 9.42 8.16 7.34	2.625 2.363 2.143 1.959 1.798 1.738 1.652 1.644 1.566 Cwsph
1.774 2.137 2.496 2.839 3.177 3.525 3.816 Display VCG Postatic Water Vel m/s 1.056 1.412 1.768 2.128 2.483 2.822	400.1 432.8 464.4 455.5 427.3 478.2 cement D sition trim TA Temp. RT gms 212.8 556.2 601.1 663.5 622.4 575.9 538.8 539.8	0.49 0.19 -0.38 -1.47 -2.15 -2.40 -2.50 -2.55 -2.65 IS 3042 27.00 19.0 H cm -0.62 0.30 -0.43 -1.75 -2.64 -2.91 -3.06	1.61 5.41 5.88 6.69 6.27 5.37 4.54 3.69 3.21 2.0 gm 7.70 % B 9.5 deg 5.50 deg TAO Rel. 1.34 6.23 6.91 8.20 7.47 6.21	43.69 39.47 35.60 32.03 28.64 26.22 23.11 21.39 19.32 s C LC cm 555.20 50.37 45.54 40.71 34.50 30.02 27.60	62.34 55.78 50.57 46.65 43.47 43.47 43.13 44.51 43.47 Disp. Co 6.37 cm Density LK cm	Cm2 1157.6 1042.3 945.2 864.1 792.8 766.6 724.8 690.7 eff. C 8 Base 998 WSPH Cm2 1193.8 1165.4 1134.1 1009.1 886.2 792.5 759.0 740.0	0.738 0.987 1.236 1.489 1.739 1.978 2.214 2.456 2.659 DL 0 Line .308 kg CV	x10-3	0.078 0.165 0.178 0.191 0.187 0.177 0.176 0.197 0.197 0.070 0.183 0.218 0.205 0.189 0.177 0.177	0.009 -0.018 -0.070 -0.102 -0.114 -0.119 -0.126 -0.126 -0.029 0.014 -0.020 -0.083 -0.126 -0.139	Abs. 3.30 7.10 7.57 8.38 7.96 7.06 6.23 5.38 4.90 0.1016E- TAO Abs. 3.29 8.18 8.86 10.15 9.42 8.16	2.625 2.363 2.143 1.959 1.798 1.652 1.644 1.566 -05 m2/s Cwsph -2.707 2.643 2.572 2.288 2.009 1.797

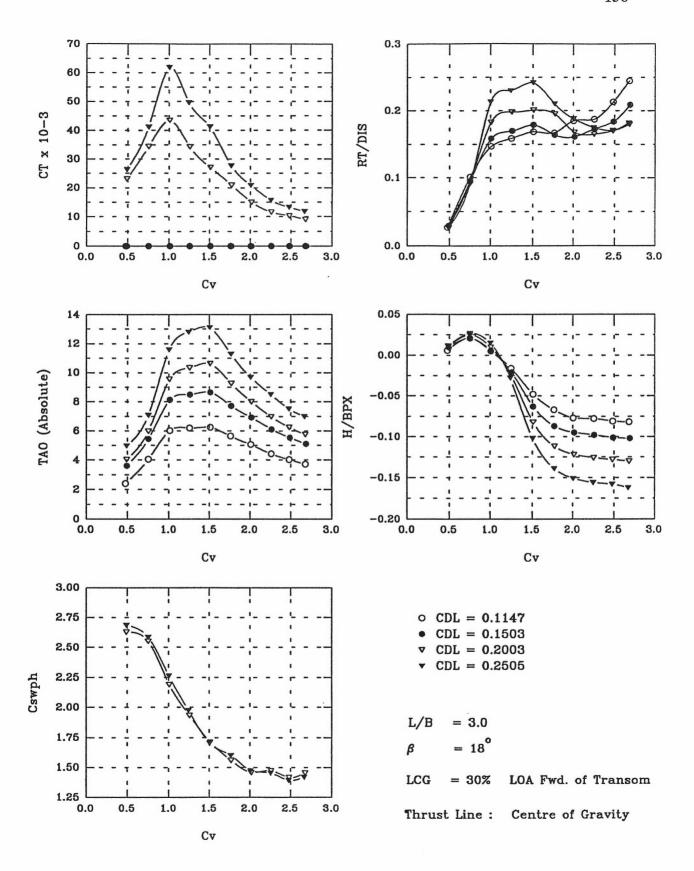


Figure B.27

Madel												
	No. T-30	110										
					T							
L/B Ra			.0			Overal I		.00 cm				
Deadri	se	18	.00 deg		Breath	(Deck) E	3 23	.00 cm				157
					Breath	(Chine) E	BPX 21	.00 cm				
LCG Po	sition	30	.00 % I	ΩA		cm @ Tra						
		-					oum					
D4 1 -			• •	A10.0 -								
	cement I				Disp. Co			.1147				
VCG Po			.35 % B		6.75 CI	n @ Base	Line					
Static	trim TA	.00 2	.05 deg									
Water			.00 deg		Density	998	.206 kg	/m3 Ki	n. Visc	ocity	0.1004E	-05 m2/s
	-											
Vel	RT	н	ma o	LC	TV	MCDII	CV	CIT.	DM/DTC	H/BPX	TAO	Granh
			TAO		LK	WSPH	CV	CT	KIIDIS	II/ DE A		Cwsph
m/s	gms	cm	Rel.	cm	CM	cm2		x10-3			Abs.	
0.683	38.1	0.14	0.35	0.00	0.00	0.0	0.476	0.00000	0.027	0.006	2.40	0.000
1.078	140.8	0.45	2.01	0.00	0.00	0.0	0.751	0.00000	0.101	0.021	4.06	0.000
1.449	204.7	0.10	3.98	0.00	0.00		1.009	0.00000			6.03	0.000
1.797				0.00			1.252	0.00000			6.19	0.000
		-0.33	4.14		0.00							
2.169		-1.00	4.19	0.00	0.00		1.511	0.00000				0.000
2.533		-1.41	3.59	0.00	0.00		1.765		0.167	-0.067	5.64	0.000
2.880	257.3	-1.61	3.01	0.00	0.00	0.0	2.006	0.00000	0.185	-0.077	5.06	0.000
3.243	260.5	-1.64	2.37	0.00	0.00	0.0	2.259	0.00000	0.187	-0.078	4.42	0.000
3.563		-1.71	1.98	0.00	0.00		2.482	0.00000				0.000
								0.00000				0.000
3.857	341.8	-1.72	1.67	0.00	0.00	0.0	2.680	0.00000	0.245	-0.002	3.72	0.000
					- 22							
Displa	cement D	IS 182	5.0 gm	s	Disp. Co	oeff. C	DL 0	.1503				
VCG Po			.48 % B			a @ Base						
	trim TA											
Water	Tomp	20	50 400	C	Donaite	900	101 6~	/m3 v:	n Wiss	ocity	0 90160	-06 m2/c
Water	remp.	. 20	. Su deg	C	pensicy	990	. IUI Kg	/m3 Ki	ii. VISC	SCILLY	0.3310E	-00 MZ/S
Vel	RT	H	TAO	LC	LK	WSPH	CV	CT	RT/DIS	H/BPX	TAO	Cwsph
m/s	gms	cm	Rel.	cm	cm	cm2		x10-3			Abs.	
0.704	54.1	0.21	0.40	0.00	0.00	0.0	0.491	0.00000	0.030	0.010	3.62	0.000
1.079	173.6	0.45	2.23	0.00	0.00		0.752	0.00000			5.45	0.000
1.448	290.2	0.13	4.91	0.00	0.00		1.009	0.00000			8.13	0.000
1.803	311.0	-0.45	5.27	0.00	0.00		1.257	0.00000	0.170	-0.021	8.49	0.000
2.170	326.5	-1.31	5.43	0.00	0.00	0.0	1.512	0.00000	0.179	-0.063	8.65	0.000
2.541		-1.83	4.51	0.00	0.00		1.770	0.00000	0.164	-0.087	7.73	0.000
2.891		-2.00	3.70	0.00	0.00		2.014	0.00000			6.92	0.000
3.248		-2.06	2.90	0.00	0.00		2.263	0.00000				0.000
										-0.101	5.53	0.000
3.571	336.3	-2.13	2.31	0.00	0.00		2.488					
3.571		-2.15	1.90	0.00	0.00		2.689	0.00000				0.000
3.860	381.1	-2.15	1.90	0.00	0.00	0.0	2.689	0.00000				
3.860	381.1	-2.15	1.90	0.00	0.00	0.0	2.689					
3.860 Displac	381.1 cement D sition	-2.15 IS 243 28	1.90 2.0 gm .52 % B	0.00 s	0.00		2.689	0.00000				
3.860 Displac VCG Pos Static	381.1 cement D sition trim TA	-2.15 IS 243: 28 .00 3	1.90 2.0 gm .52 % B .55 deg	0.00 s	0.00 Disp. Co 6.56 CE	0.0 peff. C	2.689 DL 0 Line	0.00000	0.209	-0.102	5.12	0.000
3.860 Displac VCG Pos Static	381.1 cement D sition	-2.15 IS 243: 28 .00 3	1.90 2.0 gm .52 % B .55 deg	0.00 s	0.00 Disp. Co 6.56 CE	0.0 peff. C	2.689 DL 0 Line	0.00000	0.209	-0.102	5.12	0.000
3.860 Displac VCG Pos Static	381.1 cement D sition trim TA	-2.15 IS 243: 28 .00 3	1.90 2.0 gm .52 % B .55 deg	0.00 s	0.00 Disp. Co 6.56 CE	0.0 peff. C	2.689 DL 0 Line	0.00000	0.209	-0.102	5.12	0.000
3.860 Displac VCG Pos Static Water	381.1 cement D sition trim TA Temp.	-2.15 IS 243 28 .00 3 20	1.90 2.0 gm .52 % B .55 deg .50 deg	0.00 s C	0.00 Disp. Co 6.56 cm	0.0 peff. C a @ Base 998	2.689 DL 0 Line	0.00000 .2003 /m3 Kin	0.209 n. Visc	-0.102	5.12 0.9916E	0.000 -06 m2/s
3.860 Displace VCG Posstatic Water 5	381.1 cement D sition trim TA Temp. RT	-2.15 IS 243 28 .00 3 20	1.90 2.0 gm .52 % B .55 deg .50 deg	0.00 s C LC	0.00 Disp. Co 6.56 cm Density	0.0 peff. Con @ Base 998 WSPH	2.689 DL 0 Line	0.00000 .2003 /m3 Kii	0.209 n. Visc	-0.102	5.12 0.9916E TAO	0.000
3.860 Displac VCG Pos Static Water	381.1 cement D sition trim TA Temp.	-2.15 IS 243 28 .00 3 20	1.90 2.0 gm .52 % B .55 deg .50 deg	0.00 s C	0.00 Disp. Co 6.56 cm	0.0 peff. C a @ Base 998	2.689 DL 0 Line	0.00000 .2003 /m3 Kin	0.209 n. Visc	-0.102	5.12 0.9916E	0.000 -06 m2/s
3.860 Displace VCG Posstatic Water 5 Vel m/s	381.1 cement D sition trim TA Temp. RT gms	-2.15 IS 2433 28 Oo 3 20 H cm	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel.	0.00 s C LC cm	0.00 Disp. Co 6.56 cm Density LK cm	0.0 peff. C n @ Base 998 WSPH cm2	2.689 DL 0 Line .101 kg	0.00000 .2003 /m3 Kin CT x10-3	0.209	-0.102 ocity H/BPX	5.12 0.9916E TAO Abs.	0.000 -06 m2/s Cwsph
J.860 Displactory VCG Postatic Water 9 Well m/s	381.1 cement D sition trim TA Temp. RT gms 66.8	-2.15 IS 243 28 00 3 20 H cm	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel.	0.00 s C LC cm 40.02	0.00 Disp. Co 6.56 Cn Density LK Cm	0.0 peff. C n @ Base 998 WSPH cm2 1158.9	2.689 DL 0 Line 1.101 kg CV 0.489	0.00000 .2003 /m3 Kin CT x10-3	0.209 n. Visco RT/DIS 0.027	-0.102 ocity H/BPX 	5.12 0.9916E TAO Abs.	0.000 -06 m2/s Cwsph
3.860 Displace VCG Posstatic Water 5 Vel m/s	381.1 cement D sition trim TA Temp. RT gms	-2.15 IS 2433 28 Oo 3 20 H cm	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel.	0.00 s C LC cm	0.00 Disp. Co 6.56 cm Density LK cm	0.0 peff. C n @ Base 998 WSPH cm2	2.689 DL 0 Line 1.101 kg CV 0.489	0.00000 .2003 /m3 Kin CT x10-3	0.209 n. Visco RT/DIS 0.027	-0.102 ocity H/BPX	5.12 0.9916E TAO Abs.	0.000 -06 m2/s Cwsph
J.860 Displactory VCG Postatic Water 9 Well m/s	381.1 cement D sition trim TA Temp. RT gms 66.8	-2.15 IS 243 28 00 3 20 H cm	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel.	0.00 s C LC cm 40.02	0.00 Disp. Co 6.56 Cn Density LK Cm	0.0 peff. C n @ Base 998 WSPH cm2 1158.9	2.689 DL 0 Line 1.101 kg CV 0.489	0.00000 .2003 /m3 Kin CT x10-3	0.209 n. Visco RT/DIS 0.027 0.094	-0.102 ocity H/BPX 0.011 0.025	5.12 0.9916E TAO Abs.	0.000 -06 m2/s Cwsph
J.860 Displactive VCG Postatic Water Static Vel m/s 0.701 1.076 1.444	381.1 cement D sition trim TA Temp. RT gms 66.8 228.5 445.7	-2.15 IS 243 28 Oo 3 20 H cm 0.24 0.53 0.22	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel. 	0.00 s C LC cm 40.02 48.30 37.95	0.00 Disp. Cc 6.56 CE Density LK cm 64.31 56.58 50.37	0.0 peff. C n @ Base 998 WSPH cm2 1158.9 1125.0 966.0	2.689 DL 0 Line CV 0.489 0.750 1.006	0.00000 .2003 /m3 Kin CT x10-3	0.209 n. Visco RT/DIS 0.027 0.094 0.183	-0.102 Decity H/BPX 0.011 0.025 0.010	5.12 0.9916E TAO Abs. 4.03 5.98 9.55	0.000 -06 m2/s Cwsph 2.628 2.551 2.190
3.860 Displaction VCG Postatic Water 1 Vel m/s 0.701 1.076 1.444 1.799	381.1 cement D sition trim TA Temp. RT gms 66.8 228.5 445.7 481.1	-2.15 IS 243: 28 Oo 3 20 H cm 0.24 0.53 0.22 -0.51	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel. 	0.00 s C LC cm 40.02 48.30 37.95 32.78	0.00 Disp. Cc 6.56 CF Density LK cm 64.31 56.58 50.37 44.85	0.0 peff. C n @ Base 998 WSPH cm2 1158.9 1125.0 966.0 852.5	2.689 DL 0 Line cv 0.489 0.750 1.006 1.253	0.00000 .2003 /m3 Kin	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.198	-0.102 ocity H/BPX 0.011 0.025 0.010 -0.025	5.12 0.9916E- TAO Abs. 4.03 5.98 9.55 10.34	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933
3.860 Displaction VCG Poor Static Water ** Vel m/s 0.701 1.076 1.444 1.799 2.167	381.1 cement D sition trim TA Temp. RT gms 66.8 228.5 445.7 481.1 488.3	-2.15 IS 243. 28 Oo 3 20 H Cm 0.24 0.53 0.22 -0.51 -1.71	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel. 0.48 2.43 6.00 6.79 7.08	0.00 s C LC cm 40.02 48.30 37.95 32.78 28.98	0.00 Disp. Cc 6.56 CF Density LK CM 64.31 56.58 50.37 44.85 39.68	0.0 peff. C n @ Base 998 WSPH cm2 1158.9 1125.0 966.0 852.5 754.9	2.689 EDL 0 Line CV 0.489 0.750 1.006 1.253 1.510	0.00000 .2003 /m3 Kin CT x10-3 23.05169 34.45943 43.50741 34.28138 27.07678	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.198 0.201	-0.102 Decity H/BPX 0.011 0.025 0.010 -0.025 -0.082	5.12 0.9916E TAO Abs. 4.03 5.98 9.55 10.34 10.63	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712
3.860 Displaction VCG Postatic Water ** Vel m/s 0.701 1.076 1.444 1.799 2.167 2.542	381.1 cement D sition trim TA Temp. RT gms 66.8 228.5 445.7 481.1 488.3 473.5	-2.15 IS 243. 28 Oo 3 20 H cm 0.24 0.53 0.22 -0.51 -1.71 -2.35	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel. 0.48 2.43 6.00 6.79 7.08 5.71	0.00 s C LC cm 40.02 48.30 37.95 32.78 28.98 24.17	0.00 Disp. Cc 6.56 cm Density LK cm 64.31 56.58 50.37 44.85 39.68 38.34	0.0 peff. C n @ Base 998 WSPH cm2 1158.9 1125.0 966.0 852.5 754.9 687.6	2.689 CDL 0 Line CV 0.489 0.750 1.006 1.253 1.510 1.771	0.00000 .2003 /m3 Kin CT x10-3	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.198 0.201 0.195	-0.102 ocity H/BPX 0.011 0.025 0.010 -0.025 -0.082 -0.112	5.12 0.9916E TAO Abs. 4.03 5.98 9.55 10.34 10.63 9.26	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.559
3.860 Displactory VCG Postatic Water Vel m/s 0.701 1.076 1.444 1.799 2.167 2.542 2.889	381.1 cement D sition trim TA Temp. RT gms 	-2.15 IS 243. 28 Oo 3 20 H cm 0.24 0.53 0.22 -0.51 -1.71 -2.35 -2.56	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel. 0.48 2.43 6.00 6.79 7.08 5.71 4.46	0.00 s C LC C 40.02 48.30 37.95 32.78 28.98 24.17 21.12	0.00 Disp. Co 6.56 cm Density LK cm 64.31 56.58 50.37 44.85 39.68 38.34 37.31	0.0 peff. C n @ Base 998 WSPH cm2 1158.9 1125.0 966.0 852.5 754.9 687.6 642.6	2.689 cLine cV 0.489 0.750 1.006 1.253 1.510 1.771 2.013	0.00000 .2003 /m3 Kin CT x10-3 23.05169 34.45943 43.50741 34.28138 27.07678 20.95162 15.00311	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.198 0.201 0.195 0.168	-0.102 Docity H/BPX 0.011 0.025 0.010 -0.025 -0.082 -0.112 -0.122	5.12 0.9916E TAO Abs. 4.03 5.98 9.55 10.34 10.63 9.26 8.01	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.559 1.457
3.860 Displaction VCG Postatic Water ** Vel m/s 0.701 1.076 1.444 1.799 2.167 2.542	381.1 cement D sition trim TA Temp. RT gms 	-2.15 IS 243. 28 Oo 3 20 H cm 0.24 0.53 0.22 -0.51 -1.71 -2.35	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel. 0.48 2.43 6.00 6.79 7.08 5.71 4.46	0.00 s C LC cm 40.02 48.30 37.95 32.78 28.98 24.17	0.00 Disp. Cc 6.56 cm Density LK cm 64.31 56.58 50.37 44.85 39.68 38.34	0.0 peff. C n @ Base 998 WSPH cm2 1158.9 1125.0 966.0 852.5 754.9 687.6 642.6	2.689 CDL 0 Line CV 0.489 0.750 1.006 1.253 1.510 1.771	0.00000 .2003 /m3 Kin CT x10-3 23.05169 34.45943 43.50741 34.28138 27.07678 20.95162 15.00311	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.198 0.201 0.195 0.168	-0.102 Docity H/BPX 0.011 0.025 0.010 -0.025 -0.082 -0.112 -0.122	5.12 0.9916E TAO Abs. 4.03 5.98 9.55 10.34 10.63 9.26 8.01	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.559
3.860 Displactory VCG Postatic Water Vel m/s 0.701 1.076 1.444 1.799 2.167 2.542 2.889	381.1 cement D sition trim TA Temp. RT gms 	-2.15 IS 2433 28 Oo 3 20 H cm 0.24 0.53 0.22 -0.51 -1.71 -2.35 -2.56 -2.65	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel. 0.48 2.43 6.00 6.79 7.08 5.71 4.46 3.43	0.00 s C LC cm 40.02 48.30 37.95 32.78 28.98 24.17 21.12 20.01	0.00 Disp. Cd 6.56 CE Density LK cm 64.31 56.58 50.37 44.85 39.68 38.34 37.31 38.99	0.0 peff. C n @ Base 998 WSPH cm2 1158.9 1125.0 966.0 852.5 754.9 687.6 642.6 648.9	2.689 DL 0 Line CV 0.489 0.750 1.006 1.253 1.510 1.771 2.013 2.257	0.00000 .2003 /m3 Kin CT x10-3 23.05169 34.45943 43.50741 34.28138 27.07678 20.95162 15.00311 11.56578	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.198 0.201 0.195 0.168 0.165	-0.102 H/BPX 0.011 0.025 0.010 -0.025 -0.082 -0.112 -0.122 -0.126	5.12 0.9916E TAO Abs. 4.03 5.98 9.55 10.34 10.63 9.26 8.01 6.98	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.559 1.457 1.472
3.860 Displaction VCG Postatic Water 19 10.761 1.076 1.444 1.799 2.167 2.542 2.889 3.239 3.560	381.1 cement D sition trim TA Temp. RT gms 	-2.15 IS 243: 28 Oo 3 20 H cm 0.24 0.53 0.22 -0.51 -1.71 -2.35 -2.56 -2.65 -2.68	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel. 0.48 2.43 6.00 6.79 7.08 5.71 4.46 3.43 2.69	0.00 s C LC cm 40.02 48.30 37.95 32.78 28.98 24.17 21.12 20.01 17.96	0.00 Disp. Cd 6.56 CF Density LK cm 64.31 56.58 50.37 44.85 39.68 38.34 37.31 38.99 38.79	0.0 peff. C n @ Base 998 WSPH cm2 1158.9 1125.0 966.0 852.5 754.9 687.6 642.6 648.9 624.2	2.689 DL 0 Line CV 0.489 0.750 1.006 1.253 1.510 1.771 2.013 2.257 2.480	0.00000 .2003 /m3 Kin CT x10-3 23.05169 34.45943 43.50741 34.28138 27.07678 20.95162 15.00311 11.56578 10.25411	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.198 0.201 0.195 0.168 0.165 0.170	-0.102 h/BPX 0.011 0.025 0.010 -0.025 -0.082 -0.112 -0.122 -0.126 -0.128	5.12 0.9916E- TAO Abs. 4.03 5.98 9.55 10.63 9.26 8.01 6.98 6.24	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.559 1.457 1.472 1.415
3.860 Displaction VCG Postatic Water 1 Well m/s 0.701 1.076 1.444 1.799 2.167 2.542 2.889 3.239	381.1 cement D sition trim TA Temp. RT gms 	-2.15 IS 2433 28 Oo 3 20 H cm 0.24 0.53 0.22 -0.51 -1.71 -2.35 -2.56 -2.65	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel. 0.48 2.43 6.00 6.79 7.08 5.71 4.46 3.43 2.69	0.00 s C LC cm 40.02 48.30 37.95 32.78 28.98 24.17 21.12 20.01 17.96	0.00 Disp. Cd 6.56 CE Density LK cm 64.31 56.58 50.37 44.85 39.68 38.34 37.31 38.99	0.0 peff. C n @ Base 998 WSPH cm2 1158.9 1125.0 966.0 852.5 754.9 687.6 642.6 648.9 624.2	2.689 DL 0 Line CV 0.489 0.750 1.006 1.253 1.510 1.771 2.013 2.257 2.480	0.00000 .2003 /m3 Kin CT x10-3 23.05169 34.45943 43.50741 34.28138 27.07678 20.95162 15.00311 11.56578	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.198 0.201 0.195 0.168 0.165 0.170	-0.102 h/BPX 0.011 0.025 0.010 -0.025 -0.082 -0.112 -0.122 -0.126 -0.128	5.12 0.9916E- TAO Abs. 4.03 5.98 9.55 10.63 9.26 8.01 6.98 6.24	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.559 1.457 1.472
3.860 Displactory VCG Postatic Water Static Water Water Static Water Water Static Water Wate	381.1 cement D sition trim TA Temp. RT gms 66.8 228.5 445.7 481.1 488.3 473.5 409.3 400.5 412.7 438.5	-2.15 IS 243. 28 Oo 3 20 H cm 0.24 0.53 0.22 -0.51 -1.71 -2.35 -2.56 -2.65 -2.68 -2.74	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel. 0.48 2.43 6.00 6.79 7.08 5.71 4.46 3.43 2.69 2.20	0.00 s C LC cm 40.02 48.30 37.95 32.78 28.98 24.17 21.12 20.01 17.96 17.25	0.00 Disp. Co 6.56 cm Density LK cm 64.31 56.58 50.37 44.85 39.68 38.34 37.31 38.99 38.79 41.06	0.0 peff. C n @ Base 998 WSPH cm2 1158.9 1125.0 966.0 852.5 754.9 687.6 642.6 648.9 624.2 641.4	2.689 cDL 0 Line cV 0.489 0.750 1.006 1.253 1.510 1.771 2.013 2.257 2.480 2.680	0.00000 .2003 /m3 Kin CT x10-3	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.198 0.201 0.195 0.168 0.165 0.170	-0.102 h/BPX 0.011 0.025 0.010 -0.025 -0.082 -0.112 -0.122 -0.126 -0.128	5.12 0.9916E- TAO Abs. 4.03 5.98 9.55 10.63 9.26 8.01 6.98 6.24	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.559 1.457 1.472 1.415
3.860 Displactory VCG Postatic Water Vel m/s 0.701 1.076 1.444 1.799 2.167 2.542 2.889 3.239 3.560 3.847 Displace	381.1 cement D sition trim TA Temp. RT gms	-2.15 IS 2433 28 Oo 3 20 H cm 0.24 0.53 0.22 -0.51 -1.71 -2.35 -2.56 -2.65 -2.68 -2.74 IS 304	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel 0.48 2.43 6.00 6.79 7.08 5.71 4.46 3.43 2.69 2.20 2.0 gm	0.00 s C LC Cm 	0.00 Disp. Cc 6.56 CE Density LK CM 64.31 56.58 50.37 44.85 39.68 38.34 37.31 38.99 38.79 41.06 Disp. Cc	0.0 peff. C n @ Base 998 WSPH cm2 1158.9 1125.0 966.0 852.5 754.9 687.6 642.6 648.9 624.2 641.4 peff. C	2.689 DL 0 Line 1.101 kg CV 0.489 0.750 1.006 1.253 1.510 1.771 2.013 2.257 2.480 2.680 DL 0	0.00000 .2003 /m3 Kin CT x10-3 23.05169 34.45943 43.50741 34.28138 27.07678 20.95162 15.00311 11.56578 10.25411	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.198 0.201 0.195 0.168 0.165 0.170	-0.102 h/BPX 0.011 0.025 0.010 -0.025 -0.082 -0.112 -0.122 -0.126 -0.128	5.12 0.9916E- TAO Abs. 4.03 5.98 9.55 10.63 9.26 8.01 6.98 6.24	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.559 1.457 1.472 1.415
3.860 Displaction VCG Postatic Water 1 Vel m/s 0.701 1.076 1.444 1.799 2.167 2.542 2.889 3.239 3.560 3.847 Displact VCG Post	381.1 cement D sition trim TA Temp. RT gms	-2.15 IS 2433 28 Oo 3 20 H cm 0.24 0.53 0.22 -0.51 -1.71 -2.35 -2.56 -2.65 -2.68 -2.74 IS 304	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel 0.48 2.43 6.00 6.79 7.08 5.71 4.46 3.43 2.69 2.20 2.0 gm .70 % B	0.00 s C LC cm 40.02 48.30 37.95 32.78 28.98 24.17 21.12 20.01 17.96 17.25	0.00 Disp. Cc 6.56 CE Density LK CM 64.31 56.58 50.37 44.85 39.68 38.34 37.31 38.99 38.79 41.06 Disp. Cc	0.0 peff. C n @ Base 998 WSPH cm2 1158.9 1125.0 966.0 852.5 754.9 687.6 642.6 648.9 624.2 641.4	2.689 DL 0 Line 1.101 kg CV 0.489 0.750 1.006 1.253 1.510 1.771 2.013 2.257 2.480 2.680 DL 0	0.00000 .2003 /m3 Kin CT x10-3	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.198 0.201 0.195 0.168 0.165 0.170	-0.102 h/BPX 0.011 0.025 0.010 -0.025 -0.082 -0.112 -0.122 -0.126 -0.128	5.12 0.9916E- TAO Abs. 4.03 5.98 9.55 10.63 9.26 8.01 6.98 6.24	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.559 1.457 1.472 1.415
3.860 Displaction VCG Postatic Water 1 Vel m/s 0.701 1.076 1.444 1.799 2.167 2.542 2.889 3.239 3.560 3.847 Displact VCG Post	381.1 cement D sition trim TA Temp. RT gms	-2.15 IS 243. 28 Oo 3 20 H Cm 0.24 0.53 0.22 -0.51 -1.71 -2.35 -2.56 -2.65 -2.68 -2.74 IS 304: 27 Oo 4	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel	0.00 s C LC cm 40.02 48.30 37.95 32.78 28.98 24.17 21.12 20.01 17.96 17.25	0.00 Disp. Cc 6.56 CF Density LK CM 64.31 56.58 50.37 44.85 39.68 38.34 37.31 38.99 38.79 41.06 Disp. Cc 6.37 CF	0.0 peff. Con @ Base 998 WSPH cm2 1158.9 1125.0 966.0 9652.5 754.9 687.6 642.6 648.9 624.2 641.4 peff. Con @ Base	2.689 DL 0 Line CV 0.489 0.750 1.006 1.253 1.510 1.771 2.013 2.257 2.480 2.680 DL 0 Line	0.00000 .2003 /m3 Kin CT x10-3 23.05169 34.45943 43.50741 34.28138 27.07678 20.95162 15.00311 11.56578 10.25411 9.08276	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.198 0.201 0.195 0.168 0.165 0.170 0.180	-0.102 Decity H/BPX 0.011 0.025 0.010 -0.025 -0.082 -0.112 -0.126 -0.128 -0.130	5.12 0.9916E TAO Abs. 4.03 5.98 9.55 10.34 10.63 9.26 8.01 6.98 6.24 5.75	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.559 1.457 1.457 1.415
3.860 Displaction VCG Postatic Water 19 Vel m/s 0.701 1.076 1.444 1.799 2.167 2.542 2.889 3.560 3.847 Displact VCG Postatic Static	381.1 cement D sition trim TA Temp. RT gms	-2.15 IS 243. 28 Oo 3 20 H Cm 0.24 0.53 0.22 -0.51 -1.71 -2.35 -2.56 -2.65 -2.68 -2.74 IS 304: 27 Oo 4	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel	0.00 s C LC cm 40.02 48.30 37.95 32.78 28.98 24.17 21.12 20.01 17.96 17.25	0.00 Disp. Cc 6.56 CF Density LK CM 64.31 56.58 50.37 44.85 39.68 38.34 37.31 38.99 38.79 41.06 Disp. Cc 6.37 CF	0.0 peff. Con @ Base 998 WSPH cm2 1158.9 1125.0 966.0 9652.5 754.9 687.6 642.6 648.9 624.2 641.4 peff. Con @ Base	2.689 DL 0 Line CV 0.489 0.750 1.006 1.253 1.510 1.771 2.013 2.257 2.480 2.680 DL 0 Line	0.00000 .2003 /m3 Kin CT x10-3 23.05169 34.45943 43.50741 34.28138 27.07678 20.95162 15.00311 11.56578 10.25411 9.08276	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.198 0.201 0.195 0.168 0.165 0.170 0.180	-0.102 Decity H/BPX 0.011 0.025 0.010 -0.025 -0.082 -0.112 -0.126 -0.128 -0.130	5.12 0.9916E TAO Abs. 4.03 5.98 9.55 10.34 10.63 9.26 8.01 6.98 6.24 5.75	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.559 1.457 1.457 1.415
3.860 Displaction VCG Postatic Water 1 Vel m/s 0.701 1.076 1.444 1.799 2.167 2.542 2.889 3.239 3.560 3.847 Displact VCG Post	381.1 cement D sition trim TA Temp. RT gms	-2.15 IS 243. 28 Oo 3 20 H Cm 0.24 0.53 0.22 -0.51 -1.71 -2.35 -2.56 -2.65 -2.68 -2.74 IS 304: 27 Oo 4	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel	0.00 s C LC cm 40.02 48.30 37.95 32.78 28.98 24.17 21.12 20.01 17.96 17.25	0.00 Disp. Cc 6.56 CF Density LK CM 64.31 56.58 50.37 44.85 39.68 38.34 37.31 38.99 38.79 41.06 Disp. Cc 6.37 CF	0.0 peff. Con @ Base 998 WSPH cm2 1158.9 1125.0 966.0 9652.5 754.9 687.6 642.6 648.9 624.2 641.4 peff. Con @ Base	2.689 DL 0 Line CV 0.489 0.750 1.006 1.253 1.510 1.771 2.013 2.257 2.480 2.680 DL 0 Line	0.00000 .2003 /m3 Kin CT x10-3	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.198 0.201 0.195 0.168 0.165 0.170 0.180	-0.102 Decity H/BPX 0.011 0.025 0.010 -0.025 -0.082 -0.112 -0.126 -0.128 -0.130	5.12 0.9916E TAO Abs. 4.03 5.98 9.55 10.34 10.63 9.26 8.01 6.98 6.24 5.75	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.559 1.457 1.457 1.415
3.860 Displaction VCG Postatic Water 19 1076 1.444 1.799 2.167 2.542 2.889 3.239 3.560 3.847 Displact VCG Postatic Water 19 10 10 10 10 10 10 10 10 10 10 10 10 10	381.1 cement D sition trim TA Temp. RT gms 66.8 228.5 445.7 481.1 488.3 473.5 409.3 400.5 412.7 438.5 cement D sition trim TA Temp.	-2.15 IS 243. 28 Oo 3 20 H Cm 0.24 0.53 0.22 -0.51 -1.71 -2.35 -2.56 -2.65 -2.65 -2.68 -2.74 IS 304: 27 Oo 4 20	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel	0.00 s C LC cm 40.02 48.30 37.95 32.78 28.98 24.17 21.12 20.01 17.95 17.25	0.00 Disp. Cc 6.56 CF Density LK CM 64.31 56.58 50.37 44.85 39.68 38.34 37.31 38.99 38.79 41.06 Disp. Cc 6.37 CF	0.0 peff. Con @ Base 998 WSPH cm2 1158.9 1125.0 966.0 852.5 754.9 687.6 642.6 648.9 9624.2 641.4 peff. Con @ Base	2.689 CDL 0 Line CV 0.489 0.750 1.006 1.253 1.510 2.013 2.257 2.480 2.680 CDL 0 Line .101 kg	0.00000 .2003 /m3 Kin CT x10-3 -23.05169 34.45943 43.50741 34.28138 27.07678 20.95162 15.00311 11.56578 10.25411 9.08276 .2505	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.198 0.201 0.195 0.168 0.165 0.170 0.180	-0.102 Docity H/BPX 0.011 0.025 0.010 -0.025 -0.082 -0.112 -0.126 -0.128 -0.130	TAO Abs. 4.03 5.98 9.55 10.34 10.63 9.26 8.01 6.98 6.24 5.75	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.559 1.457 1.472 1.415 1.454
3.860 Displaction VCG Postatic Water 1.076 1.076 1.444 1.799 2.167 2.542 2.889 3.239 3.560 3.847 Displact VCG Postatic Water 1.098	381.1 cement D sition trim TA Temp. RT gms	-2.15 IS 2433 28 Oo 3 20 H cm 0.24 0.53 0.22 -0.51 -1.71 -2.35 -2.56 -2.65 -2.68 -2.74 IS 304 27 Oo 4 20 H	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel 0.48 2.43 6.00 6.79 7.08 5.71 4.46 3.43 2.69 2.20 2.0 gm .70 % B .51 deg .50 deg	0.000 s C LC cm 40.02 48.30 37.95 32.78 28.98 24.17 21.12 20.01 17.96 17.25 s	0.00 Disp. Cc 6.56 CE Density LK Cm 64.31 56.58 50.37 44.85 39.68 38.34 37.31 38.99 38.79 41.06 Disp. Cc 6.37 CE Density LK	0.0 peff. C n @ Base 998 WSPH cm2 1158.9 1125.0 966.0 852.5 754.9 687.6 642.6 648.9 624.2 641.4 peff. C n @ Base	2.689 DL 0 Line CV 0.489 0.750 1.006 1.253 1.510 1.771 2.013 2.257 2.480 2.680 DL 0 Line	0.00000 .2003 /m3 Kin CT x10-3 23.05169 34.45943 43.50741 34.28138 27.07678 20.95162 15.00311 11.56578 10.25411 9.08276 .2505 /m3 Kin	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.198 0.201 0.195 0.168 0.165 0.170 0.180	-0.102 Decity H/BPX 0.011 0.025 0.010 -0.025 -0.082 -0.112 -0.126 -0.128 -0.130	5.12 0.9916E- TAO Abs. 4.03 5.98 9.55 10.34 10.63 9.26 8.01 6.98 6.24 5.75 0.9916E-	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.559 1.457 1.457 1.415
3.860 Displaction VCG Postatic Water 19 1076 1.444 1.799 2.167 2.542 2.889 3.239 3.560 3.847 Displact VCG Postatic Water 19 10 10 10 10 10 10 10 10 10 10 10 10 10	381.1 cement D sition trim TA Temp. RT gms	-2.15 IS 243: 28 00 3 20 H cm 0.24 0.53 0.22 -0.51 -1.71 -2.35 -2.56 -2.65 -2.68 -2.74 IS 304: 27 00 H cm	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel 0.48 2.43 6.00 6.79 7.08 5.71 4.46 3.43 2.69 2.20 2.0 gm .70 % B .51 deg .50 deg TAO Rel.	0.000 s C LC cm 40.02 48.30 37.95 32.78 28.98 24.17 21.12 20.01 17.96 17.25 s	0.00 Disp. Cc 6.56 CF Density LK cm 64.31 56.58 50.37 44.85 39.68 38.34 37.31 38.99 38.79 41.06 Disp. Cc 6.37 CF	0.0 peff. C n @ Base 998 WSPH cm2 1158.9 1125.0 966.0 852.5 754.9 687.6 642.6 648.9 624.2 641.4 peff. C n @ Base 998 WSPH cm2	2.689 DL 0 Line cv 0.489 0.750 1.006 1.253 1.510 2.013 2.257 2.480 2.680 DL 0 Line cv	0.00000 .2003 /m3 Kin CT x10-3 23.05169 34.45943 43.50741 34.28138 27.07678 20.95162 15.00311 11.56578 10.25411 9.08276 .2505 /m3 Kin CT x10-3	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.198 0.201 0.195 0.168 0.165 0.170 0.180 RT/DIS	-0.102 H/BPX 0.011 0.025 0.010 -0.025 -0.112 -0.122 -0.126 -0.128 -0.130	5.12 0.9916E- TAO Abs. 4.03 5.98 9.55 10.34 10.63 9.26 8.01 6.98 6.24 5.75	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.457 1.472 1.415 1.454 -06 m2/s Cwsph
3.860 Displaction VCG Postatic Water 19 1076 1.444 1.799 2.167 2.542 2.889 3.239 3.560 3.847 Displact VCG Postatic Water 19 10 10 10 10 10 10 10 10 10 10 10 10 10	381.1 cement D sition trim TA Temp. RT gms	-2.15 IS 243: 28 00 3 20 H cm 0.24 0.53 0.22 -0.51 -1.71 -2.35 -2.56 -2.65 -2.68 -2.74 IS 304: 27 00 H cm	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel 0.48 2.43 6.00 6.79 7.08 5.71 4.46 3.43 2.69 2.20 2.0 gm .70 % B .51 deg .50 deg TAO Rel.	0.000 s C LC cm 40.02 48.30 37.95 32.78 28.98 24.17 21.12 20.01 17.96 17.25 s	0.00 Disp. Cc 6.56 CF Density LK cm 64.31 56.58 50.37 44.85 39.68 38.34 37.31 38.99 38.79 41.06 Disp. Cc 6.37 CF	0.0 peff. Con @ Base 998 WSPH cm2 1158.9 1125.0 966.0 966.0 852.5 754.9 687.6 642.6 648.9 624.2 641.4 peff. Con @ Base 998 WSPH cm2	2.689 DL 0 Line cv 0.489 0.750 1.006 1.253 1.510 1.771 2.013 2.257 2.480 2.680 DL 0 Line cv	0.00000 .2003 /m3 Kin CT x10-3 -23.05169 34.45943 43.50741 34.28138 27.07678 20.95162 15.00311 11.56578 10.25411 9.08276 .2505 /m3 Kin CT x10-3	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.198 0.201 0.195 0.168 0.165 0.170 0.180 RT/DIS	-0.102 H/BPX 0.011 0.025 0.010 -0.025 -0.112 -0.122 -0.126 -0.128 -0.130	5.12 0.9916E TAO Abs. 4.03 5.98 9.26 8.01 6.98 6.24 5.75 0.9916E TAO Abs.	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.559 1.457 1.415 1.415 1.454 -06 m2/s Cwsph
3.860 Displaction VCG Postatic Water 19 1076 1.444 1.799 2.167 2.542 2.889 3.239 3.560 3.847 Displact VCG Postatic Water 19 10 10 10 10 10 10 10 10 10 10 10 10 10	381.1 cement D sition trim TA Temp. RT gms	-2.15 IS 243: 28 00 3 20 H cm 0.24 0.53 0.22 -0.51 -1.71 -2.35 -2.56 -2.65 -2.68 -2.74 IS 304: 27 00 H cm	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel. 0.48 2.43 6.00 6.79 7.08 5.71 4.46 3.43 2.69 2.20 2.0 gm .70 % B .51 deg .50 deg TAO Rel.	0.000 s C LC cm 40.02 48.30 37.95 28.98 24.17 21.12 20.01 17.96 17.25 s	0.00 Disp. Cc 6.56 CF Density LK cm 64.31 56.58 50.37 44.85 39.68 38.34 37.31 38.99 38.79 41.06 Disp. Cc 6.37 CF	0.0 peff. C n @ Base 998 WSPH cm2 1158.9 1125.0 966.0 852.5 754.9 687.6 642.6 648.9 624.2 641.4 peff. C n @ Base 998 WSPH cm2	2.689 DL 0 Line cv 0.489 0.750 1.006 1.253 1.510 1.771 2.013 2.257 2.480 2.680 DL 0 Line cv	0.00000 .2003 /m3 Kin CT x10-3 -23.05169 34.45943 43.50741 34.28138 27.07678 20.95162 15.00311 11.56578 10.25411 9.08276 .2505 /m3 Kin CT x10-3	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.198 0.201 0.195 0.168 0.165 0.170 0.180	-0.102 Decity H/BPX -0.011 0.025 0.010 -0.025 -0.082 -0.112 -0.126 -0.128 -0.130 Decity H/BPX	5.12 0.9916E- TAO Abs. 4.03 5.98 9.55 10.34 10.63 9.26 8.01 6.98 6.24 5.75	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.457 1.472 1.415 1.454 -06 m2/s Cwsph
3.860 Displaction VCG Postatic Water 1.076 1.076 1.444 1.799 2.167 2.542 2.889 3.239 3.560 3.847 Displactic Water 1.076 Water 1.076 Water 1.076	381.1 cement D sition trim TA Temp. RT gms 66.8 228.5 445.7 481.1 488.3 473.5 409.3 400.5 412.7 438.5 cement D sition trim TA Temp. RT gms	-2.15 IS 243. 28 Oo 3 20 H Cm 0.24 0.53 0.22 -0.51 -1.71 -2.35 -2.56 -2.65 -2.68 -2.74 IS 304 27 Oo 4 00 H Cm 0.24	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel. 0.48 2.43 6.00 6.79 7.08 5.71 4.46 3.43 2.69 2.20 2.0 gm .70 % B .51 deg .50 deg TAO Rel. 0.46	0.000 s C LC cm 40.02 48.30 37.95 32.78 28.98 24.17 21.12 20.01 17.96 17.25 s C LC cm	0.00 Disp. Cc 6.56 CF Density LK CM 64.31 56.58 50.37 44.85 39.68 38.34 37.31 38.99 38.79 41.06 Disp. Cc 6.37 CF Density LK CM	0.0 peff. C 998 WSPH Cm2 1158.9 1125.0 966.0 852.5 754.9 687.6 642.6 648.9 924.2 641.4 peff. C Base 998 WSPH Cm2	2.689 DL 0 Line CV 0.489 0.750 1.006 1.253 1.510 1.771 2.013 2.257 2.480 2.680 DL 0 Line CV	0.00000 .2003 /m3 Kin CT x10-3 -23.05169 34.45943 43.50741 34.28138 27.07678 20.95162 15.00311 11.56578 10.25411 9.08276 .2505 /m3 Kin CT x10-3 -26.36100	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.198 0.201 0.195 0.165 0.170 0.180 RT/DIS	-0.102 Decity H/BPX 0.011 0.025 0.010 -0.025 -0.082 -0.112 -0.126 -0.128 -0.130 Decity H/BPX 0.012	5.12 0.9916E TAO Abs. 4.03 5.98 9.55 10.34 10.63 9.26 8.01 6.98 6.24 5.75 0.9916E TAO Abs.	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.559 1.457 1.472 1.415 1.454 -06 m2/s Cwsph 2.686
3.860 Displaction VCG Postatic Water 10.701 1.076 1.444 1.799 2.167 2.542 2.889 3.239 3.560 3.847 Displact VCG Postatic Water 10.701 m/s	381.1 cement D sition trim TA Temp. RT gms	-2.15 IS 2433 28 Oo 3 20 H cm 0.24 0.53 0.22 -0.51 -1.71 -2.35 -2.56 -2.65 -2.68 -2.74 IS 304 27 Oo 4 20 H cm 0.24 0.57	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel 0.48 2.43 6.00 6.79 7.08 5.71 4.46 3.43 2.69 2.20 2.0 gm .70 % B .51 deg .50 deg TAO Rel 0.46 2.56	0.000 s C LC Cm 40.002 48.30 37.95 32.78 28.98 24.17 21.12 20.01 17.96 17.25 s C LC cm 41.40 50.37	0.00 Disp. Cc 6.56 CE Density LK Cm 64.31 56.58 50.37 44.85 39.68 38.34 37.31 38.99 38.79 41.06 Disp. Cc 6.37 CE Density LK Cm 65.24 57.27	0.0 peff. C n @ Base 998 WSPH cm2 1158.9 1125.0 966.0 852.5 754.9 687.6 642.6 648.9 624.2 641.4 peff. C n @ Base 998 WSPH cm2 1184.7 1140.5	2.689 DL 0 Line CV 0.489 0.750 1.071 2.013 2.257 2.480 2.680 DL 0 Line CV	0.00000 .2003 /m3 Kin CT x10-3	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.195 0.168 0.165 0.170 0.180 n. Visco RT/DIS 0.026 0.091	-0.102 h/BPX 0.011 0.025 0.010 -0.025 -0.112 -0.126 -0.128 -0.130 city h/BPX	5.12 0.9916E TAO Abs. 4.03 5.98 9.55 10.34 10.63 9.26 8.01 6.98 6.24 5.75 0.9916E TAO Abs.	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.559 1.457 1.472 1.415 1.454 -06 m2/s Cwsph 2.686 2.586
3.860 Displaction VCG Postatic Water 1.076 1.076 1.444 1.799 2.167 2.542 2.889 3.239 3.560 3.847 Displact VCG Postatic Water 1.076 water 1.077 1.077 1.437	381.1 cement D sition trim TA Temp. RT gms	-2.15 IS 2433 28 Oo 3 20 H cm 0.24 0.53 0.22 -0.51 -1.71 -2.35 -2.65 -2.65 -2.68 -2.74 IS 304 27 Oo 4 20 H cm 0.24 0.57 0.31	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel 0.48 2.43 6.00 6.79 7.08 5.71 4.46 3.43 2.69 2.20 2.0 gm .70 % B .51 deg .50 deg TAO Rel 0.46 2.56 7.09	0.000 s C LC cm 40.02 48.30 37.95 32.78 28.98 24.17 21.12 20.01 17.96 17.25 s C LC cm 41.40 50.37 40.36	0.00 Disp. Cc 6.56 CF Density LK cm 64.31 56.58 50.37 44.85 39.68 38.34 37.31 38.99 38.79 41.06 Disp. Cc 6.37 CF Density LK cm 65.24 57.27 51.06	0.0 peff. C n @ Base 998 WSPH cm2 1158.9 1125.0 966.0 852.5 754.9 687.6 642.6 648.9 624.2 641.4 peff. C n @ Base 998 WSPH cm2 1184.7 1140.5 998.0	2.689 DL 0 Line cv 0.489 0.750 1.006 1.253 1.510 1.771 2.013 2.257 2.480 2.680 DL 0 Line cv CV	0.00000 .2003 /m3 Kin CT x10-323.05169 34.45943 43.50741 34.28138 27.07678 20.95162 15.00311 11.56578 10.25411 9.08276 .2505 /m3 Kin CT x10-326.36100 41.29830 61.88522	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.198 0.201 0.165 0.170 0.180 n. Visco RT/DIS 0.026 0.021 0.021 0.021	-0.102 H/BPX 0.011 0.025 -0.082 -0.112 -0.126 -0.128 -0.130 Decity H/BPX	5.12 0.9916E TAO Abs. 4.03 5.98 9.55 10.34 10.63 9.26 8.01 6.98 6.24 5.75 TAO Abs. 4.97 7.07 11.60	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.457 1.472 1.415 1.454 -06 m2/s Cwsph 2.686 2.586 2.263
3.860 Displace VCG Pos Static Water Vel m/s 0.701 1.076 1.444 1.799 2.167 2.542 2.889 3.560 3.847 Displace VCG Pos Static Water Vel m/s 0.701 1.077 1.437 1.783	381.1 cement D sition trim TA Temp. RT gms	-2.15 IS 243: 28 00 3 20 H cm 0.24 0.53 0.22 -0.51 -1.71 -2.35 -2.56 -2.65 -2.68 -2.74 IS 304: 27 00 4 20 H cm 0.24 0.53 0.22 -0.51 -1.71 -2.35 -2.56 -2.65 -2.65 -2.68 -2.74	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel 0.48 2.43 6.00 6.79 7.08 5.71 4.46 3.43 2.69 2.20 2.0 gm .70 % B .51 deg .50 deg TAO Rel 0.46 2.56 7.09 8.29	0.000 s C LC cm 40.02 48.30 37.95 32.78 28.98 24.17 21.12 20.01 17.96 17.25 s C LC cm 41.40 50.37 40.36 34.50	0.00 Disp. Cc 6.56 CF Density LK cm 64.31 56.58 50.37 44.85 39.68 38.34 37.31 38.99 38.79 41.06 Disp. Cc 6.37 CF Density LK cm 65.24 57.27 51.06 44.85	0.0 peff. Con @ Base 998 WSPH cm2 1158.9 1125.0 966.0 852.5 754.9 687.6 642.6 648.9 624.2 641.4 peff. Con @ Base 998 WSPH cm2 1184.7 1140.5 998.0 871.1	2.689 DL 0 Line 0.489 0.750 1.001 1.253 1.510 1.771 2.013 2.257 2.480 2.680 DL 0 Line 0.489 0.750 1.001 1.242	0.00000 .2003 /m3 Kin CT x10-3 23.05169 34.45943 43.50741 34.28138 27.07678 20.95162 15.00311 11.56578 10.25411 9.08276 .2505 /m3 Kin CT x10-3 26.36100 41.29830 61.88522 49.61108	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.201 0.195 0.168 0.165 0.170 0.180 RT/DIS RT/DIS 0.026 0.091 0.213 0.230	-0.102 Docity H/BPX -0.011 0.025 -0.082 -0.112 -0.128 -0.130 Docity H/BPX -0.012 0.012 -0.128 -0.130	5.12 0.9916E TAO Abs. 4.03 5.98 9.55 10.34 10.63 9.26 8.01 6.98 6.24 5.75 0.9916E TAO Abs. 4.97 7.07 11.60 12.80	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.559 1.457 1.472 1.415 1.454 -06 m2/s Cwsph 2.686 2.586 2.263 1.975
3.860 Displaction VCG Poor Static Water 10.701 1.076 1.444 1.799 2.167 2.542 2.889 3.239 3.560 3.847 Displact VCG Poor Static Water 10.701 1.077 1.437 1.783 2.159	381.1 cement D sition trim TA Temp. RT gms 66.8 228.5 445.7 481.1 488.3 473.5 409.3 400.5 412.7 438.5 cement D sition trim TA Temp. RT gms 78.2 277.7 649.0 698.9 735.6	-2.15 IS 243: 28 Oo 3 20 H Cm 0.24 0.53 0.22 -0.51 -1.71 -2.35 -2.56 -2.66 -2.68 -2.74 IS 304: 27 Oo 4 20 H Cm 0.24 0.57 0.31 -0.59 -2.14	1.90 2.0 gm .52 % B .55 deg .50 deg TAO .82.43 6.00 6.79 7.08 5.71 4.46 3.43 2.69 2.20 2.0 gm .70 % B .51 deg .50 deg TAO .70 % B .51 deg .50 deg .50 deg .50 deg .50 deg .50 deg	0.000 s C LC cm 40.02 48.30 37.95 32.78 28.98 24.17 21.12 20.01 17.96 17.25 s C LC cm 41.40 50.37 40.36 34.50 29.33	0.00 Disp. Cc 6.56 CF Density LK CM 64.31 56.58 50.37 44.85 39.68 38.34 37.31 38.99 38.79 41.06 Disp. Cc 6.37 CF Density LK CM 65.24 57.27 51.06 44.85 38.99	0.0 peff. Con @ Base 998 WSPH cm2 1158.9 1125.0 966.0 966.0 852.5 754.9 687.6 642.6 648.9 624.2 641.4 peff. Con @ Base 998 WSPH cm2 1184.7 1140.5 998.0 871.1 751.0	2.689 DL 0 Line 0.489 0.750 1.006 1.253 1.510 1.771 2.013 2.257 2.480 2.680 DL 0 Line 0.489 0.750 1.001 1.242 1.504	0.00000 .2003 /m3 Kin CT x10-3 -23.05169 34.45943 43.50741 34.28138 27.07678 20.95162 15.00311 11.56578 10.25411 9.08276 .2505 /m3 Kin CT x10-3 -26.36100 41.29830 61.88522 49.61108 41.31379	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.198 0.201 0.195 0.168 0.165 0.170 0.180 RT/DIS 0.026 0.091 0.213 0.230 0.242	-0.102 Decity H/BPX -0.011 0.025 0.010 -0.025 -0.082 -0.112 -0.120 -0.128 -0.130 Decity H/BPX 0.012 0.027 0.015 -0.028 -0.102	5.12 0.9916E TAO Abs. 4.03 5.98 9.55 10.34 10.63 9.26 8.01 6.98 6.24 5.75 0.9916E TAO Abs. 4.97 7.07 11.60 12.80 13.11	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.559 1.457 1.472 1.415 1.454 -06 m2/s Cwsph 2.686 2.586 2.586 2.263 1.975 1.703
3.860 Displace VCG Pos Static Water Vel m/s 0.701 1.076 1.444 1.799 2.167 2.542 2.889 3.560 3.847 Displace VCG Pos Static Water Vel m/s 0.701 1.077 1.437 1.783	381.1 cement D sition trim TA Temp. RT gms 66.8 228.5 445.7 481.1 488.3 473.5 409.3 400.5 412.7 438.5 cement D sition trim TA Temp. RT gms 78.2 277.7 649.0 698.9 735.6	-2.15 IS 243: 28 00 3 20 H cm 0.24 0.53 0.22 -0.51 -1.71 -2.35 -2.56 -2.65 -2.68 -2.74 IS 304: 27 00 4 20 H cm 0.24 0.53 0.22 -0.51 -1.71 -2.35 -2.56 -2.65 -2.65 -2.68 -2.74	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel 0.48 2.43 6.00 6.79 7.08 5.71 4.46 3.43 2.69 2.20 2.0 gm .70 % B .51 deg .50 deg TAO Rel 0.46 2.56 7.09 8.29	0.000 s C LC cm 40.02 48.30 37.95 32.78 28.98 24.17 21.12 20.01 17.96 17.25 s C LC cm 41.40 50.37 40.36 34.50	0.00 Disp. Cc 6.56 CF Density LK cm 64.31 56.58 50.37 44.85 39.68 38.34 37.31 38.99 38.79 41.06 Disp. Cc 6.37 CF Density LK cm 65.24 57.27 51.06 44.85	0.0 peff. Con @ Base 998 WSPH cm2 1158.9 1125.0 966.0 852.5 754.9 687.6 642.6 648.9 624.2 641.4 peff. Con @ Base 998 WSPH cm2 1184.7 1140.5 998.0 871.1	2.689 DL 0 Line 0.489 0.750 1.001 1.253 1.510 1.771 2.013 2.257 2.480 2.680 DL 0 Line 0.489 0.750 1.001 1.242	0.00000 .2003 /m3 Kin CT x10-3 23.05169 34.45943 43.50741 34.28138 27.07678 20.95162 15.00311 11.56578 10.25411 9.08276 .2505 /m3 Kin CT x10-3 26.36100 41.29830 61.88522 49.61108	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.198 0.201 0.195 0.168 0.165 0.170 0.180 RT/DIS 0.026 0.091 0.213 0.230 0.242	-0.102 Decity H/BPX -0.011 0.025 0.010 -0.025 -0.082 -0.112 -0.120 -0.128 -0.130 Decity H/BPX 0.012 0.027 0.015 -0.028 -0.102	5.12 0.9916E TAO Abs. 4.03 5.98 9.55 10.34 10.63 9.26 8.01 6.98 6.24 5.75 0.9916E TAO Abs. 4.97 7.07 11.60 12.80 13.11	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.559 1.457 1.472 1.415 1.454 -06 m2/s Cwsph 2.686 2.586 2.263 1.975
3.860 Displaction VCG Postatic Water 10.701 1.076 1.444 1.799 2.167 2.542 2.889 3.239 3.560 3.847 Displact VCG Postatic Water 10.701 1.077 1.437 1.783 2.159 2.536	381.1 cement D sition trim TA Temp. RT gms	-2.15 IS 2433 28 00 3 20 H cm 0.24 0.57 0.31 -0.59 -2.61 -2.74	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel 0.48 2.43 6.00 6.79 7.08 5.71 4.46 3.43 2.69 2.20 2.0 gm .70 % B .51 deg .50 deg TAO Rel 0.46 2.56 7.09 8.29 8.60 6.79	0.000 s C LC Cm 40.02 48.30 37.95 32.78 28.98 24.17 21.12 20.01 17.96 17.25 s C LC Cm 41.40 50.37 40.36 34.50 29.33 26.56	0.00 Disp. Cc 6.56 CE Density LK CM 64.31 56.58 50.37 44.85 39.68 38.34 37.31 38.99 38.79 41.06 Disp. Cc 6.37 CE Density LK CM CM 65.24 57.27 51.06 44.85 38.99 37.61	0.0 peff. C n @ Base 998 WSPH cm2 1158.9 1125.0 966.0 852.5 754.9 687.6 642.6 648.9 624.2 641.4 peff. C n @ Base 998 WSPH cm2 1184.7 1140.5 998.0 871.1 751.0 705.9	2.689 DL 0 Line 0.489 0.750 1.006 1.253 1.510 1.771 2.013 2.257 2.480 2.680 DL 0 Line 0.101 kg CV	0.00000 .2003 /m3 Kin CT x10-3 23.05169 34.45943 43.50741 34.28138 27.07678 20.95162 15.00311 11.56578 10.25411 9.08276 .2505 /m3 Kin CT x10-3 26.36100 41.29830 61.88522 49.61108 41.31379 27.66258	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.195 0.168 0.165 0.170 0.180 n. Visco RT/DIS 0.021 0.213 0.230 0.242 0.210	-0.102 H/BPX 0.011 0.025 0.010 -0.025 -0.112 -0.122 -0.126 -0.128 -0.130 DCity H/BPX 0.012 0.027 0.015 -0.028 -0.102 -0.139	5.12 0.9916E TAO Abs. 4.03 5.98 9.55 10.34 10.63 9.26 8.01 6.98 6.24 5.75 0.9916E TAO Abs. 4.97 7.07 11.60 12.80 13.11	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.559 1.457 1.472 1.415 1.454 -06 m2/s Cwsph 2.686 2.586 2.586 2.263 1.975 1.703
3.860 Displaction VCG Postatic Water 1.076 1.076 1.444 1.799 2.167 2.542 2.889 3.239 3.560 3.847 Displact VCG Postatic Water 1.077 1.437 1.783 2.159 2.536 2.876	381.1 cement D sition trim TA Temp. RT gms	-2.15 IS 2433 28 Oo 3 20 H cm 0.24 0.53 0.22 -0.51 -1.71 -2.35 -2.66 -2.65 -2.68 -2.74 IS 304 27 Oo 4 0.57 0.31 -0.59 -2.14 -2.91 -3.17	1.90 2.0 gm .52 % B .55 deg .50 deg TAO Rel 0.48 2.43 6.00 6.79 7.08 5.71 4.46 3.43 2.69 2.20 2.0 gm .70 % B .51 deg .50 deg TAO Rel 0.46 7.09 8.29 8.60 6.79 5.18	0.000 s C LC Cm 40.02 48.30 37.95 32.78 28.98 24.17 21.12 20.01 17.96 17.25 s C LC Cm 41.40 50.37 40.36 34.50 29.33 26.56 22.80	0.00 Disp. Cc 6.56 CF Density LK cm 64.31 56.58 50.37 44.85 39.68 38.39 38.79 41.06 Disp. Cc 6.37 CF Density LK cm 65.24 57.27 51.06 44.85 38.99 37.61 36.28	0.0 peff. Con @ Base 998 WSPH cm2 1158.9 1125.0 966.0 852.5 754.9 687.6 648.9 624.2 641.4 peff. Con @ Base 998 WSPH cm2 1184.7 1140.5 998.0 871.1 751.0 705.9 649.8	2.689 DL 0 Line cv 0.489 0.750 1.006 1.253 1.510 1.771 2.013 2.257 2.480 2.680 DL 0 Line cv 0.489 0.750 1.001 1.242 1.504 1.767 2.004	0.00000 .2003 /m3 Kin CT x10-323.05169 34.45943 43.50741 34.28138 27.07678 20.95162 15.00311 11.56578 10.25411 9.08276 .2505 /m3 Kin CT x10-326.36100 41.29830 61.88522 49.61108 41.31379 27.66258 20.88547	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.198 0.201 0.195 0.168 0.165 0.170 0.180 n. Visco RT/DIS 0.026 0.091 0.213 0.230 0.242 0.210 0.188	-0.102 H/BPX 0.011 0.025 -0.082 -0.112 -0.126 -0.128 -0.130 Ocity H/BPX	5.12 0.9916E TAO Abs. 4.03 5.98 9.55 10.34 10.63 9.26 8.01 6.98 6.24 5.75 TAO Abs. 4.97 7.07 11.60 12.80 13.11 11.30 9.69	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.559 1.457 1.472 1.415 1.454 -06 m2/s Cwsph 2.686 2.263 1.975 1.703 1.601 1.474
3.860 Displace VCG Pos Static Water Vel m/s 0.701 1.076 1.444 1.799 2.167 2.542 2.889 3.239 3.560 3.847 Displace VCG Pos Static Water Vel m/s 0.701 1.077 1.437 1.783 2.159 2.536 2.876 3.232	381.1 cement D sition trim TA Temp. RT gms	-2.15 IS 243: 28 00 3 20 H cm 0.24 0.53 0.22 -0.51 -1.71 -2.35 -2.56 -2.65 -2.68 -2.74 IS 304: 27 00 4 0.57 0.31 -0.59 -2.14 -2.91 -3.17 -3.27	1.90 2.0 gm .52 % B .55 deg .50 deg TAO .70 % B .51 deg	0.000 s C LC Cm 40.02 48.30 37.95 32.78 28.98 24.17 21.12 20.01 17.96 17.25 s C LC Cm 41.40 36.36 34.50 29.33 26.56 22.80 21.74	0.00 Disp. Co 6.56 CF Density LK cm 64.31 56.58 50.37 44.85 39.68 38.34 37.31 38.99 38.79 41.06 Disp. Co 6.37 CF Density LK cm 65.24 57.27 51.06 44.85 38.99 37.61 36.28 36.57	0.0 peff. C n @ Base 998 WSPH cm2 1158.9 1125.0 966.0 852.5 754.9 687.6 642.6 648.9 624.2 641.4 peff. C n @ Base 998 WSPH cm2 1184.7 1140.5 998.0 871.1 751.0 705.9 649.8 641.4	2.689 DL 0 Line 0.489 0.750 1.006 1.253 1.510 2.257 2.480 2.680 DL 0 Line 0.101 kg CV CV 0.489 1.501 1.771 2.013 2.257 2.480 2.680 DL 0 Line 1.101 kg CV 0.489 0.750 1.001 1.242 1.504 1.767 2.004 2.251	0.00000 .2003 /m3 Kin CT x10-3 23.05169 34.45943 43.50741 34.28138 27.07678 20.95162 15.00311 11.56578 10.25411 9.08276 .2505 /m3 Kin CT x10-3 26.36100 41.29830 61.88522 49.61108 41.31379 27.66258 20.88547 15.63390	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.201 0.195 0.168 0.165 0.170 0.180 n. Visco RT/DIS 0.026 0.091 0.213 0.230 0.242 0.210 0.188 0.175	-0.102 H/BPX 0.011 0.025 -0.082 -0.112 -0.122 -0.126 -0.128 -0.130 Docity H/BPX -0.01 -0.025 -0.126 -0.128 -0.130	5.12 0.9916E TAO Abs. 4.03 5.98 9.55 10.34 10.63 9.26 8.01 6.98 6.24 5.75 TAO Abs. 4.97 7.07 11.60 12.80 13.11 11.30 9.69 8.50	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.559 1.457 1.472 1.415 1.454 -06 m2/s Cwsph 2.686 2.586 2.263 1.975 1.703 1.601 1.474 1.454
3.860 Displace VCG Pos Static Water Vel m/s 0.701 1.076 1.444 1.799 2.167 2.542 2.889 3.239 3.560 3.847 Displace VCG Pos Static Water Vel m/s 0.701 1.077 1.437 1.783 2.159 2.536 2.876 3.232 3.553	381.1 cement D sition trim TA Temp. RT gms	-2.15 IS 243: 28 00 3 20 H Cm 0.24 0.53 0.22 -0.51 -1.71 -2.35 -2.56 -2.65 -2.68 -2.74 IS 304: 27 00 4 20 H Cm 0.24 0.57 0.31 -0.59 -2.14 -2.91 -3.17 -3.27 -3.31	1.90 2.0 gm .52 % B .55 deg .50 deg TAO .70 % B .51 deg .70 % B .70 % B .70 %	0.000 s C LC cm 40.02 48.30 37.95 32.78 28.98 24.17 21.12 20.01 17.96 17.25 s C LC cm 41.40 50.37 40.36 43.50 29.33 26.56 22.80 21.74 19.48	0.00 Disp. Cc 6.56 CF Density LK cm 64.31 56.58 50.37 44.85 39.68 38.34 37.31 38.99 38.79 41.06 Disp. Cc 6.37 CF Density LK cm 65.24 57.27 51.06 44.85 38.99 37.61 36.28 36.57 36.31	0.0 peff. Con @ Base 998 WSPH cm2 1158.9 1125.0 966.0 852.5 754.9 687.6 642.6 648.9 624.2 641.4 peff. Con @ Base 998 WSPH cm2 1184.7 1140.5 998.0 871.1 751.0 705.9 649.8 641.4 613.7	2.689 DL 0 Line 0.489 0.750 1.006 1.253 1.510 1.771 2.013 2.257 2.480 2.680 DL 0 Line 0.489 0.750 1.001 1.242 1.504 1.767 2.004 2.251 2.476	0.00000 .2003 /m3 Kin CT x10-3 23.05169 34.45943 43.50741 34.28138 27.07678 20.95162 15.00311 11.56578 10.25411 9.08276 .2505 /m3 Kin CT x10-3 26.36100 41.29830 61.88522 49.61108 41.31379 27.66258 20.88547 15.63390 13.22143	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.198 0.201 0.195 0.168 0.165 0.170 0.180 n. Visco RT/DIS 0.026 0.091 0.213 0.230 0.242 0.210 0.188 0.175 0.171	-0.102 Docity H/BPX -0.011 0.025 -0.082 -0.112 -0.122 -0.128 -0.130 Docity H/BPX -0.012 0.015 -0.028 -0.015 -0.028 -0.102 -0.139 -0.151 -0.156 -0.158	5.12 0.9916E TAO Abs. 4.03 5.98 9.55 10.34 10.63 9.26 8.01 6.98 6.24 5.75 0.9916E TAO Abs. 4.97 7.07 11.60 12.80 13.11 11.30 9.69 8.50 7.52	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.559 1.457 1.472 1.415 1.454 -06 m2/s Cwsph 2.686 2.586 2.263 1.975 1.703 1.601 1.474 1.454 1.392
3.860 Displace VCG Pos Static Water Vel m/s 0.701 1.076 1.444 1.799 2.167 2.542 2.889 3.239 3.560 3.847 Displace VCG Pos Static Water Vel m/s 0.701 1.077 1.437 1.783 2.159 2.536 2.876 3.232	381.1 cement D sition trim TA Temp. RT gms	-2.15 IS 243: 28 00 3 20 H cm 0.24 0.53 0.22 -0.51 -1.71 -2.35 -2.56 -2.65 -2.68 -2.74 IS 304: 27 00 4 0.57 0.31 -0.59 -2.14 -2.91 -3.17 -3.27	1.90 2.0 gm .52 % B .55 deg .50 deg TAO .70 % B .51 deg	0.000 s C LC cm 40.02 48.30 37.95 32.78 28.98 24.17 21.12 20.01 17.96 17.25 s C LC cm 41.40 50.37 40.36 43.50 29.33 26.56 22.80 21.74 19.48	0.00 Disp. Co 6.56 CF Density LK cm 64.31 56.58 50.37 44.85 39.68 38.34 37.31 38.99 38.79 41.06 Disp. Co 6.37 CF Density LK cm 65.24 57.27 51.06 44.85 38.99 37.61 36.28 36.57	0.0 peff. Con @ Base 998 WSPH cm2 1158.9 1125.0 966.0 852.5 754.9 687.6 642.6 648.9 624.2 641.4 peff. Con @ Base 998 WSPH cm2 1184.7 1140.5 998.0 871.1 751.0 705.9 649.8 641.4 613.7	2.689 DL 0 Line 0.489 0.750 1.006 1.253 1.510 2.257 2.480 2.680 DL 0 Line 0.101 kg CV CV 0.489 1.501 1.771 2.013 2.257 2.480 2.680 DL 0 Line 1.101 kg CV 0.489 0.750 1.001 1.242 1.504 1.767 2.004 2.251	0.00000 .2003 /m3 Kin CT x10-3 23.05169 34.45943 43.50741 34.28138 27.07678 20.95162 15.00311 11.56578 10.25411 9.08276 .2505 /m3 Kin CT x10-3 26.36100 41.29830 61.88522 49.61108 41.31379 27.66258 20.88547 15.63390 13.22143	0.209 n. Visco RT/DIS 0.027 0.094 0.183 0.198 0.201 0.195 0.168 0.165 0.170 0.180 n. Visco RT/DIS 0.026 0.091 0.213 0.230 0.242 0.210 0.188 0.175 0.171	-0.102 Docity H/BPX -0.011 0.025 -0.082 -0.112 -0.122 -0.128 -0.130 Docity H/BPX -0.012 0.015 -0.028 -0.015 -0.028 -0.102 -0.139 -0.151 -0.156 -0.158	5.12 0.9916E TAO Abs. 4.03 5.98 9.55 10.34 10.63 9.26 8.01 6.98 6.24 5.75 0.9916E TAO Abs. 4.97 7.07 11.60 12.80 13.11 11.30 9.69 8.50 7.52	0.000 -06 m2/s Cwsph 2.628 2.551 2.190 1.933 1.712 1.559 1.457 1.472 1.415 1.454 -06 m2/s Cwsph 2.686 2.586 2.263 1.975 1.703 1.601 1.474 1.454

<u>Table B.27</u> L/B = 3.0; β = 18°; L_{cg} = 30%; Thrust Line: Centre of Gravity

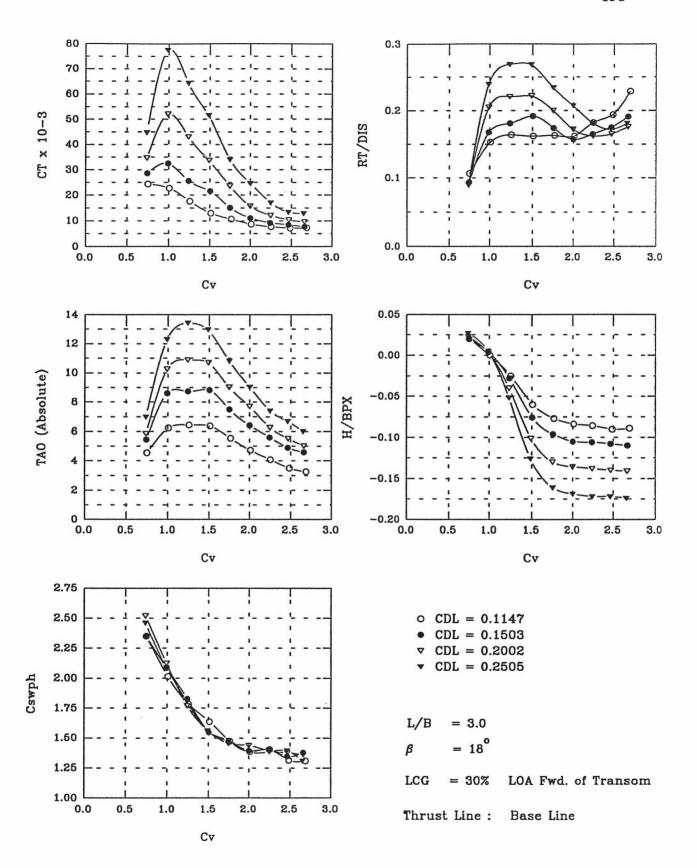


Figure B.28

```
Model No. T-3018
L/B Ratio
                     3.0
                                     Length Overal LOA 69.00 cm
Deadrise
                    18.00 deg
                                                                                               159
                                     Breath (Deck) B
Breath (Chine) BPX
                                                           23.00 cm
                                                          21.00 cm
LCG Position
                    30.00 % TOA
                                     20.70 cm @ Transom
Displacement DIS 1393.0 gms
                                     Disp. Coeff.
                                                   CDL
                                                           0.1147
                    29.35 % B
VCG Position
                                     6.75 cm @ Base Line
Static trim TAOo
                     2.05 deg
Water Temp.
                    20.00 deg C
                                     Density
                                                  998.206 kg/m3
                                                                   Kin. Viscocity 0.1004E-05 m2/s
Vel
         RT
                  н
                        TAO
                                LC
                                        T.K
                                                WSPH
                                                               CT
                                                                        RT/DIS H/BPX
                                                       CV
                                                                                         TAO
                                                                                                Cwsph
m/s
                        Rel.
                                                               x10-3
         qms
                  CM
                                CM
                                        CIM
                                                 cm2
                                                                                         Ahs.
1.077
                                                               24.27681
        148.4
                 0.42
                        2.48
                              39.68
                                      55.20
                                              1036.8
                                                      0.750
                                                                         0.107
                                                                                 0.020
                                                                                         4.53
                                                                                                2.351
1.443
        213.6
                 0.00
                        4.19
                              31.05
                                      49.68
                                               887.4 1.006
                                                               22.71037
                                                                         0.153 0.000
                                                                                         6.24
                                                                                                2.012
1.799
        228.6
                -0.53
                              25.88
                                               786.0 1.253
                        4.39
                                      45.58
                                                               17.66659
                                                                         0.164 -0.025
                                                                                                1.782
                                                                                         6.44
2.170
                                                                         0.162 -0.060
        225.3
                -1.25
                        4.33
                              23.19
                                      42.47
                                               722.2
                                                      1.512
                                                               13.01892
                                                                                         6.38
                                                                                                1.638
2.535
        226.7
                -1.62
                        3.49
                              19.32
                                      39.68
                                               648.9
                                                      1.766
                                                               10.68319
                                                                         0.163 -0.077
                                                                                         5.54
                                                                                                1.472
2.885
        225.1
                -1.75
                        2.66
                              16.22
                                      39.33
                                               611.0
                                                      2.010
                                                                8.70030
                                                                         0.162 -0.084
                                                                                         4.71
                                                                                                1.385
3.234
        253.3
                -1.81
                        2.03
                              14.84
                                      41.40
                                               618.6
                                                     2.253
                                                                7.69268
                                                                         0.182 -0.086
                                                                                         4.08
                                                                                                1.403
3.567
        270.5
                -1.88
                        1.45
                              11.62
                                      41.11
                                               580.0
                                                      2.485
                                                                7.20213
                                                                         0.194 -0.090
                                                                                         3.50
                                                                                                1.315
3.859
        319.2 -1.88
                                               576.8 2.688
                                                                         0.229 -0.089
                                                                                         3.26
                                                                                                1.308
                        1.21
                               9.32
                                      43.13
                                                                7.30481
Displacement DIS 1825.0
                                                    CDL
                                                           0.1503
                           gms
                                     Disp. Coeff.
                   28.48 % B
                                     6.55 cm € Base Line
VCG Position
Static trim TAOo
                     3.22 deg
Water Temp.
                    20.50 deg C
                                                                   Kin. Viscocity 0.9916E-06 m2/s
                                     Density
                                                  998.101 kg/m3
Vel
         RT
                  H
                        TAO
                                TC
                                                WSPH
                                                       CV
                                                                CT
                                                                                         TAO
                                        T.K
                                                                        RT/DIS H/BPX
                                                                                                Cwsph
m/s
                                                               x10-3
         qms
                  Cm
                        Rel.
                                CM
                                        Cm
                                                 cm2
                                                                                         Abs.
1.066
        171.3
                 0.44
                        2.23
                             39.62
                                      55.22
                                              1036.5 0.743
                                                               28.57424
                                                                         0.094 0.021
                                                                                         5.45
                                                                                                2.350
1.420
        307.1
                0.07
                        5.39
                              34.50
                                      49.34
                                               920.5 0.989
                                                               32.54889
                                                                         0.168 0.004
                                                                                         8.61
                                                                                                2.087
1.779
        331.6
               -0.60
                        5.51
                              29.56
                                               805.4 1.239
                                                                         0.181 -0.028
                                                               25.57433
                                                                                         8.73
                                                                                                1.826
                                      43.71
2.160
        349.7
               -1.59
                        5.60
                              24.15
                                      37.95
                                               683.1 1.505
                                                               21.56031
                                                                         0.192 -0.076
                                                                                         8.82
                                                                                                1.549
2.516
        316.9
               -2.01
                        4.27
                              21.74
                                      37.26
                                               648.9
                                                      1.753
                                                               15.16183
                                                                         0.174 -0.096
                                                                                         7.49
                                                                                                1.472
2.870
        286.9
               -2.20
                        3.20
                              19.32
                                      36.57
                                               614.8 1.999
                                                               11.13807
                                                                         0.157 -0.105
                                                                                         6.42
                                                                                                1.394
3.220
        301.8
               -2.24
                        2.39
                              17.25
                                      38.99
                                                      2.243
                                                                9.25159
                                                                         0.165 -0.106
                                                                                         5.61
                                                                                                1.403
                                               618.6
                                                                         0.175 -0.108
3.540
        319.4
               -2.26
                        1.67
                              15.18
                                      38.77
                                                      2.466
                                                                8.44126
                                                                                         4.89
                                               593.5
                                                                                                1.346
3.822
        348.0 -2.31
                        1.36 13.80
                                      41.40
                                               607.2 2.663
                                                                7.71075 0.191 -0.110
                                                                                         4.58
                                                                                                1.377
                                    Disp. Coeff. CDL
6.56 cm @ Base Line
Displacement DIS 2432.0 qms
                                                           0.2002
                    28.52 % B
VCG Position
                     3.55 deg
Static trim TAOo
Water Temp.
                   19.70 deg C
                                                  998.267 kg/m3 Kin. Viscocity 0.1011E-05 m2/s
                                    Density
VAI
         RT
                  H
                        TAO
                                LC
                                       LK
                                                WSPH
                                                       CV
                                                               CT
                                                                        RT/DIS H/BPX
                                                                                         TAO
                                                                                                Cwsph
m/s
         oms
                 CM
                        Rel.
                                CM
                                       cm
                                                 cm2
                                                              x10-3
                                                                                         Abs.
1.060
        219.9
                0.48
                              47.61
                                              1111.1 0.738
936.2 0.988
                                                               34.64159
                        2.30
                                     55.89
                                                                         0.090 0.023
                                                                                         5.85
                                                                                                2.519
                                                                         0.205 0.003
1.418
        498.9
                0.06
                        6.70
                              38.42
                                      47.22
                                                               52.06846
                                                                                        10.25
                                                                                                2.123
                        7.33
1.773
        537.8
               -0.84
                              30.70
                                      40.36
                                               781.0 1.235
                                                               43.04269
                                                                         0.221 -0.040
                                                                                               1.771
                                                                                        10.88
                                                                         0.222 -0.101
2.138
        539.5
               -2.11
                        7.15
                              25.93
                                      36.61
                                               687.9
                                                      1.490
                                                               33.71162
                                                                                        10.70
                                                                                                1.560
2.510
        485.5
               -2.73
                        5.46
                              23.11
                                      35.19
                                               641.4 1.748
                                                               23,62350
                                                                         0.200 -0.130
                                                                                         9.01
                                                                                                1.454
2.867
        417.5
                                                               15.75404
                                                                         0.172 -0.136
                                                                                         7.70
               -2.85
                        4.15
                              21.74
                                     35.88
                                               633.8
                                                      1.997
                                                                                                1.437
                                               614.8
3.223
        394.9
               -2.91
                        2.72
                              19.67
                                      36.22
                                                      2.246
                                                               12.15084
                                                                         0.162 -0.138
                                                                                         6.27
                                                                                                1.394
3.542
        400.4
              -2.93
                        1.97
                              17.94
                                     37.26
                                               607.2
                                                      2.468
                                                               10.32899
                                                                         0.165 -0.140
                                                                                         5.52
                                                                                                1.377
3.818
        427.4 -2.96
                        1.45
                                                                9.60983 0.176 -0.141
                                                                                         5.00
                             16.56
                                     37.95
                                               599.6
                                                      2.660
                                                                                                1.360
Displacement DIS 3042.0 gms
                                    Disp. Coeff.
                                                    CDL
                                                          0.2505
VCG Position
                   27.70 % B
                                    6.37 cm @ Base Line
Static trim TAOo
                     4.51 deg
Water Temp.
                                                                   Kin. Viscocity 0.1009E-05 m2/s
                   19.80 deg C
                                                 998.267 kg/m3
                                    Density
Vel
         RT
                 H
                        TAO
                                LC
                                       LK
                                                WSPH
                                                       CV
                                                               CT
                                                                        RT/DIS H/BPX
                                                                                         TAO
                                                                                                Cwsph
m/s
         ams
                 CM
                        Rel.
                                CM
                                       CM
                                                Cm2
                                                              x10-3
                                                                                         Abs.
                                                               44.78492 0.091 0.027
77.49544 0.239 0.005
                                              1084.6 0.736
921.1 0.985
1.056
        275.5
                0.56
                        2.47
                              45.71
                                     54.99
                                                                                         6.98
                                                                                                2.459
1.413
        725.5
                        7.77
                                                                                                2.089
                0.11
                              37.26
                                     46.92
                                                                                        12.28
1.773
        817.7
               -1.08
                        8.92
                              31.59
                                      40.82
                                               795.6 1.235
                                                               64.26863
                                                                         0.269 -0.052
                                                                                        13.43
                                                                                                1.804
                                                                         0.269 -0.126
2.131
        819.3
                              27.25
                                     35.19
                                                      1.485
                                                               51.62585
              -2.65
                        8.45
                                               686.9
                                                                                        12.96
                                                                                                1.558
2.510
        712.2
              -3.39
                        6.30
                              25.19
                                               652.7 1.749
                                                               34.03570
                                                                         0.234 -0.161
                                                                                        10.81
                                                                                                1.480
                                     34.16
                                                                         0.207 -0.169
                                                                                         9.03
2.870
                        4.52
                                                      1.999
                                                                                                1.385
        628.3
              -3.55
                              21.74
                                     33.81
                                               611.0
                                                               24.53957
3.227
        551.8
              -3.61
                        2.89
                              21.05
                                     34.50
                                               611.0
                                                      2.248
                                                               17.04791
                                                                         0.181 -0.172
                                                                                         7.40
                                                                                                1.385
3.536
        524.1
               -3.62
                        2.18
                              19.67
                                     36.22
                                               614.8 2.463
                                                               13.40373
                                                                         0.172 -0.172
                                                                                         6.69
                                                                                                1.394
```

576.8 2.651

12.92424 0.181 -0.174

5.99

1.308

3.806

549.4 -3.65

1.48 17.60 34.85

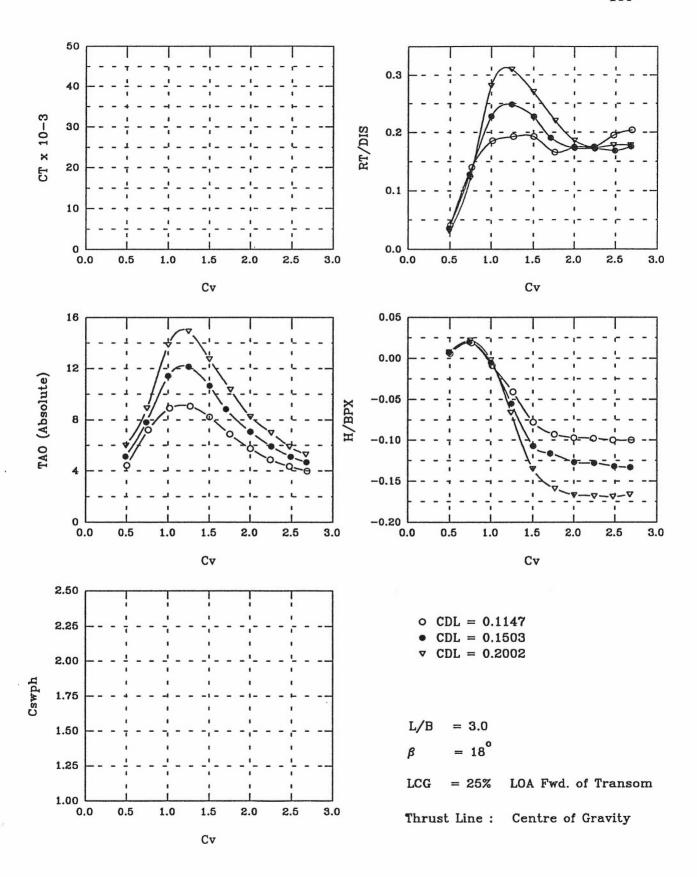


Figure B.29

	Model 1	No. T-30	18			~							
	L/B Rat Deadris		3. 18.	0 deg		Length O			.00 cm			-1	(61
	LCG Pos			00 % LC)A	Breath (Chine) B	PX 21	.00 cm]	161
	VCG Pos	sition		87 % B	3	Disp. Co			.1147				
	Water !	trim TA Temp.		79 deg 50 deg	C	Density	998	.308 kg	/m3 Ki	n. Visco	ocity	0.1016E	-05 m2/s
	Vel m/s	RT gms	H Cm	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
_	0.722	56.5	0.13	0.63	0.00	0.00	0.0	0.503	0.00000		0.006	4.42	0.000
	1.096	195.2	0.40	3.41	0.00	0.00	0.0	0.763	0.00000	0.140	0.019	7.20	
	1.460	258.8	-0.19	5.13	0.00	0.00		1.017	0.00000		-0.009	8.92	0.000
	1.818	269.2	-0.87	5.29	0.00	0.00		1.266	0.00000		-0.041	9.08	0.000
	2.161	268.6	-1.64	4.43	0.00	0.00		1.506	0.00000		-0.078	8.22	0.000
	2.520	230.7	-1.96	3.08	0.00	0.00		1.756	0.00000		-0.093	6.87	0.000
	2.872	243.3	-2.04	1.96	0.00	0.00		2.001	0.00000		-0.097	5.75	0.000
	3.219	244.3	-2.06	1.10	0.00	0.00		2.243	0.00000		-0.098	4.89	0.000
	3.550	271.7	-2.10	0.56	0.00	0.00		2.473	0.00000		-0.100	4.35	0.000
	3.861	284.0	-2.11	0.20	0.00	0.00	0.0	2.690	0.00000	0.204	-0.100	3.99	0.000
	Displac	rement D	IS 1825	i.0 cms		Disp. Co	eff. C	DL 0	.1503				
	VCG Pos			09 % B		6.46 cm							
		trim TA		50 deg									
	Water '			50 deg	C	Density	998	.308 kg	/m3 Kir	. Visco	ocity	0.1016E	-05 m2/s
	Vel	RT	н	TAO	LC	LK	WSPH	CV	CT	PT/DTC	H/BPX	TAO	Cwsph
	m/s	gms	cm	Rel.	cm	cm	cm2	•	x10-3	KI/DIS	II/ DE A	Abs.	-
-	0.702	65.0	0.15	0.65	0.00	0.00	0.0	0.489	0.00000	0.036	0.007	5.15	0.000
	1.061	234.0	0.42	3.32	0.00	0.00		0.739	0.00000	0.128	0.020	7.82	0.000
	1.434	416.9	-0.10	6.91	0.00	0.00		0.999	0.00000		-0.005	11.41	0.000
	1.789	453.2	-1.16	7.64	0.00	0.00		1.246	0.00000		-0.055	12.14	0.000
	2.159	413.8	-2.25	6.15	0.00	0.00	0.0	1.504	0.00000		-0.107	10.65	0.000
	2.451	348.8	-2.43	4.34	0.00	0.00		1.708	0.00000		-0.116	8.84	0.000
	2.874	315.4	-2.66	2.56	0.00	0.00		2.003	0.00000		-0.127	7.06	0.000
	3.234		-2.69	1.43	0.00	0.00		2.253	0.00000		-0.128	5.93	0.000
	3.575	314.3 308.5	-2.77	0.61	0.00	0.00		2.491	0.00000		-0.132	5.11	0.000
	3.848	320.5	-2.79	0.18	0.00	0.00		2.681	0.00000		-0.133	4.68	0.000
	3.040	320.3	-2.75	0.10	0.00	0.00	0.0	2.001	0.00000	0.176	-0.133	1.00	
		ement D		.0 gms	;	Disp. Co			.2002				
	VCG Pos			26 % B		6.50 cm	e Base	Line					
	Water 1	trim TA Cemp.		20 deg 50 deg	С	Density	998	.308 kg	/m3 Kii	. Visco	city	0.1016E	-05 m2/s
	**-1	-		alebarran an alebarran								TAO	Cwsph
	Vel m/s	RT qms	H	TAO Rel.	LC cm	LK Cm	WSPH cm2	CV	CT x10-3	RT/DIS	H/BPX	Abs.	CHOPII
_				VCT.									
	0.706	75.8	0.16	0.80	0.00	0.00		0.492	0.00000		0.008	6.00	0.000
	1.069	296.8	0.46	3.72	0.00	0.00		0.745	0.00000	0.122	0.022	8.92	0.000
	1.432	682.5	-0.05	8.67	0.00	0.00	0.0	0.998	0.00000		-0.002	13.87	
	1.785	754.1	-1.39	9.73	0.00	0.00	0.0	1.243	0.00000		-0.066	14.93	0.000
	2.154	657.1	-2.84	7.55	0.00	0.00	0.0	1.501	0.00000		-0.135	12.75	0.000
	2.529	534.2	-3.34	5.16	0.00	0.00		1.762	0.00000		-0.159	10.36	0.000
	2.872	452.6	-3.51	3.05	0.00	0.00		2.001	0.00000		-0.167	8.25	0.000
	3.234	423.0	-3.53	1.78	0.00	0.00		2.253	0.00000		-0.168	6.98	0.000
	3.551	433.9	-3.54	0.70	0.00	0.00	0.0	2.474	0.00000		-0.169	5.90	0.000
	3.838	432.1	-3.49	0.08	0.00	0.00	0.0	2.674	0.00000	0.178	-0.166	5.28	0.000

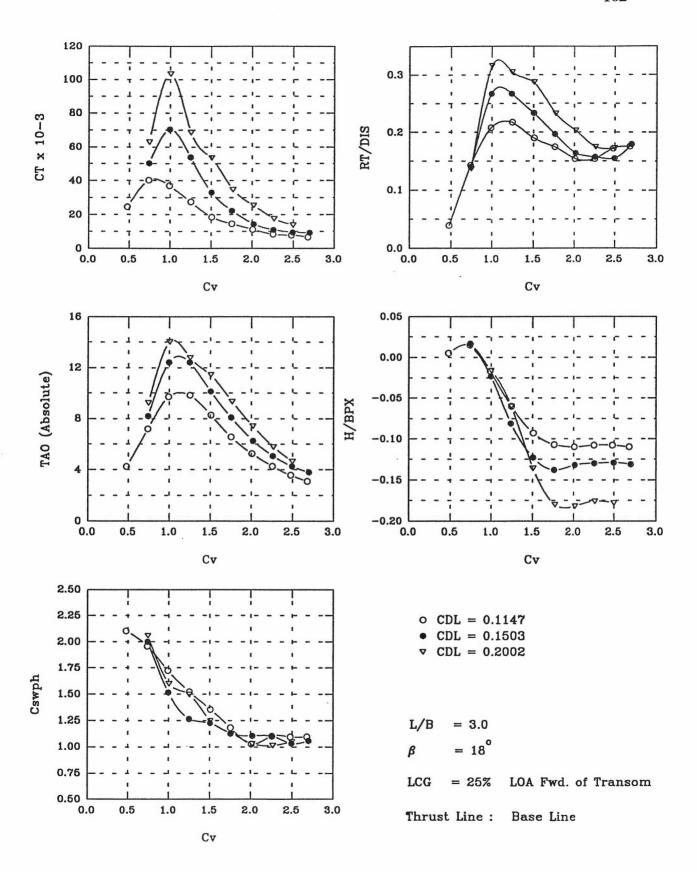


Figure B.30

L/B Ratio 3.0 Length Overal LOA 69.00 cm
Deadrise 18.00 deg Breath (Deck) B 23.00 cm
Breath (Chine) BPX 21.00 cm

LCG Position 25.00 % LOA 17.25 cm @ Transom

Displacement DIS 1393.0 gms Disp. Coeff. CDL VCG Position 28.87 % B 6.64 cm @ Base Line Static trim TAOO 3.79 deg

Water Temp. 19.50 deg C Density 998.308 kg/m3 Kin. Viscocity 0.1016E-05 m2/s

Vel RT H TAO LC LK WSPH CV CT RT/DIS H/BPX TAO Cwsph
m/s gms cm Rel. cm cm cm2 x10-3 Abs.

0.1147

m/s	gms	CM	Rel.	CM	Cm	cm2	CV	x10-3	KI/DIS	11/ DE X	Abs.	Cwspii
0.687 1.060 1.432 1.421 1.793 2.164 2.521 2.883 3.236 3.555	54.9 199.3 305.2 290.2 303.0 265.0 244.1 215.0 239.9	0.11 0.31 -0.37 -0.35 -1.26 -1.95 -2.25 -2.30 -2.26	0.44 3.40 6.17 5.92 6.03 4.48 2.76 1.44 0.47	28.29 31.05 27.81 27.81 24.84 20.84 15.53 14.28 10.35 8.63	55.68 47.61 41.33 41.33 36.22 33.47 31.81 26.84 33.81 35.19		0.478 0.739 0.998 0.990 1.249 1.508 1.756 2.009 2.255 2.477	24.65967 40.32894 38.44251 37.12512 27.56185 18.60822 14.49632 11.18998 8.30446 7.74104	0.143 0.219 0.208 0.217 0.190 0.175 0.154 0.154	0.005 0.015 -0.017 -0.017 -0.060 -0.093 -0.107 -0.110 -0.108	4.23 7.19 9.96 9.71 9.82 8.27 6.55 5.23 4.26 3.57	2.104 1.959 1.724 1.724 1.523 1.354 1.181 1.026 1.101 1.093
3.847	244.5	-2.30	-0.69	7.93	35.88	482.0	2.680	6.73763		-0.110	3.10	1.093

Displacement DIS 1825.0 gms Disp. Coeff. CDL 0.1503 VCG Position 28.09 % B 6.46 cm @ Base Line

Static trim TAOo 4.50 deg
Water Temp. 19.50 deg C Density 998.308 kg/m3 Kin. Viscocity 0.1016E-05 m2/s

Vel m/s	RT gms	H cm	TAO Rel.	LC	LK cm	WSPH cm2	cv	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
1.064	255.3	0.36	3.69	32.78	47.61	882.6	0.742	50.18390	0.140	0.017	8.19	2.001
1.427	500.8	-0.53	8.23	26.22	34.50	667.9	0.994	72.38678	0.274	-0.025	12.73	1.515
1.428	486.8	-0.49	7.93	26.22	34.50	667.9	0.995	70.26306	0.267	-0.023	12.43	1.515
1.785	487.3	-1.69	7.93	21.39	29.33	557.9	1.244	53.88821	0.267	-0.081	12.43	1.265
2.161	425.7	-2.59	5.63	19.18	29.90	539.9	1.506	33.18024	0.233	-0.123	10.13	1.224
2.522	359.8	-2.89	3.58	16.56	28.64	497.1	1.757	22.36681	0.197	-0.138	8.08	1.127
2.896	299.2	-2.78	1.76	13.19	31.05	486.6	2.018	14.40831	0.164	-0.132	6.26	1.103
3.241	285.8	-2.73	0.57	12.08	32.09	485.8	2.258	11.00456	0.157	-0.130	5.07	1.101
3.579	282.9	-2.70	-0.25	9.61	31.80	455.5	2.494	9.52959	0.155	-0.129	4.25	1.033
3.877	329.3	-2.75	-0.69	7.93	34.50	466.8	2.701	9.22424	0.180	-0.131	3.81	1.058

Displacement DIS 2432.0 gms Disp. Coeff. CDL 0.2002 VCG Position 28.26 % B 6.50 cm @ Base Line Static trim TAOo 5.20 deg

Static trim TAOO 5.20 deg
Water Temp. 19.50 deg C Density 998.308 kg/m3 Kin. Viscocity 0.1016E-05 m2/s

Vel m/s	RT gms	H	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	CT x10-3	RT/DIS	н/врх	TAO Abs.	Cwsph
1.070 1.438 1.793 2.162 2.536 2.896 3.252 3.583	333.0 767.6 742.1 698.6 564.9 493.3 424.5 419.9	0.30 -0.33 -1.26 -2.86 -3.78 -3.82 -3.70	4.03 8.83 7.59 6.24 4.13 2.21 0.58	35.54 28.64 26.22 21.06 17.60 15.18 13.39	47.27 35.54 33.81 28.91 27.60 26.10 27.21	907.6 705.7 660.3 549.7 497.1 454.1 446.6 463.0	0.745 1.002 1.249 1.506 1.767 2.017 2.266 2.497	63.01647 103.43590 68.69774 53.45550 34.73394 25.46374 17.66030	0.305 0.287 0.232 0.203 0.175	0.014 -0.016 -0.060 -0.136 -0.180 -0.182 -0.176	9.23 14.03 12.79 11.44 9.33 7.41 5.78 4.64	2.058 1.600 1.497 1.246 1.127 1.030 1.013

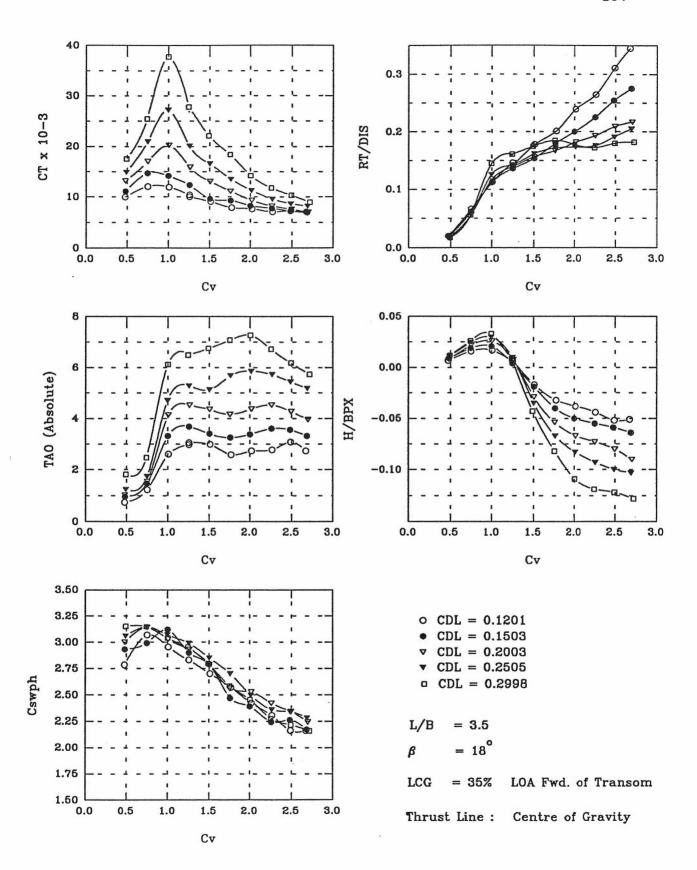


Figure B.31

Model No. T-3518 L/B Ratio 3.5 Length Overal LOA 80.50 cm Deadrise 18.00 deg Breath (Deck) B 23.00 cm 165 21.00 cm Breath (Chine) BPX LCG Position 35.00 % TOA 28.18 cm @ Transom Displacement DIS 1458.0 gms VCG Position 26.96 % B qms Disp. Coeff. CDL 0.1201 6.20 cm @ Base Line Static trim TAOo 0.70 deg Water Temp. 20.30 deg C Density 998.164 kg/m3 Kin. Viscocity 0.9964E-06 m2/s Vel RT H TAO LC WSPH T.K CV CT RT/DTS H/RPY TAO Cwsph m/s qms Rel. x10-3 CI CID CIM cm2 Abs. 0.682 0.15 28.8 0.04 43.07 68.43 1228.1 0.475 9.93115 0.020 0.007 0.74 2.785 1.075 95.9 0.33 0.51 60.38 68.43 1352.8 0.749 12.04408 0.066 0.016 1.22 3.068 1.446 165.5 0.36 1.90 54.34 66.82 1302.9 1.008 11.93068 0.113 0.017 2.60 2.954 1.798 213.5 0.14 2.27 48.30 66.01 1248.8 10.40120 2.97 1.252 0.007 0.146 2.832 1.801 206.7 0.14 2.35 48.30 66.01 1248.8 1.255 10.03193 0.142 0.007 3.05 2.832 2.171 258.9 -0.36 2.28 43.47 65.21 1191.7 1.512 9.06272 0.178 -0.017 2.98 2.702 2.543 293.6 -0.68 1.88 38.64 64.40 1134.0 1.771 7.87241 0.201 - 0.0322.58 2.571 2.894 348.9 -0.81 2.02 34.21 62.79 1068.7 2.017 7.65850 0.239 -0.038 2.73 2.423 3.250 385.2 -0.93 2.06 30.99 1015.9 7.05586 61.18 2.265 0.264 - 0.0442.304 2.77 3.572 453.9 -1.08 25.36 953.9 2.38 61.18 2.489 7.33129 0.311 - 0.0523.08 2.163 3.837 502.7 -1.072.04 24.95 61.58 954.1 2.673 7.03698 0.345 - 0.0512.74 2.163 Displacement DIS 1825.0 gms VCG Position 26.87 % B Disp. Coeff. CDL gms 0.1503 6.18 cm @ Base Line Static trim TAOo 0.88 deg Water Temp. 20.30 deg C Density 998.164 kg/m3 Kin. Viscocity 0.9964E-06 m2/s Vel PT H TAO LC T.K WSPH CV CT RT/DIS H/BPX TAO Cwsph m/s x10-3 ams CM Rel. Cm CM cm2 Abs. 49.11 0.688 34.4 0.18 0.08 69.23 1293.0 0.479 11.07708 0.019 0.009 0.96 2.932 14.70522 1.071 113.2 0.39 0.58 66.82 0.746 56.35 1320.1 0.062 0.019 1.46 2.993 1.433 203.6 0.45 2.43 63.19 69.23 1376.4 0.999 14.15303 0.112 0.021 3.31 3.121 1.798 248.3 0.09 2.80 47.50 64.40 1221.1 1.252 12.36847 0.136 0.004 3.68 2.769 2.161 280.5 -0.41 2.52 46.29 66.01 1228.9 1.505 9.61305 0.154 -0.019 3.40 2.787 2.527 -0.85 328.5 2.37 37.03 1089.5 1.761 9.28240 0.180 -0.040 3.25 61.99 2.470 2.870 365.4 -1.05 2.51 34.21 61.58 1055.0 2.000 8.26491 0.200 -0.050 3.38 2.392 3.242 410.3 -1.15 2.72 29.38 60.38 989.0 2.259 7.76001 0.225 -0.055 3.60 2.243 30.19 7.19059 3.561 462.9 -1.24 2.67 60.38 997.8 2.481 0.254 -0.059 3.55 2.263 3.857 502.3 -1.34 2.44 26.16 60.78 958.2 2.687 6.92502 0.275 -0.064 3.32 2.173 gms Displacement DIS 2432.0 Disp. Coeff. CDL 0.2003 27.26 % B VCG Position 6.27 cm @ Base Line 0.98 deg Static trim TAOo Water Temp. 20.30 deg C Density 998.164 kg/m3 Kin. Viscocity 0.9964E-06 m2/s Vel RT TAO TC WSPH CT H T.K CV RT/DIS H/BPX TAO Cwsph m/s gms CM Rel. CM CM cm2 x10-3 Abs. 0.688 42.0 0.17 0.05 52.33 70.04 1324.0 0.479 13.16023 0.017 0.008 1.02 3.002 1.075 138.4 0.56 68.43 70.04 0.749 16.98169 0.47 1386.3 0.057 0.022 1.54 3.143 20.26992 286.2 58.36 1.441 0.54 3.17 67.62 1335.7 1.004 0.118 0.026 4.14 3.029 1.806 340.7 0.16 3.55 54.34 66.01 1293.9 1.259 15.86076 0.140 0.008 4.52 2.934 2.160 381.3 3.39 48.30 1229.2 1.505 13.06622 -0.60 64.40 0.157 -0.029 4.36 2.787 406.1 2.519 -1.13 3.18 41.86 61.18 1130.1 1.755 11.12869 0.167 -0.054 4.16 2.563 2.893 442.4 -1.413.40 39.85 61.58 1115.0 2.016 9.31644 0.182 - 0.0672.528 4.37 3.241 468.9 -1.533.55 35.82 61.18 1067.5 2.258 8.22142 0.193 -0.073 4.53 2.421 3.579 508.7 3.29 33.00 1033.1 2.494 7.55458 0.209 -0.080 -1.68 60.78 4.27 2.343 3.874 528.3 -1.90 2.98 29.38 60.38 989.0 2.699 6.99609 0.217 -0.090 3.96 2.243 Displacement DIS 3042.0 gms Disp. Coeff. CDL 0.2505 VCG Position 26.61 % B 6.12 cm @ Base Line Static trim TAOo 1.09 deg Water Temp. 20.30 deg C Density 998.164 kg/m3 Kin. Viscocity 0.9964E-06 m2/s Vel. WSPH CT RT H TAO LC LK CV RT/DIS H/BPX TAO Cwsph m/s Rel. x10-3 ams CM CM CM cm2 Abs. 0.700 50.1 0.24 0.15 55.14 70.44 1349.5 0.488 14.90563 0.016 0.011 1.24 3.060 20.98718 1.073 170.6 0.52 68.43 70.44 1388.2 0.748 0.056 0.025 1.74 0.65 3.148 382.1 1.426 0.63 3.62 60.78 68.43 1354.9 0.994 27.25003 0.126 0.030 4.71 3.072 1.797 435.5 0.20 4.20 56.35 66.82 1320.1 1.252 20.08816 0.143 0.010 5.28 2.993 2.158 493.2 -0.73 4.04 51.52 64.80 1257.5 1.503 16.55736 0.162 -0.035 5.13 2.851 2.528 1191.0 1.761 13.51669 0.172 -0.067 523.2 -1.42 4.60 46.69 62.39 5.69 2.701 2.888 5.86 527.0 -1.754.78 40.25 59.97 1101.1 2.012 11,28075 0.173 - 0.0832.497 3.248 535.2 -1.96 4.64 35.02 59.57 1040.6 2.263 9.57955 0.176 -0.093 5.73 2.360 3.568 579.8 -2.10 4.36 34.21 59.57 1032.1 2.486 8.67115 0.191 -0.100 5.44 2.340

<u>Table</u> B.31 L/B = 3.5; β = 18°; L_{cg} = 35%; Thrust Line: Centre of Gravity (1/2)

2.688

8.18768

0.205 -0.103

5.18

2.282

1006.2

3.858

623.7

-2.17

4.10

32.20

59.17

Vel RT H TAO LC LK WSPH CV CT RT/DIS H/BPX TAO C m/s gms cm Rel. cm cm cm2 x10-3 Abs.	
0.706 61.7 0.24 0.06 68.43 70.84 1390.0 0.492 17.49934 0.017 0.012 1.81 3 1.064 203.5 0.55 0.72 68.43 70.44 1388.2 0.741 25.47478 0.056 0.026 2.47 3 1.431 527.3 0.69 4.37 59.57 67.62 1341.2 0.997 37.74709 0.145 0.033 6.12 3 1.783 585.2 0.16 4.74 55.95 65.61 1303.4 1.242 27.76654 0.161 0.008 6.49 2 1.784 586.5 0.18 4.75 55.95 65.61 1303.4 1.242 27.76654 0.161 0.009 6.50 2 1.39 635.4 -0.91 5.01 50.72 63.19 1233.9 1.490 22.12623 0.175 -0.043 6.76 2 1.518 675.1 -1.72 5.33 44.68 59.57 1139.8 1.754 18.36375 0.185 -0.082 7.08 2 1.786 647.3 -2.29 5.52 40.65 57.96 1082.3 2.004 14.21975 0.178 -0.109 7.27 2 1.785 65.7 2.785 65.795 65	1.064 2 1.431 5 1.783 5 1.784 5 2.139 6 2.518 6 2.876 6 3.232 6 3.577 6

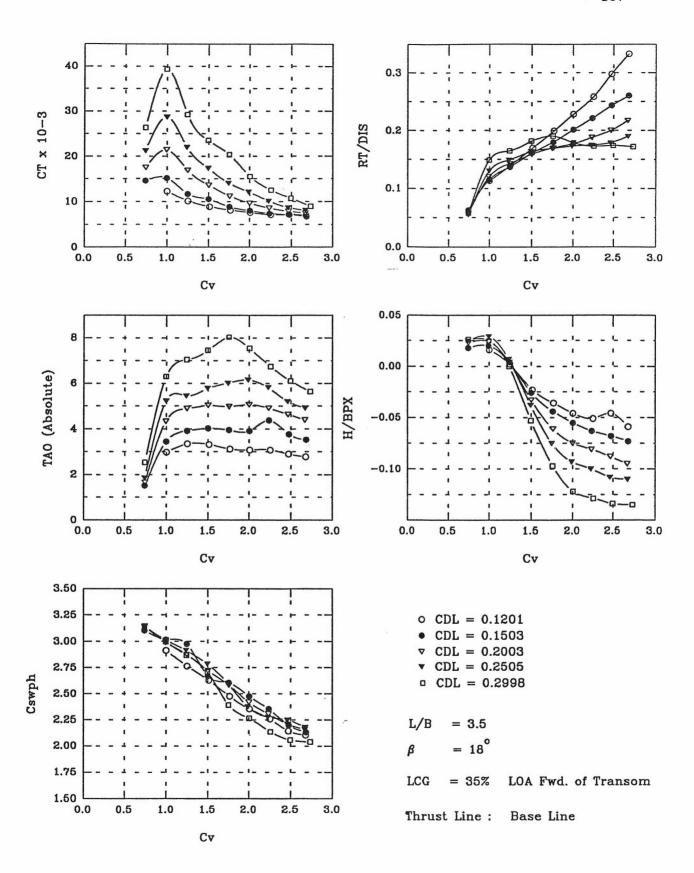


Figure B.32

Model No. T-3518 Length Overal LOA Breath (Deck) B L/B Ratio 3.5 80.50 cm Deadrise 18.00 deg 23.00 cm 168 Breath (Chine) BPX 21.00 cm LCG Position 35.00 % LOA 28.18 CM @ Transom Displacement DIS 1458.0 gms VCG Position 26.96 % B Disp. Coeff. CDL 0.1201 6.20 cm @ Base Line 0.70 deg Static trim TAOo Water Temp. 20.30 deg C Density 998.164 kg/m3 Kin. Viscocity 0.9964E-06 m2/s Vel RT н LC TAO T.K WSPH CV CT RT/DIS H/BPX TAO Cwsph m/a dms Cm Rel. CM CM x10-3 Abs. 1.436 164.9 0.33 2.28 51.46 67.16 1284.4 1.000 12.24135 0.113 0.016 2.98 2.913 1.795 203.3 0.04 2.64 46.29 65.21 1219.0 1.251 10.17489 0.139 0.002 3.34 2.764 2.171 247.3 -0.472.61 41.06 64.40 1158.7 1.513 8.89937 0.170 -0.023 3.32 2.627 2.534 289.7 -0.76 1.766 8.12799 0.199 -0.036 2.41 1091.0 36.22 62.87 3.12 2.474 2.879 332.6 -0.96 2.37 32.20 61.99 1038.3 2.006 7.59488 0.228 -0.046 3.08 2.355 3.237 376.3 -1.08 2.38 28.47 61.86 995.9 2.255 7.08809 0.258 -0.051 3.08 2.258 3.551 433.9 -0.97 2.19 23.75 61.99 945.4 2.474 7:15415 0.298 - 0.0462.90 2.144 3.845 485.3 -1.232.07 22.10 62.09 928.5 2.679 6.94764 0.333 -0.059 2.77 2.105 1825.0 gms Displacement DTS 0.1503 Disp. Coeff. CDL 26.87 % B VCG Position 6.18 cm @ Base Line Static trim TAOo 0.88 deg Water Temp. 0.1004E-05 m2/s 20.00 deg C Density 998.206 kg/m3 Kin. Viscocity Vel RT TC WSPH H TAO T.K CV CT RT/DIS H/BPX TAO Cwsph Abs, m/s gms Cm Rel. CID x10-3CI cm2 1.063 114.7 0.38 0.63 61.99 69.23 1368.9 0.740 14.57800 0.063 0.018 1.51 3.104 1330.9 1.425 209.1 0.42 67.47 0.020 3.44 2.56 57.51 0.993 15,19549 0.115 3.018 1.789 0.09 1.246 250.2 3.92 2.977 3.04 55.55 66.82 1313.1 11.70342 0.137 0.004 2.157 294.0 -0.543.15 44.28 63.19 1176.0 1.503 10.56257 0.161 -0.026 4.03 2.667 2.521 328.6 -0.93 3.07 41.87 62.89 1149.4 1.757 8.83980 0.180 -0.044 3.95 2.606 2.875 366.7 -1.153.04 37.16 62.00 1091.0 2.003 7.99227 0.201 -0.055 3.91 2.474 3.216 402.9 -1.32 3.50 32.78 1038.0 2.240 7.37914 0.221 - 0.0634.38 2.354 61.42 3.554 443.0 0.243 -0.068 3.77 2.201 -1.422.89 26.97 2.476 7.09980 61.11 970.8 3.848 6.70169 0.260 -0.073 474.9 -1.53 2.65 24.15 61.18 940.6 2.681 3.53 2.133 Displacement DIS 2432.0 gms Disp. Coeff. CDL 0.2002 VCG Position 27.26 % B 6.27 cm @ Base Line Static trim TAOo 0.98 deg Water Temp. 20.00 deg C Density 998.206 kg/m3 Kin. Viscocity 0.1004E-05 m2/s Vel RT H TAO LC WSPH CV CT RT/DIS H/BPX TAO LK Cwsph m/s x10-3 ams cm Rel. CM CI cm2 Abs. 1.064 139.5 0.741 0.057 0.023 0.48 66.41 1.66 0.68 70.04 1385.4 17.48788 3.142 1.424 292.6 0.50 3.36 56.35 66.82 1320.1 0.992 21.47624 0.120 0.024 4.34 2.993 1.788 348.5 0.09 3.92 52.33 65.21 1268.4 1.245 16.90114 0.143 0.004 4.89 2.876 2.152 385.7 -0.69 4.05 46.69 63.19 1199.8 1.500 13.64001 0.159 -0.033 5.03 2.721 2.522 2.582 4.01 1.757 0.170 -0.061 4.98 413.4 -1.2842.26 61.58 1138.5 11.22449 2.869 5.06 431.2 -1.574.09 37.03 59.97 1066.6 1.999 9.65456 0.177 -0.075 2.419 3.207 456.8 -1.703.93 34.62 57.96 1018.0 2.235 8.57290 0.188 -0.081 4.91 2.308 3.539 487.6 -1.853.66 30.59 57.96 974.7 2.466 7.84835 0.200 -0.088 4.64 2.210 3.828 528.8 -1.993.42 28.18 58.36 952.7 2.667 7.44415 0.217 -0.095 4.40 2.160 Displacement DIS 3042.0 gms CDL 0.2505 Disp. Coeff. 26.61 % B VCG Position 6.12 cm @ Base Line Static trim TAOo 1.09 deg 998.206 kg/m3 Water Temp. 20.00 deg C Kin. Viscocity 0.1004E-05 m2/s Density Vel RT H TAO LC LK WSPH CV CT RT/DIS H/BPX TAO Cwsph m/s ams cm Rel. CM CM cm2 x10-3 Abs. 1.061 168.6 0.53 21.29795 0.055 0.025 3.137 0.76 64.11 1383.4 0.739 1.85 69.32 1.427 395.6 0.60 4.15 58.77 66.82 1329.4 0.994 28.73560 0.130 0.029 5.23 3.015 1286.1 1.236 1.774 454.8 0.14 4.37 53.94 22.07600 0.149 0.007 5.45 2.916 65.61 2.145 498.7 -0.81 4.71 49.91 63.19 1227.7 1.494 17.35756 0.164 -0.038 5.79 2.784 2.501 513.5 -1.58 4.93 44.42 60.44 1146.8 1.743 14.07041 0.169 -0.075 6.01 2.600 2.849 -1.94 12.13627 524.9 5.06 38.24 57.16 1047.6 1.985 0.173 -0.093 6.15 2.376 3.198 530.9 -2.11 4.73 35.02 56.35 1004.0 2.228 10.16017 0.175 -0.100 5.82 2.277 3.532 545.7 -2.28 57.16 8.66877 0.179 -0.108 5.21 2.249 4.12 33.00 991.8 2.461 3.833 579.0 -2.30 3.83 30.59 56.75 960.9 2.670 8.06149 0.190 -0.110 4.92 2.179

Disp. Coeff. CDL 6.47 cm @ Base Line Displacement DIS 3640.0 gms VCG Position 28.13 % B 0.2998 169 1.75 deg Static trim TAOo Water Temp. 997.885 kg/m3 Kin. Viscocity 0.9682E-06 m2/s 21.50 deg C Density Vel RT H TAO LC T.K WSPH CV CT RT/DIS H/BPX TAO Cwsph m/s gms cm Rel. cm CM cm2 x10-3 Abs. 1.064 210.3 0.55 0.79 68.43 70.04 1386.3 0.741 26.37326 0.058 0.026 3.143 1.430 540.7 0.53 4.55 57.96 66.41 1321.8 0.996 39.34676 0.149 0.025 6.30 2.997 1.785 599.5 0.01 5.30 53.53 64.00 29.25781 0.165 0.000 7.05 2.869 1265.1 1.243 1.497 23.57079 0.182 -0.053 7.46 2.708 2.149 661.2 -1.12 5.71 48.30 61.18 1194.1 2.517 0.190 -0.097 691.4 1054.5 1.754 20.34448 8.03 2.391 -2.05 6.28 41.46 54.74 0.179 -0.122 7.54 2.874 650.3 -2.56 5.79 37.84 53.13 999.0 2.003 15.49251 2.265 3.241 630.7 -2.71 5.00 34.21 51.52 942.4 2.258 12.52598 0.173 -0.129 6.75 2.137 3.581 633.7 4.36 30.99 51.52 907.6 2.495 10.70201 0.174 -0.134 6.11 2.058 -2.80

29.78 51.92

3.89

3.922

627.6 -2.83

898.8 2.732

8.92723 0.172 -0.135

2.038

5.64

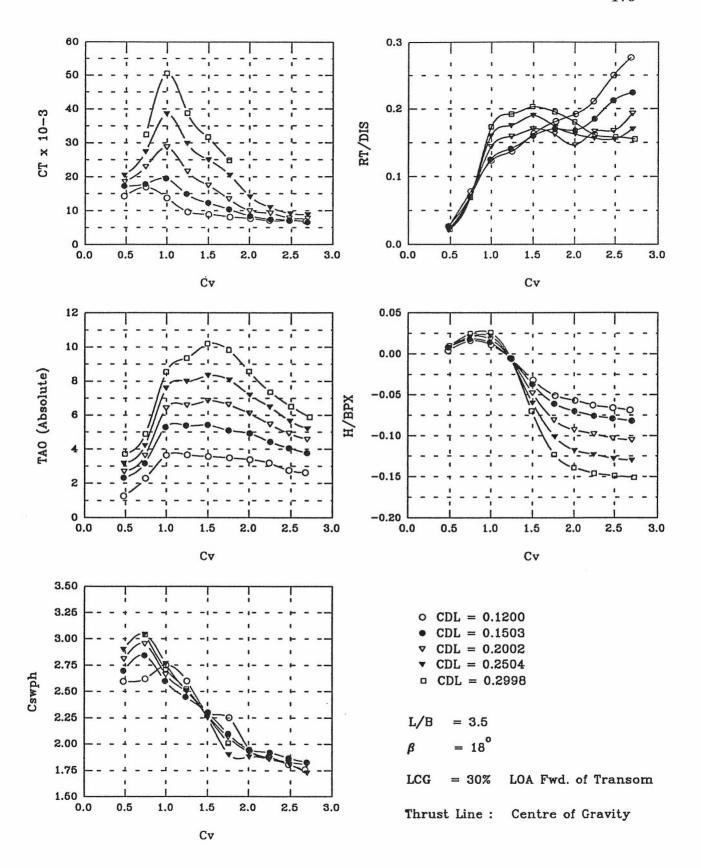


Figure B.33

Model No. T-3518 T./B Ratio 3.5 Length Overal LOA 80.50 cm Deadrise 18.00 deg Breath (Deck) B 23.00 cm 171 Breath (Chine) BPX 21.00 cm 24.15 cm @ Transom LCG Position 30.00 % LOA Displacement DIS 1458.0 gms Disp. Coeff. CDL 0.1200 6.88 cm @ Base Line VCG Position 29.91 % B Static trim TAOo 1.13 deg Water Temp. 19.50 deg C Density 998.308 kg/m3 Kin. Viscocity 0.1016E-05 m2/s Vel RT TAO LC T.K WSPH H CV CT RT/DIS H/BPX TAO Cwaph m/s qms CM Rel. CI CM Cm2 x10-3 Abs. 0.685 39.1 0.09 0.14 36.22 67.22 1144.2 0.478 14.29996 0.027 0.004 1.27 2.595 1.066 113.1 0.33 1.15 37.84 66.82 1156.1 0.743 16.90530 0.078 0.016 2.28 2.622 1.436 0.23 65.21 1253.1 0.124 0.011 2.841 180.4 1.000 2.52 50.31 13.73184 3.65 1.793 0.137 -0.006 199.3 -0.132.54 53.13 63.60 1257.6 1.249 9.69332 3.67 2.852 2.158 238.0 -0.67 2.45 40.25 61.99 1123.9 1.504 8.93606 0.163 -0.032 3.58 2.549 2.532 264.6 -1.07 2.36 30.59 59.57 993.1 1.764 8.16948 0.181 -0.051 3.49 2.252 2.888 2.012 279.5 -1.19 2.26 23.35 54.34 854.5 7.70894 0.192 -0.057 3.39 1.938 3.216 308.1 -1.32 2.06 20.93 54.34 827.9 2.241 7.06906 0.211 -0.063 3.19 1.877 3.559 0.250 -0.066 365.1 -1.391.62 18.11 54.34 797.0 2.479 7.10824 2.75 1.807 3.839 403.2 -1.45 1.49 16.10 54.34 774.8 2.675 6.93937 0.277 - 0.0692.62 1.757 CDL Displacement DIS 1825.0 qms Disp. Coeff. 0.1503 VCG Position 29.22 % B 6.72 cm € Base Line 2.07 deg Static trim TAOo 19.50 deg C Kin. Viscocity 0.1016E-05 m2/s Water Temp. Density 998.308 kg/m3 Vel RT H TAO LC WSPH CT RT/DIS H/BPX TAO Cwsph m/s qms Rel. CM CM x10-3 Abs. CM cm2 0.685 0.17 1189.2 0.478 17.34405 2.697 0.26 49.3 41.06 66.82 0.027 0.008 2.33 1.055 127.2 0.38 1.10 48.30 66.41 1253.7 0.735 17.90275 0.070 0.018 3.17 2.843 1.414 227.8 0.30 3.22 42.67 61.99 1146.9 0.985 19.52690 0.125 0.014 5.29 2.601 1.773 257.2 -0.11 3.31 38.64 59.57 1079.3 1.235 14.89671 0.141 -0.005 5.38 2.447 2.149 292.2 -0.78 3.35 34.21 57.96 1013.8 1.498 12.26285 0.160 -0.037 5.42 2.299 30.19 1.753 2.098 2.516 309.4 -1.293.04 53.94 925.3 10.37676 0.170 -0.061 5.11 2.879 2.006 1.948 306.3 -1.472.86 26.16 51.92 858.9 8.45902 0.168 - 0.0704.93 3.233 338.4 -1.592.37 24.15 52.73 845.7 2.252 7.52454 0.185 -0.076 4.44 1.918 0.212 -0.079 3.554 2.476 7.30902 4.07 1.867 386.8 -1.66 2.00 21.33 53.53 823.5 3.868 409.6 -1.73 1.70 18.92 54.34 805.8 2.695 6.67882 0.224 -0.082 1.827 0.2002 Displacement DIS 2432.0 qms Disp. Coeff. CDL 29.04 % B VCG Position 6.68 cm € Base Line Static trim TAOo 2.38 deg Water Temp. 19.50 deg C Density 998.308 kg/m3 Kin. Viscocity 0.1016E-05 m2/s Vel TC CT RT H TAO T.K WSPH CV RT/DIS H/BPX TAO Cwsph x10-3 m/s ams CM Rel. CM CM cm2 Abs. 1238.8 0.483 0.694 56.4 0.16 0.31 46.29 66.82 18.58616 0.023 0.008 2.69 2.809 1.059 170.8 0.44 1301.8 0.738 23.00336 0.070 0.021 2.952 1.25 54.74 66.41 3.63 1.427 349.5 0.39 4.03 46.29 61.18 1173.7 0.994 28.73523 0.144 0.018 6.41 2.661 1.785 387.2 -0.13 4.20 41.86 1103.0 1.244 21.64140 0.159 -0.006 6.58 2.501 58.77 17.48536 2.150 412.8 -1.01 4.47 37.03 54.34 1003.5 1.498 0.170 -0.048 6.85 2.276 1.751 13.40884 0.162 -0.081 2.068 2.514 393.1 4.23 32.60 50.31 911.9 6.61 -1.719.93594 354.5 28.98 850.1 2.001 0.146 -0.093 6.10 1.928 2.872 -1.953.72 48.30 3.231 404.4 -2.06 3.08 26.57 48.30 823.5 2.251 9.24688 0.166 -0.098 5.46 1.867 3.555 406.4 -2.17 2.55 24.15 49.11 805.8 2.477 7.84202 0.167 -0.103 4.93 1.827 3.868 469.6 -2.212.20 22.94 49.51 796.9 2.695 7.73953 0.193 -0.105 4.58 1.807 3042.0 gms 0.2504 Displacement DIS Disp. Coeff. CDL 28.00 % B VCG Position 6.44 cm € Base Line 2.91 deg Static trim TAOo Water Temp. 19.50 deg C Density 998.308 kg/m3 Kin. Viscocity 0.1016E-05 m2/s Vel RT H TAO LC LK WSPH CV CT RT/DIS H/BPX TAO Cwsph m/s x10-3 Abs. ams CM Rel. CM CM cm2 0.686 0.17 20.52712 0.021 0.008 3.18 2.899 62.9 0.27 48.30 68.43 1278.2 0.478 1.056 209.1 0.45 1.31 59.17 68.02 1343.2 0.736 27.41298 0.069 0.021 4.22 3.046 1.426 487.1 0.45 4.68 48.30 63.60 1220.4 0.993 38.59400 0.160 0.022 7.59 2.767 1.780 533.2 -0.12 5.08 42.67 58.36 1106.4 1.240 29.87786 0.175 -0.006 7.99 2.509 577.1 37.03 51.92 977.1 1.499 25.08002 0.190 -0.060 8.34 2.216 2.151 5.43 -1.268.08 20.49939 0.173 -0.101 792.5 1.760 1.797 2.526 527.3 -2.135.17 25.36 46.69 2.880 493.2 -2.474.28 29.78 45.48 827.9 2.006 14.11877 0.162 -0.118 7.19 1.877 2.248 6.49 3.227 3.58 819.1 10.94947 0.156 -0.123 1.857 475.2 -2.58 28.18 46.29 3.571 472.6 -2.68 2.74 26.16 46.29 796.9 2.488 9.13881 0.155 -0.128 5.65 1.807 3.871 761.5 2.697 8.90416 0.170 -0.130 5.21 1.727 517.0 -2.722.30 22.94 46.29

172 Disp. Coeff. CDL 6.24 cm @ Base Line Displacement DIS 3640.0 gms 0.2998 VCG Position 27.13 % B 3.28 deg Static trim TAOo Water Temp. 21.50 deg C Density 997.885 kg/m3 Kin. Viscocity 0.9682E-06 m2/s Vel RT H TAO LC LK WSPH CV CT RT/DIS H/BPX TAO Cwsph m/s x10-3 gms cm Rel. cm CM cm2 Abs. 0.705 80.3 0.22 0.44 0.00 0.00 0.0 0.491 0.00000 0.022 0.010 3.72 0.000 1.065 251.0 0.52 60.38 1341.5 0.742 32.42541 0.069 0.025 4.90 3.042 1.62 67.22 1.430 629.2 0.54 5.26 1195.8 50.58518 0.026 8.54 2.712 49.11 60.78 0.996 0.173 1.785 698.5 -0.10 6.08 38.74842 0.192 -0.005 9.36 45.08 56.75 1112.6 1.243 2.523 2.140 739.4 6.93 1003.2 1.491 31.65230 0.203 -0.070 2.275 -1.4739.85 51.52 10.21 1.754 2.517 709.2 -2.59 6.55 34.62 45.89 884.9 24.87031 0.195 -0.123 9.83 2.007 2.867 655.3 -2.92 5.29 0.00 0.00 0.0 1.998 0.00000 0.180 -0.139 8.57 0.000 0.00 3.236 587.0 -3.06 4.08 0.00 0.0 2.255 0.00000 0.161 -0.146 0.000 7.36 3.588 0.00 2.500 0.158 -0.149 0.000 573.6 -3.12 3.23 0.00 0.0 0.00000 6.51

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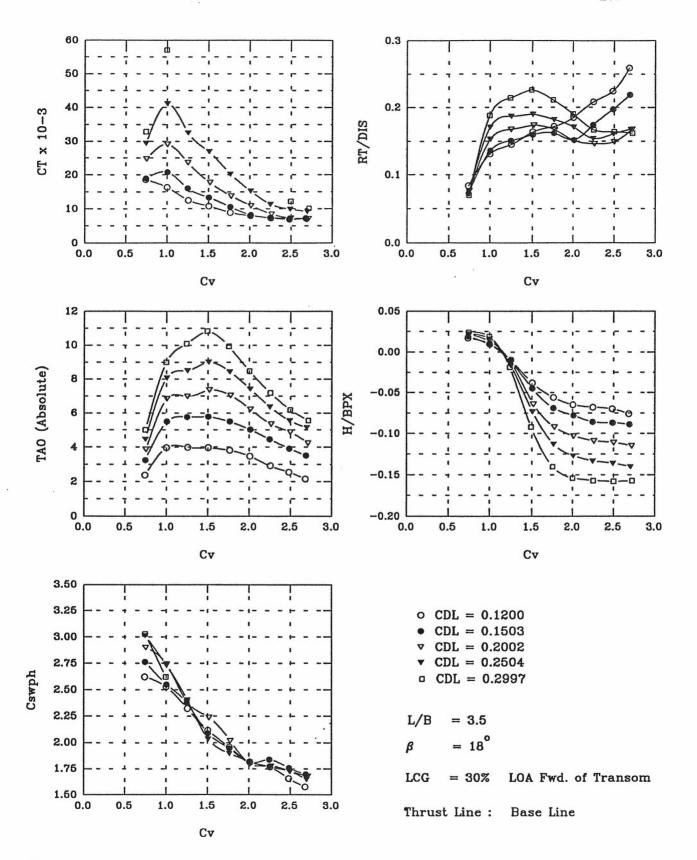


Figure B.34

L/B Ratio 3.5 Length Overal LOA 80.50 cm Deadrise 18.00 deg Breath (Deck) B Breath (Chine) BPX 23.00 cm 21.00 cm 24.15 cm @ Transom

LCG Position 30.00 % LOA

Displacement DIS 1458.0 gms Disp. Coeff. 29.91 % B VCG Position 6.88 cm @ Base Line

1.13 deg Static trim TAOo Water Temp. 19.50 deg C Density 998.308 kg/m3 Kin. Viscocity 0.1016E-05 m2/s

CDL

0.1200

Vel m/s	RT gms	H cm	TAO Rel.	LC cm	LK cm	WSPH cm2	CA	СТ ж10-3	RT/DIS	H/BPX	TAO Abs.	Cwaph
1.060	122.8	0.36	1.25	40.25	64.80	1156.3	0.738	18.57927	0.084	0.017	2.38	2.622
1.436	191.5	0.21	2.84	40.25	61.18	1114.8	1.000	16.37033	0.131	0.010	3.97	2.528
1.802	211.3	-0.21	2.86	34.21	58.77	1022.9	1.256	12.49896	0.145	-0.010	3.99	2.320
2.159	239.5	-0.80	2.83	28.58	56.35	934.2	1.504	10.81287	0.164	-0.038	3.96	2.118
2.530	250.5	-1.17	2.68	26.16	52.33	863.4	1.763	8.90607	0.172	-0.056	3.81	1.958
2.877	269.7	-1.37	2.35	22.54	50.31	801.4	2.005	7.98788	0.185	-0.065	3.48	1.817
3.232	303.2	-1.43	1.79	18.92	51.92	779.2	2.252	7.32068	0.208	-0.068	2.92	1.767
3.564	326.6	-1.46	1.42	16.10	50.31	730.5	2.483	6.91673	0.224	-0.070	2.55	1.657
3.846	378.1	-1.59	1.03	14.09	49.11	695.1	2.680	7.22520	0.259	-0.076	2.16	1.576

Displacement DIS 1825.0 gms Disp. Coeff. CDL 0.1503 29.22 % B VCG Position 6.72 cm @ Base Line Static trim TAOo . 2.07 deg

Water Temp. 19.50 deg C Density 998.308 kg/m3 Kin. Viscocity 0.1016E-05 m2/s

Vel m/s	RT gms	H Cm	TAO Rel.	LC cm	LK cm	WSPH cm2	CA	CT x10-3	RT/DIS	н/врх	TAO Abs.	Cwsph
1.064	133.1	0.39	1.19	46.29	65.21	1219.0	0.741	18.95411	0.073	0.019	3.26	2.764
1.442	247.3	0.20	3.42	42.26	60.38	1125.0	1.004	20.79462	0.136	0.009	5.49	2.551
1.795	275.5	-0.22	3.70	38.24	57.16	1047.6	1.250	16.04600	0.151	-0.011	5.77	2.376
2.161	292.8	-0.94	3.71	31.40	52.33	920.9	1.506	13.37948	0.160	-0.045	5.78	2.088
2.530	296.0	-1.45	3.42	28.18	49.91	858.9	1.762	10.58334	0.162	-0.069	5.49	1.948
2.884	276.6	-1.64	2.95	24.95	47.50	797.0	2.010	8.19974	0.152	-0.078	5.02	1.807
3.225	316.9	-1.80	2.39	24.15	49.51	810.2	2.247	7.39023	0.174	-0.086	4.46	1.837
3.567	359.5	-1.83	1.85	20.13	50.31	774.8	2.485	7.16782	0.197	-0.087	3.92	1.757
3.860	399.1	-1.87	1.45	17.71	50.31	748.2	2.689	7.03553	0.219	-0.089	3.52	1.697

Disp. Coeff. CDL 6.68 cm @ Base Line Displacement DIS 2432.0 gms 0.2002 29.04 % B VCG Position 2.38 deg Static trim TAOo

Water Temp. 18.50 deg C Density 998.503 kg/m3 Kin. Viscocity 0.1041E-05 m2/s

Vel m/s	RT gms	H CM	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	CT x10-3	RT/DIS	н/врх	TAO Abs.	Cwsph
1.075	186.3	0.46	1.49	51.92	66.41	1279.2	0.749	24.77568	0.077	0.022	3.87	2.901
1.439	371.9	0.27	4.46	52.33	59.57	1209.6	1.003	29.16540	0.153	0.013	6.84	2.743
1.796	407.5	-0.25	4.59	39.04	56.75	1051.7	1.252	23.59675	0.168	-0.012	6.97	2.385
2.178	423.6	-1.33	4.97	33.41	56.35	986.9	1.518	17.77347	0.174	-0.064	7.35	2.238
2.545	405.9	-1.93	4.65	30.19	50.72	889.9	1.773	13.83978	0.167	-0.092	7.03	2.018
2.888	367.1	-2.16	3.85	26.97	45.08	792.5	2.012	10.91327	0.151	-0.103	6.23	1.797
3.248	356.2	-2.29	2.97	25.36	45.89	783.7	2.263	8.46712	0.146	-0.109	5.35	1.777
3.585	362.7	-2.32	2.50	22.54	46.69	761.5	2.498	7.28234	0.149	-0.111	4.88	1.727
3.896	407.8	-2.43	1.86	20.13	47.09	739.4	2.714	7.13862	0.168	-0.115	4.24	1.677

Displacement DIS 3042.0 gms Disp. Coeff. CDL 0.2504 28.00 % B VCG Position 6.44 cm @ Base Line

Static trim TAOo 2.91 deg Water Temp. 19.50 deg C Density 998.308 kg/m3 Kin. Viscocity 0.1016E-05 m2/s

Vel m/s	RT gms	H Cm	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
1.067	227.0	0.46	1.56	58.77	66.82	1329.4	0.743	29.49320	0.075	0.022	4.47	3.015
1.437	520.1	0.33	5.16	51.12	60.13	1205.0	1.001	41.09979	0.171	0.016	8.07	2.733
1.799	569.1	-0.36	5.59	43.47	53.45	1060.8	1.254	32.57132	0.187	-0.017	8.50	2.405
2.163	577.2	-1.54	6.11	35.02	46.69	898.1	1.507	26.99991	0.190	-0.073	9.02	2.036
2.531	552.8	-2.36	5.53	31.80	44.28	836.8	1.763	20.27581	0.182	-0.113	8.44	1.897
2.883	518.7	-2.67	4.51	29.38	43.47	801.4	2.008	15.30666	0.171	-0.127	7.42	1.817
3.227	468.7	-2.80	3.46	26.57	44.28	779.2	2.248	11.35343	0.154	-0.133	6.37	1.767
3.573	490.1	-2.86	2.64	24.95	44.28	761.5	2.489	9.90871	0.161	-0.136	5.55	1.727
3.874	510.0	-2.95	2.24	22.54	43.47	726.1	2.699	9.19821	0.168	-0.140	5.15	1.647

0.0

0.0

748.2

778.7

822.8

767.0

693.3

607.9

598.2

-0.39

-1.94

-2.94

-3.23

-3.29

-3.32

589.1 -3.30

6.82

7.54

6.66

5.19

3.90

2.91

2.28

0.00

0.00

0.00

0.00

0.00

25.36

24.15

0.00

0.00

0.00

0.00

0.00

42.67

43.87

Vel

m/s

1.067

1.429

1.782

2.142

2.513

2.873

3.237

3.586

3.903

0.000

0.000

0.000

0.000

0.000

1.697

1.697

10.10

10.82

9.94

8.47

7.18

6.19

5.56

27.13 % B Static trim TAOo 3.28 deg Water Temp. 20.50 deg C Density 998.101 kg/m3 Kin. Viscocity 0.9916E-06 m2/s RT WSPH RT/DIS H/BPX H TAO LC LK CV CT TAO Cwsph x10-3 Abs. qms CM Rel. Cm CM cm2 1.73 32.88982 0.070 0.024 254.6 0.50 58.36 67.62 1335.7 0.744 5.01 3.029 685.2 0.40 5.72 47.09 58.77 1155.3 0.996 57.08467 0.188 0.019 9.00 2.620

0.0 1.492

0.0 1.751

0.0 2.255

748.2 2.719

1.242

2.001

2.498

0.00000

0.00000

0.00000

0.00000

0.00000

12.22447

0.214 -0.019

0.226 -0.092

0.211 -0.140

0.190 -0.154

0.167 -0.157

0.164 -0.158

10.15857 0.162 -0.157

Table B.34 L/B = 3.5; β = 18°; L_{cc} = 30%; Thrust Line: Base Line (2/2)

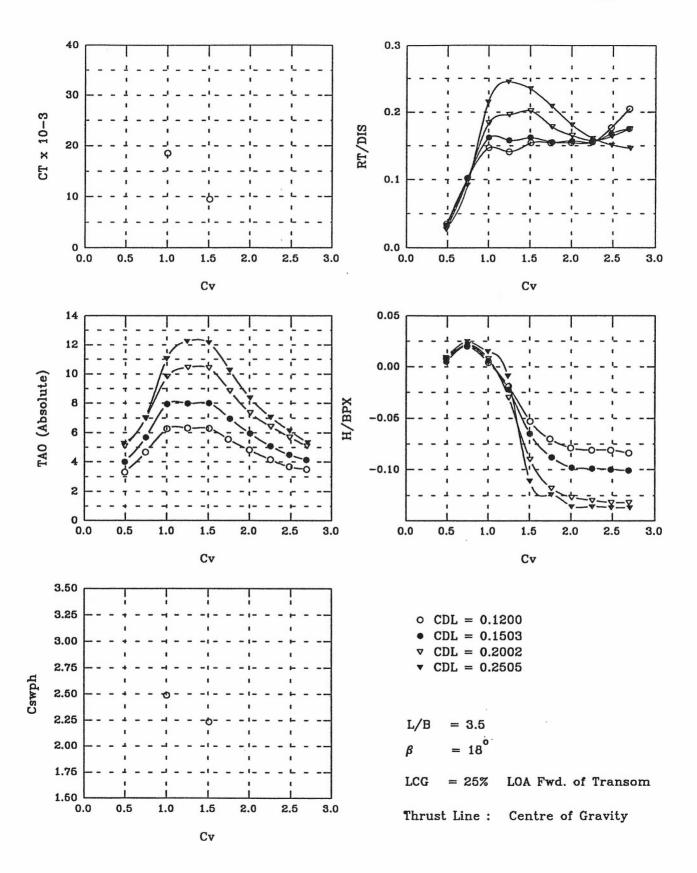


Figure B.35

Model L/B Ra Deadri		3	.5 .00 deg		Breath (Overal I (Deck) E (Chine) E	23	0.50 cm				177
LCG Po	sition	25	.00 % L	OA		cm (Tra		00 cm			•	. / /
	cement I				Disp. Co	eff. c		.1200				
	sition trim TA		.48 % B .79 deq		7.47 CH	a @ Base	Line					
	Temp.				Density	998	.308 kg	y∕m3 Ki	n. Visc	ocity	0.1016E	-05 m2/s
Vel m/s	RT gms	H cm	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
0.703	51.2	0.16	0.52	0.00	0.00		0.490	0.00000				0.000
1.065 1.441	149.4 214.6	0.41	1.87	0.00	0.00		0.742	0.00000			4.66	0.000
1.796	205.4	-0.39	3.48 3.53	38.64	61.18 0.00	1097.5	1.004	18.52056		0.004	6.27	2.489 0.000
2.170		-1.12	3.50	28.98	60.38		1.512	9.50732				2.233
2.503	224.6	-1.46	2.78	0.00	0.00		1.744	0.00000				0.000
2.868	224.7		2.03	20.13	0.00	0.0	1.998	0.00000	0.154	-0.079	4.82	0.000
3.233		-1.71	1.37	0.00	0.00		2.253					0.000
3.560		-1.71	0.89	0.00	0.00		2.481	0.00000				0.000
3.867	298.9	-1.76	0.72	0.00	0.00	0.0	2.694	0.00000	0.205	-0.084	3.51	0.000
VCG Po	cement D sition trim TA	32	.48 % B		Disp. Co 7.47 cm			.1503				
	Temp.				Density	998	.308 kg	/m3 Ki	n. Visc	ocity	0.1016E	-05 m2/s
	_				_		90 1211 010 - 110 -					
Vel m/s	RT gms	H Cm	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	CT x10-3		H/BPX	Abs.	Cwsph
0.704	60.3	0.11	0.53	0.00	0.00		0.490	0.00000			4.02	0.000
1.069	188.8	0.44	2.21	0.00	0.00		0.745	0.00000			5.70	0.000
1.438	295.5	0.13	4.45	0.00	0.00		1.002	0.00000			7.94	0.000
1.794	288.3	-0.47	4.49	0.00	0.00	0.0	1.250	0.00000	0.158	-0.022	7.98	0.000
2.163	295.0	-1.36	4.52	0.00	0.00	0.0	1.507	0.00000				0.000
2.534	283.2		3.46	0.00	0.00		1.765	0.00000				0.000
2.882		-2.05	2.46	0.00	0.00		2.008	0.00000				0.000
3.237 3.560	283.1	-2.08	1.60	0.00	0.00		2.255	0.00000				0.000
3.863		-2.10 -2.12	1.01 0.65	0.00	0.00	0.0	2.480 2.691	0.00000			4.50 4.14	0.000
2	cement D				Disp. Co			.2002	0.175	-0.101	4.14	0.000
VCG Po			61 % B		7.04 cm			.2002				
	trim TA											
Water	Temp.	19	.50 deg	С	Density	998	.308 kg	/m3 Ki	n. Visco	ocity	0.1016E	-05 m2/s
Vel	RT	H	TAO	LC	LK	WSPH	CV	CT	RT/DIS	H/BPX	TAO	Cwsph
m/s	gms	cm	Rel.	cm	CM	cm2		x10-3			Abs.	
0.706 1.070	70.0 245.9	0.18	0.68 2.58	0.00	0.00		0.492 0.745	0.00000		0.008	5.09 6.99	0.000
1.438	448.6	0.18	5.41	0.00	0.00	0.0	1.002	0.00000		0.008	9.82	0.000
1.797	476.7	-0.62	6.03	0.00	0.00	0.0	1.252	0.00000		-0.030	10.44	0.000
2.163		-1.88	5.99	0.00	0.00		1.507	0.00000				0.000
2.530		-2.48	4.44	0.00	0.00		1.763	0.00000			8.85	0.000
2.883	400.6		2.93	0.00	0.00		2.008	0.00000				0.000
3.241	382.7		2.01	0.00	0.00		2.258	0.00000				0.000
3.568	398.8	-2.77	1.29	0.00	0.00		2.486	0.00000				0.000
3.870	426.0	-2.77	0.69	0.00	0.00	0.0	2.697	0.00000	0.175	-0.132	5.10	0.000
Displac VCG Pos	cement D		2.0 gm:		Disp. Co 6.72 cm			.2504				
	trim TA											
Water !	Temp.	19	50 deg	C	Density	998	.308 kg	/m3 Kii	n. Visco	city	0.1016E	-05 m2/s
Vel	RT	H	TAO	LC	LK	WSPH	CV	CT	RT/DIS	H/BPX		Cwsph
m/s		cm	Rel.	cm	CM	cm2		x10-3			Abs.	
	gms											
						0.0	0.483	0.00000	0.027	0.009	5.28	0.000
0.693	_		0.58	0.00	0.00		0.483	0.00000		0.009	5.28 7.02	0.000
0.693	81.2	0.19	0.58	0.00	0.00	0.0			0.092	0.046		
0.693 1.065 1.427 1.780	81.2 278.9	0.19 0.97	0.58	0.00	0.00	0.0	0.742	0.00000	0.092 0.215	0.046	7.02	0.000 0.000 0.000
0.693 1.065 1.427 1.780 2.159	81.2 278.9 652.7 743.8 714.2	0.19 0.97 0.76 -0.19 -2.34	0.58 2.32 6.33 7.54 7.45	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.0 0.0 0.0	0.742 0.994 1.240 1.504	0.00000 0.00000 0.00000 0.00000	0.092 0.215 0.245 0.235	0.046 0.036 -0.009 -0.111	7.02 11.04 12.25 12.16	0.000 0.000 0.000 0.000
0.693 1.065 1.427 1.780 2.159 2.525	81.2 278.9 652.7 743.8 714.2 636.6	0.19 0.97 0.76 -0.19 -2.34 -2.60	0.58 2.32 6.33 7.54 7.45 5.56	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.0 0.0 0.0 0.0	0.742 0.994 1.240 1.504 1.759	0.00000 0.00000 0.00000 0.00000	0.092 0.215 0.245 0.235 0.209	0.046 0.036 -0.009 -0.111 -0.124	7.02 11.04 12.25 12.16 10.26	0.000 0.000 0.000 0.000
0.693 1.065 1.427 1.780 2.159 2.525 2.880	81.2 278.9 652.7 743.8 714.2 636.6 551.5	0.19 0.97 0.76 -0.19 -2.34 -2.60 -2.85	0.58 2.32 6.33 7.54 7.45 5.56 3.66	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	0.0 0.0 0.0 0.0 0.0	0.742 0.994 1.240 1.504 1.759 2.006	0.00000 0.00000 0.00000 0.00000 0.00000	0.092 0.215 0.245 0.235 0.209 0.181	0.046 0.036 -0.009 -0.111 -0.124 -0.136	7.02 11.04 12.25 12.16 10.26 8.37	0.000 0.000 0.000 0.000 0.000
0.693 1.065 1.427 1.780 2.159 2.525 2.880 3.237	81.2 278.9 652.7 743.8 714.2 636.6 551.5 489.4	0.19 0.97 0.76 -0.19 -2.34 -2.60 -2.85 -2.85	0.58 2.32 6.33 7.54 7.45 5.56 3.66 2.34	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	0.0 0.0 0.0 0.0 0.0	0.742 0.994 1.240 1.504 1.759 2.006 2.255	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.092 0.215 0.245 0.235 0.209 0.181 0.161	0.046 0.036 -0.009 -0.111 -0.124 -0.136	7.02 11.04 12.25 12.16 10.26 8.37 7.05	0.000 0.000 0.000 0.000 0.000 0.000
0.693 1.065 1.427 1.780 2.159 2.525 2.880	81.2 278.9 652.7 743.8 714.2 636.6 551.5 489.4 459.7	0.19 0.97 0.76 -0.19 -2.34 -2.60 -2.85	0.58 2.32 6.33 7.54 7.45 5.56 3.66	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	0.0 0.0 0.0 0.0 0.0 0.0	0.742 0.994 1.240 1.504 1.759 2.006	0.00000 0.00000 0.00000 0.00000 0.00000	0.092 0.215 0.245 0.235 0.209 0.181 0.161 0.151	0.046 0.036 -0.009 -0.111 -0.124 -0.136 -0.137	7.02 11.04 12.25 12.16 10.26 8.37 7.05	0.000 0.000 0.000 0.000 0.000

Table B.35 L/B = 3.5 ; β = 18° ; L_{cc} = 25% ; Thrust Line: Centre of Gravity

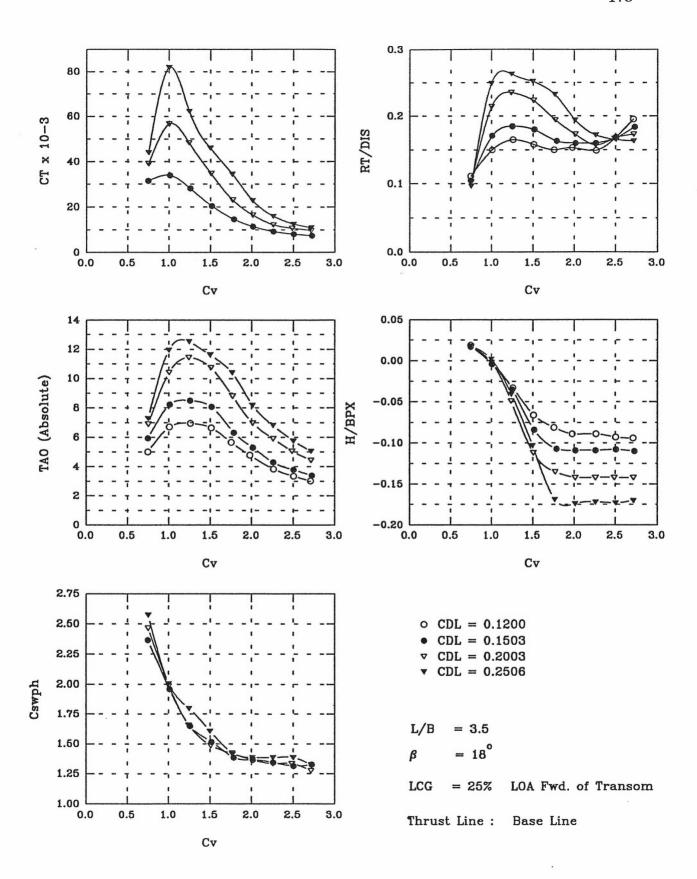


Figure B.36

					~							
Mode 1	No. T-35	18										
L/B Ra			.5		Tongth (Orrowol T	.03 .00	F0				
					Length C			.50 cm				
Deadri	se	18	.00 deg		Breath (.00 cm			17	79
					Breath (Chine) E	3PX 21	.00 cm				
LCG Po	sition	25	.00 % I	OA.	20.13	m & Tra	nsom					
Dianla	cement I	TC 14E	0 0 ~~		Diam Co		TDT 0	1200				
			8.0 gm		Disp. Co			.1200				
VCG Po			.48 % B		7.47 cm	a & Base	Line					
Static	trim TA	00 2	.79 deg									
Water '	Temp.	19	.50 deg	C	Density	998	3.308 kg	m3 Ki	n. Visc	ocitv	0.1016E	-05 m2/s
	•		3/5/Tuetta		-	15.50						
Vel	RT	***	mao	TO	TV	MCDII	OTT	am	DM/DTC	II /DDV	mao	Channel .
		H	TAO	LC	LK	WSPH	CA	CT	KT/DIS	H/BPX	TAO	Cwsph
m/s	gms	cm	Rel.	cm	CM	cm2		x10-3			Abs.	
1.069	162.6	0.40	2.22	0.00	0.00	0.0	0.745	0.00000	0.111	0.019	5.01	0.000
1.445		-0.08	3.91	0.00	0.00		1.007	0.00000		-0.004	6.70	0.000
1.812		-0.69	4.16	0.00	0.00		1.263	0.00000		-0.033	6.95	0.000
2.171	230.0	-1.39	3.86	0.00	0.00	0.0	1.512	0.00000	0.158	-0.066	6.65	0.000
2.517	218.3	-1.71	2.86	0.00	0.00	0.0	1.754	0.00000	0.150	-0.081	5.65	0.000
2.839		-1.87	2.00	0.00	0.00		1.978	0.00000		-0.089	4.79	0.000
3.251		-1.87	1.05	0.00	0.00		2.265	0.00000			3.84	0.000
3.594		-1.95	0.56	0.00	0.00		2.504	0.00000	0.169	-0.093	3.35	0.000
3.889	284.1	-1.97	0.22	0.00	0.00	0.0	2.709	0.00000	0.195	-0.094	3.01	0.000
Dianla	cement D	TS 182	5.0 cm	a	Disp. Co	off. C	יחד. ח	1503				
								.1303				
VCG Pos			.48 % B		7.47 CH	t 6 Base	Line					
	trim TA											
Water !	remp.	22	.00 deg	C	Density	997	.772 kg/	m3 Ki	n. Visc	ocity	0.9568E	-06 m2/s
					- , - , - , - , - , - , - , - , - ,					-	(0) (1) F. W. S. W	
Vel	RT	H	TAO	LC	TV	WSPH	CV	CT	DM/DTC	H/BPX	TAO	Granh
			0.00000		LK		CV		KI/DIS	H/ DFA	1000 ± 7000	Cwsph
m/s	gms	cm	Rel.	cm	Cm	cm2		x10-3			Abs.	
1.071	191.5	0.36	2.45	36.22	58.77	1044.3	0.746	31.46105	0.105	0.017	5.94	2.368
1.448	312.2	-0.07	4.73	32.20	46.29	863.4	1.009	33.91953	0.171	-0.003	8.22	1.958
1.802		-0.74	5.00	26.57	39.45	726.1	1.256	28.18231		-0.035	8.49	1.647
2.176		-1.76	4.59	23.35	37.43	668.6	1.516	20.45515		-0.084	8.08	1.516
2.562	297.2	-2.26	2.82	20.13	35.42	611.0	1.785	14.57649	0.163	-0.107	6.31	1.385
2.894	201 7	-2.29	1.81	10 11	36.63	602 1	2.016	11.37130	0 160	-0.109	5.30	1.365
				18.11								
				18.11								
3.246	291.3	-2.30	0.80	16.10	37.84	593.3	2.262	9.16116	0.160	-0.109	4.29	1.345
3.246 3.595	291.3 306.6	-2.30 -2.27	0.80	16.10 13.68	37.84 39.04	593.3 580.0	2.262 2.505	9.16116 8.04071	0.160 0.168	-0.109 -0.108	4.29 3.78	1.345 1.315
3.246	291.3 306.6	-2.30	0.80	16.10	37.84 39.04	593.3 580.0	2.262	9.16116	0.160 0.168	-0.109	4.29	1.345
3.246 3.595	291.3 306.6	-2.30 -2.27	0.80	16.10 13.68	37.84 39.04	593.3 580.0	2.262 2.505	9.16116 8.04071	0.160 0.168	-0.109 -0.108	4.29 3.78	1.345 1.315
3.246 3.595 3.913	291.3 306.6 336.2	-2.30 -2.27 -2.31	0.80 0.29 -0.10	16.10 13.68 11.27	37.84 39.04 41.86	593.3 580.0 584.4	2.262 2.505 2.726	9.16116 8.04071 7.38955	0.160 0.168	-0.109 -0.108	4.29 3.78	1.345 1.315
3.246 3.595 3.913 Displace	291.3 306.6 336.2 Dement D	-2.30 -2.27 -2.31	0.80 0.29 -0.10 2.0 gm	16.10 13.68 11.27	37.84 39.04 41.86 Disp. Co	593.3 580.0 584.4 eff. C	2.262 2.505 2.726	9.16116 8.04071	0.160 0.168	-0.109 -0.108	4.29 3.78	1.345 1.315
3.246 3.595 3.913 Displace VCG Pos	291.3 306.6 336.2 Dement D	-2.30 -2.27 -2.31 (IS 243 30	0.80 0.29 -0.10 2.0 gm .61 % B	16.10 13.68 11.27	37.84 39.04 41.86	593.3 580.0 584.4 eff. C	2.262 2.505 2.726	9.16116 8.04071 7.38955	0.160 0.168	-0.109 -0.108	4.29 3.78	1.345 1.315
3.246 3.595 3.913 Displac VCG Pos Static	291.3 306.6 336.2 cement D sition trim TA	-2.30 -2.27 -2.31 IS 243 30 00 4	0.80 0.29 -0.10 2.0 gm .61 % B	16.10 13.68 11.27	37.84 39.04 41.86 Disp. Co	593.3 580.0 584.4 eff. C	2.262 2.505 2.726 DL 0.	9.16116 8.04071 7.38955	0.160 0.168 0.184	-0.109 -0.108 -0.110	4.29 3.78 3.39	1.345 1.315 1.325
3.246 3.595 3.913 Displace VCG Pos	291.3 306.6 336.2 cement D sition trim TA	-2.30 -2.27 -2.31 IS 243 30 00 4	0.80 0.29 -0.10 2.0 gm .61 % B	16.10 13.68 11.27	37.84 39.04 41.86 Disp. Co	593.3 580.0 584.4 eff. C	2.262 2.505 2.726 DL 0.	9.16116 8.04071 7.38955	0.160 0.168 0.184	-0.109 -0.108 -0.110	4.29 3.78 3.39	1.345 1.315 1.325
3.246 3.595 3.913 Displac VCG Pos Static	291.3 306.6 336.2 cement D sition trim TA	-2.30 -2.27 -2.31 IS 243 30 00 4	0.80 0.29 -0.10 2.0 gm .61 % B	16.10 13.68 11.27	37.84 39.04 41.86 Disp. Co	593.3 580.0 584.4 eff. C	2.262 2.505 2.726 DL 0.	9.16116 8.04071 7.38955	0.160 0.168 0.184	-0.109 -0.108 -0.110	4.29 3.78 3.39	1.345 1.315 1.325
3.246 3.595 3.913 Displac VCG Pos Static	291.3 306.6 336.2 cement D sition trim TA	-2.30 -2.27 -2.31 IS 243 30 00 4	0.80 0.29 -0.10 2.0 gm .61 % B	16.10 13.68 11.27	37.84 39.04 41.86 Disp. Co	593.3 580.0 584.4 eff. C	2.262 2.505 2.726 DL 0.	9.16116 8.04071 7.38955	0.160 0.168 0.184	-0.109 -0.108 -0.110	4.29 3.78 3.39	1.345 1.315 1.325
3.246 3.595 3.913 Displac VCG Pos Static Water T	291.3 306.6 336.2 cement D sition trim TA Temp.	-2.30 -2.27 -2.31 IS 243 30 Oo 4 22	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg	16.10 13.68 11.27 s	37.84 39.04 41.86 Disp. Co 7.04 cm Density	593.3 580.0 584.4 eeff. C Base 997 WSPH	2.262 2.505 2.726 DL 0. Line	9.16116 8.04071 7.38955 .2003 /m3 Kin	0.160 0.168 0.184	-0.109 -0.108 -0.110	4.29 3.78 3.39 0.9568E	1.345 1.315 1.325
3.246 3.595 3.913 Displac VCG Pos Static Water 1	291.3 306.6 336.2 Cement D sition trim TA	-2.30 -2.27 -2.31 IS 243 30 00 4 22	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg	16.10 13.68 11.27 s	37.84 39.04 41.86 Disp. Co 7.04 cm	593.3 580.0 584.4 eeff. C	2.262 2.505 2.726 DL 0. Line	9.16116 8.04071 7.38955 .2003	0.160 0.168 0.184	-0.109 -0.108 -0.110	4.29 3.78 3.39	1.345 1.315 1.325
3.246 3.595 3.913 Displac VCG Pos Static Water T	291.3 306.6 336.2 Sement D Sition trim TA Temp. RT gms	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H cm	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg	16.10 13.68 11.27 s	37.84 39.04 41.86 Disp. Co 7.04 cm Density LK	593.3 580.0 584.4 eff. C @ Base 997 WSPH cm2	2.262 2.505 2.726 EDL 0. Line 7.772 kg/	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3	0.160 0.168 0.184 n. Visco	-0.109 -0.108 -0.110	4.29 3.78 3.39 0.9568E TAO Abs.	1.345 1.315 1.325 -06 m2/s Cwsph
3.246 3.595 3.913 Displace VCG Pos Static Water 1 Vel m/s	291.3 306.6 336.2 cement D sition trim TA Temp. RT gms	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H cm	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel.	16.10 13.68 11.27 s C LC cm	37.84 39.04 41.86 Disp. Co 7.04 cm Density LK cm	593.3 580.0 584.4 eff. C @ Base 997 WSPH Cm2	2.262 2.505 2.726 EDL 0. Line 7.772 kg/ CV	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3	0.160 0.168 0.184 n. Visco RT/DIS 0.103	-0.109 -0.108 -0.110 Decity H/BPX	4.29 3.78 3.39 0.9568E TAO Abs.	1.345 1.315 1.325 -06 m2/s Cwsph
3.246 3.595 3.913 Displac VCG Pos Static Water T	291.3 306.6 336.2 cement D sition trim TA Temp. RT gms	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H cm	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg	16.10 13.68 11.27 s	37.84 39.04 41.86 Disp. Co 7.04 cm Density LK	593.3 580.0 584.4 eff. C @ Base 997 WSPH cm2	2.262 2.505 2.726 EDL 0. Line 7.772 kg/	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3	0.160 0.168 0.184 n. Visco RT/DIS 0.103	-0.109 -0.108 -0.110	4.29 3.78 3.39 0.9568E TAO Abs.	1.345 1.315 1.325 -06 m2/s Cwsph
3.246 3.595 3.913 Displace VCG Pos Static Water 1 Vel m/s	291.3 306.6 336.2 cement D sition trim TA Temp. RT gms	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H cm	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel.	16.10 13.68 11.27 s C LC cm	37.84 39.04 41.86 Disp. Co 7.04 cm Density LK cm	593.3 580.0 584.4 eff. C @ Base 997 WSPH Cm2	2.262 2.505 2.726 EDL 0. Line 7.772 kg/ CV	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214	-0.109 -0.108 -0.110 Decity H/BPX	4.29 3.78 3.39 0.9568E TAO Abs.	1.345 1.315 1.325 -06 m2/s Cwsph
3.246 3.595 3.913 Displace VCG Pos Static Water T Vel m/s 1.077 1.436 1.782	291.3 306.6 336.2 Cement D Sition trim TA Temp. RT gms 	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H Cm -0.36 -0.04 -1.04	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel. 	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98	37.84 39.04 41.86 Disp. Co 7.04 cm Density LK cm 58.77 45.08 37.43	593.3 580.0 584.4 eff. C Base 997 WSPH Cm2 1087.5 876.1 730.5	2.262 2.505 2.726 DL 0. Line CV CV 0.750 1.001 1.241	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 39.09560 56.75127 48.43117	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235	-0.109 -0.108 -0.110 Decity H/BPX -0.017 -0.002 -0.049	4.29 3.78 3.39 0.9568E TAO Abs. 	1.345 1.315 1.325 -06 m2/s Cwsph 2.466 1.987 1.657
3.246 3.595 3.913 Displace VCG Pos Statice Water ? Vel m/s 	291.3 306.6 336.2 Sement D Sition trim TA Temp. RT gms 250.6 521.6 571.2 541.2	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H cm -0.36 -0.04 -1.04 -2.35	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel. 	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95	37.84 39.04 41.86 Disp. Co 7.04 cm Density LK cm 58.77 45.08 37.43 34.62	593.3 580.0 584.4 eff. C @ Base 997 WSPH Cm2 1087.5 876.1 730.5 655.3	2.262 2.505 2.726 DL 0. Line CV CV 0.750 1.001 1.241 1.507	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235 0.223	-0.109 -0.108 -0.110 Decity H/BPX -0.017 -0.002 -0.049 -0.112	4.29 3.78 3.39 0.9568E TAO Abs. 6.90 10.42 11.45 10.75	1.345 1.315 1.325 -06 m2/s Cwsph
3.246 3.595 3.913 Displace VCG Pos Statice Water 1 Vel m/s 1.077 1.436 1.782 2.163 2.536	291.3 306.6 336.2 cement D sition trim TA Temp. RT gms 250.6 521.6 571.2 541.2 471.3	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H cm -0.36 -0.04 -1.04 -2.35 -2.83	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel. 	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95 22.54	37.84 39.04 41.86 Disp. Co 7.04 cm Density LK cm 58.77 45.08 37.43 34.62 34.21	593.3 580.0 584.4 eff. C @ Base 997 WSPH Cm2 1087.5 876.1 730.5 655.3 624.3	2.262 2.505 2.726 EDL 0. E Line 7.772 kg/ CV 0.750 1.001 1.241 1.507 1.767	9.16116 8.04071 7.38955 .2003 Vm3 Kin CT x10-3 39.09560 56.75127 48.43117 34.70268 23.08229	0.160 0.168 0.184 n. Visce RT/DIS 0.103 0.214 0.235 0.223 0.194	-0.109 -0.108 -0.110 Decity H/BPX -0.017 -0.002 -0.049 -0.112 -0.135	4.29 3.78 3.39 0.9568E TAO Abs. 6.90 10.42 11.45 10.75 8.80	1.345 1.315 1.325 -06 m2/s Cwsph
3.246 3.595 3.913 Displace VCG Pos Static Water T Vel m/s 1.077 1.436 1.782 2.163 2.536 2.887	291.3 306.6 336.2 cement D sition trim TA Femp. RT gms 	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H cm -0.36 -0.04 -1.04 -2.35 -2.83 -2.99	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel. -2.49 6.01 7.04 6.34 4.39 2.56	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95 22.54 20.13	37.84 39.04 41.86 Disp. Co 7.04 cm Density LK cm 58.77 45.08 37.43 34.62 34.21 34.62	593.3 580.0 584.4 eff. C @ Base 997 WSPH cm2 1087.5 876.1 730.5 655.3 624.3 602.1	2.262 2.505 2.726 2.726 2.11ne 2.772 kg/ CV 0.750 1.001 1.241 1.507 1.767 2.012	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235 0.223 0.194 0.173	-0.109 -0.108 -0.110 Decity H/BPX -0.017 -0.002 -0.049 -0.112 -0.135 -0.142	4.29 3.78 3.39 0.9568E TAO Abs. 6.90 10.42 11.45 10.75 8.80 6.97	1.345 1.315 1.325 -06 m2/s Cwsph 2.466 1.987 1.657 1.486 1.416 1.365
3.246 3.595 3.913 Displace VCG Pos Statice Water 1 Vel m/s 1.077 1.436 1.782 2.163 2.536	291.3 306.6 336.2 cement D sition trim TA Femp. RT gms 	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H cm -0.36 -0.04 -1.04 -2.35 -2.83	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel. 	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95 22.54 20.13	37.84 39.04 41.86 Disp. Co 7.04 cm Density LK cm 58.77 45.08 37.43 34.62 34.21	593.3 580.0 584.4 eff. C @ Base 997 WSPH cm2 1087.5 876.1 730.5 655.3 624.3 602.1	2.262 2.505 2.726 EDL 0. E Line 7.772 kg/ CV 0.750 1.001 1.241 1.507 1.767	9.16116 8.04071 7.38955 .2003 Vm3 Kin CT x10-3 39.09560 56.75127 48.43117 34.70268 23.08229	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235 0.223 0.194 0.173	-0.109 -0.108 -0.110 Decity H/BPX -0.017 -0.002 -0.049 -0.112 -0.135	4.29 3.78 3.39 0.9568E TAO Abs. 6.90 10.42 11.45 10.75 8.80	1.345 1.315 1.325 -06 m2/s Cwsph
3.246 3.595 3.913 Displace VCG Pos Static Water 7 Vel m/s 1.077 1.436 1.782 2.163 2.536 2.887 3.243	291.3 306.6 336.2 cement D sition trim TA Temp. RT gms 	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H cm -0.36 -0.04 -1.04 -2.35 -2.83 -2.99 -2.97	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel. 	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95 22.54 20.13 18.11	37.84 39.04 41.86 Disp. Cc 7.04 cm Density LK cm 58.77 45.08 37.43 34.62 34.21 34.62 35.42	593.3 580.0 584.4 eff. C @ Base 997 WSPH cm2 1087.5 876.1 730.5 655.3 624.3 602.1 588.9	2.262 2.505 2.726 DL 0. Line CV CV 0.750 1.001 1.241 1.507 1.767 2.012 2.259	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 39.09560 56.75127 48.43117 34.70268 23.08229 16.47601 12.12949	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235 0.223 0.194 0.173 0.157	-0.109 -0.108 -0.110 Decity H/BPX -0.017 -0.002 -0.049 -0.112 -0.135 -0.142	4.29 3.78 3.39 0.9568E TAO Abs. 6.90 10.42 11.45 10.75 8.80 6.97 5.91	1.345 1.315 1.325 -06 m2/s Cwsph
3.246 3.595 3.913 Displace VCG Pos Static Water T Vel m/s 1.077 1.436 1.782 2.163 2.536 2.887 3.243 3.569	291.3 306.6 336.2 Cement D Sition trim TA Pemp. RT gms 	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H CM -0.36 -0.04 -1.04 -2.35 -2.83 -2.99 -2.97 -2.98	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel. 	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95 22.54 20.13 18.11 17.31	37.84 39.04 41.86 Disp. Co 7.04 cm Density LK cm 58.77 45.08 37.43 34.62 34.21 34.62 35.42 36.22	593.3 580.0 584.4 eff. C Base 997 WSPH Cm2 1087.5 876.1 730.5 655.3 602.1 588.9 588.9	2.262 2.505 2.726 DL 0. 2 Line CV 0.750 1.001 1.241 1.507 1.767 2.012 2.259 2.486	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 39.09560 56.75127 48.43117 34.70268 23.08229 16.47601 12.12949 10.68013	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235 0.223 0.194 0.173 0.157 0.167	-0.109 -0.108 -0.110 Deity H/BPX -0.017 -0.002 -0.049 -0.112 -0.135 -0.142	4.29 3.78 3.39 0.9568E TAO Abs. 6.90 10.42 11.45 10.75 8.80 6.97 5.91 5.06	1.345 1.315 1.325 -06 m2/s Cwsph 2.466 1.987 1.657 1.486 1.416 1.365 1.335
3.246 3.595 3.913 Displace VCG Pos Static Water 7 Vel m/s 	291.3 306.6 336.2 Cement D Sition trim TA Pemp. RT gms 	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H cm -0.36 -0.04 -1.04 -2.35 -2.83 -2.99 -2.97	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel. 	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95 22.54 20.13 18.11 17.31	37.84 39.04 41.86 Disp. Cc 7.04 cm Density LK cm 58.77 45.08 37.43 34.62 34.21 34.62 35.42	593.3 580.0 584.4 eff. C Base 997 WSPH Cm2 1087.5 876.1 730.5 655.3 602.1 588.9 588.9	2.262 2.505 2.726 DL 0. Line CV CV 0.750 1.001 1.241 1.507 1.767 2.012 2.259	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 39.09560 56.75127 48.43117 34.70268 23.08229 16.47601 12.12949	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235 0.223 0.194 0.173 0.157 0.167	-0.109 -0.108 -0.110 Decity H/BPX -0.017 -0.002 -0.049 -0.112 -0.135 -0.142	4.29 3.78 3.39 0.9568E TAO Abs. 6.90 10.42 11.45 10.75 8.80 6.97 5.91	1.345 1.315 1.325 -06 m2/s Cwsph
3.246 3.595 3.913 Displace VCG Pos Static Water T Vel m/s 	291.3 306.6 336.2 cement D sition trim TA Temp. RT gms 	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H cm 0.36 -0.04 -1.04 -2.35 -2.83 -2.99 -2.97 -2.98 -2.99	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg TAO Rel. 	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95 22.54 20.13 18.11 17.31 14.89	37.84 39.04 41.86 Disp. Co 7.04 cm Density LK cm 58.77 45.08 37.43 34.62 34.21 34.62 35.42 36.22 36.22	593.3 580.0 584.4 eff. C @ Base 997 WSPH cm2 1087.5 876.1 730.5 655.3 624.3 602.1 588.9 562.3	2.262 2.505 2.726 2.726 2.11ne 2.772 kg/ CV 0.750 1.001 1.241 1.507 1.767 2.012 2.259 2.486 2.714	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235 0.223 0.194 0.173 0.157 0.167	-0.109 -0.108 -0.110 Deity H/BPX -0.017 -0.002 -0.049 -0.112 -0.135 -0.142	4.29 3.78 3.39 0.9568E TAO Abs. 6.90 10.42 11.45 10.75 8.80 6.97 5.91 5.06	1.345 1.315 1.325 -06 m2/s Cwsph 2.466 1.987 1.657 1.486 1.416 1.365 1.335
3.246 3.595 3.913 Displace VCG Pos Static Water T Vel m/s 	291.3 306.6 336.2 Cement D Sition trim TA Pemp. RT gms 	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H cm 0.36 -0.04 -1.04 -2.35 -2.83 -2.99 -2.97 -2.98 -2.99	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel. 	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95 22.54 20.13 18.11 17.31 14.89	37.84 39.04 41.86 Disp. Co 7.04 cm Density LK cm 58.77 45.08 37.43 34.62 34.21 34.62 35.42 36.22	593.3 580.0 584.4 eff. C @ Base 997 WSPH cm2 1087.5 876.1 730.5 655.3 624.3 602.1 588.9 562.3	2.262 2.505 2.726 2.726 2.712 kg/ CV 0.750 1.001 1.241 1.507 1.767 2.012 2.259 2.486 2.714	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 39.09560 56.75127 48.43117 34.70268 23.08229 16.47601 12.12949 10.68013	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235 0.223 0.194 0.173 0.157 0.167	-0.109 -0.108 -0.110 Deity H/BPX -0.017 -0.002 -0.049 -0.112 -0.135 -0.142	4.29 3.78 3.39 0.9568E TAO Abs. 6.90 10.42 11.45 10.75 8.80 6.97 5.91 5.06	1.345 1.315 1.325 -06 m2/s Cwsph 2.466 1.987 1.657 1.486 1.416 1.365 1.335
3.246 3.595 3.913 Displace VCG Pos Static Water T Vel m/s 	291.3 306.6 336.2 cement D sition trim TA Temp. RT gms 	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H cm -0.36 -0.04 -1.04 -2.35 -2.83 -2.99 -2.97 -2.98 -2.99	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel. 	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95 22.54 20.13 18.11 17.31 14.89	37.84 39.04 41.86 Disp. Co 7.04 cm Density LK cm 58.77 45.08 37.43 34.62 34.62 34.21 34.62 35.42 36.22 36.22 Disp. Co	593.3 580.0 584.4 eff. C @ Base 997 WSPH cm2 1087.5 876.1 730.5 655.3 624.3 602.1 588.9 562.3 eff. C	2.262 2.505 2.726 2.726 2.726 2.772 kg/ CV 0.750 1.001 1.241 1.507 1.767 2.012 2.259 2.486 2.714	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235 0.223 0.194 0.173 0.157 0.167	-0.109 -0.108 -0.110 Deity H/BPX -0.017 -0.002 -0.049 -0.112 -0.135 -0.142	4.29 3.78 3.39 0.9568E TAO Abs. 6.90 10.42 11.45 10.75 8.80 6.97 5.91 5.06	1.345 1.315 1.325 -06 m2/s Cwsph 2.466 1.987 1.657 1.486 1.416 1.365 1.335
3.246 3.595 3.913 Displace VCG Pos Static Water 7 Vel m/s 	291.3 306.6 336.2 Sement D Sition trim TA Femp. RT gms 	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H cm -0.36 -0.04 -1.04 -2.35 -2.83 -2.99 -2.97 -2.98 -2.99	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel. 	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95 22.54 20.13 18.11 17.31 14.89	37.84 39.04 41.86 Disp. Co 7.04 cm Density LK cm 58.77 45.08 37.43 34.62 34.21 34.62 35.42 36.22 36.22	593.3 580.0 584.4 eff. C @ Base 997 WSPH cm2 1087.5 876.1 730.5 655.3 624.3 602.1 588.9 562.3 eff. C	2.262 2.505 2.726 2.726 2.726 2.772 kg/ CV 0.750 1.001 1.241 1.507 1.767 2.012 2.259 2.486 2.714	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235 0.223 0.194 0.173 0.157 0.167	-0.109 -0.108 -0.110 Deity H/BPX -0.017 -0.002 -0.049 -0.112 -0.135 -0.142	4.29 3.78 3.39 0.9568E TAO Abs. 6.90 10.42 11.45 10.75 8.80 6.97 5.91 5.06	1.345 1.315 1.325 -06 m2/s Cwsph 2.466 1.987 1.657 1.486 1.416 1.365 1.335
3.246 3.595 3.913 Displace VCG Pos Static Water T Vel m/s 	291.3 306.6 336.2 cement D sition trim TA Femp. RT gms 	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H CM -0.36 -0.04 -1.04 -2.35 -2.83 -2.99 -2.97 -2.98 -2.99 Solution (Control of the Control of the Con	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel. 	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95 22.54 20.13 18.11 17.31 14.89	37.84 39.04 41.86 Disp. Co 7.04 cm Density LK cm 58.77 45.08 37.43 34.62 34.21 34.62 35.42 36.22 36.22 Disp. Co 6.72 cm	593.3 580.0 584.4 eff. C @ Base 997 WSPH Cm2 1087.5 876.1 730.5 655.3 602.1 588.9 562.3 eff. C	2.262 2.505 2.726 DL 0. Line CV 0.750 1.001 1.241 1.507 1.767 2.012 2.259 2.486 2.714 DL 0.	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 39.09560 56.75127 48.43117 34.70268 23.08229 16.47601 12.12949 10.68013 9.71074	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235 0.223 0.194 0.173 0.157 0.167	-0.109 -0.108 -0.110 Deity H/BPX -0.017 -0.002 -0.049 -0.112 -0.142 -0.142 -0.142	4.29 3.78 3.39 0.9568E TAO Abs. 	1.345 1.315 1.325 -06 m2/s Cwsph
3.246 3.595 3.913 Displace VCG Pos Static Water 7 Vel m/s 	291.3 306.6 336.2 cement D sition trim TA Femp. RT gms 	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H CM -0.36 -0.04 -1.04 -2.35 -2.83 -2.99 -2.97 -2.98 -2.99 Solution (Control of the Control of the Con	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel. 	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95 22.54 20.13 18.11 17.31 14.89	37.84 39.04 41.86 Disp. Co 7.04 cm Density LK cm 58.77 45.08 37.43 34.62 34.62 34.21 34.62 35.42 36.22 36.22 Disp. Co	593.3 580.0 584.4 eff. C @ Base 997 WSPH Cm2 1087.5 876.1 730.5 655.3 602.1 588.9 562.3 eff. C	2.262 2.505 2.726 2.726 2.726 2.772 kg/ CV 0.750 1.001 1.241 1.507 1.767 2.012 2.259 2.486 2.714	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 39.09560 56.75127 48.43117 34.70268 23.08229 16.47601 12.12949 10.68013 9.71074	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235 0.223 0.194 0.173 0.157 0.167	-0.109 -0.108 -0.110 Deity H/BPX -0.017 -0.002 -0.049 -0.112 -0.142 -0.142 -0.142	4.29 3.78 3.39 0.9568E TAO Abs. 	1.345 1.315 1.325 -06 m2/s Cwsph 2.466 1.987 1.657 1.486 1.416 1.365 1.335
3.246 3.595 3.913 Displace VCG Pos Static Water T Vel m/s 	291.3 306.6 336.2 cement D sition trim TA Femp. RT gms 	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H CM -0.36 -0.04 -1.04 -2.35 -2.83 -2.99 -2.97 -2.98 -2.99 Solution (Control of the Control of the Con	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel. 	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95 22.54 20.13 18.11 17.31 14.89	37.84 39.04 41.86 Disp. Co 7.04 cm Density LK cm 58.77 45.08 37.43 34.62 34.21 34.62 35.42 36.22 36.22 Disp. Co 6.72 cm	593.3 580.0 584.4 eff. C @ Base 997 WSPH Cm2 1087.5 876.1 730.5 655.3 602.1 588.9 562.3 eff. C	2.262 2.505 2.726 DL 0. Line CV 0.750 1.001 1.241 1.507 1.767 2.012 2.259 2.486 2.714 DL 0.	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 39.09560 56.75127 48.43117 34.70268 23.08229 16.47601 12.12949 10.68013 9.71074	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235 0.223 0.194 0.173 0.157 0.167	-0.109 -0.108 -0.110 Deity H/BPX -0.017 -0.002 -0.049 -0.112 -0.142 -0.142 -0.142	4.29 3.78 3.39 0.9568E TAO Abs. 	1.345 1.315 1.325 -06 m2/s Cwsph
3.246 3.595 3.913 Displace VCG Pos Static Water T Vel m/s 	291.3 306.6 336.2 cement D sition trim TA Femp. RT gms 	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H CM -0.36 -0.04 -1.04 -2.35 -2.83 -2.99 -2.97 -2.98 -2.99 Solution (Control of the Control of the Con	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel. 	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95 22.54 20.13 18.11 17.31 14.89	37.84 39.04 41.86 Disp. Co 7.04 cm Density LK cm 58.77 45.08 37.43 34.62 34.21 34.62 35.42 36.22 36.22 Disp. Co 6.72 cm	593.3 580.0 584.4 eff. C @ Base 997 WSPH Cm2 1087.5 876.1 730.5 655.3 602.1 588.9 562.3 eff. C	2.262 2.505 2.726 DL 0. Line CV 0.750 1.001 1.241 1.507 1.767 2.012 2.259 2.486 2.714 DL 0.	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 39.09560 56.75127 48.43117 34.70268 23.08229 16.47601 12.12949 10.68013 9.71074	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235 0.223 0.194 0.173 0.157 0.167 0.173	-0.109 -0.108 -0.110 Deity H/BPX -0.017 -0.002 -0.049 -0.112 -0.142 -0.142 -0.142	4.29 3.78 3.39 0.9568E TAO Abs. 	1.345 1.315 1.325 -06 m2/s Cwsph
3.246 3.595 3.913 Displace VCG Pos Static Water 7 1.077 1.436 1.782 2.163 2.163 2.887 3.243 3.569 3.895 Displace VCG Pos Static Water 7	291.3 306.6 336.2 cement D sition trim TA Temp. RT gms 	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H cm -0.36 -0.04 -1.04 -2.35 -2.83 -2.99 -2.97 -2.98 -2.99 Sociation of the control of	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel. 	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95 22.54 20.13 18.11 17.31 14.89 s	37.84 39.04 41.86 Disp. Co 7.04 cm Density LK cm 58.77 45.08 37.43 34.62 34.62 34.21 34.62 35.42 36.22 Disp. Co 6.72 cm	593.3 580.0 584.4 eff. C @ Base 997 WSPH cm2 1087.5 876.1 730.5 655.3 624.3 602.1 588.9 562.3 eff. C @ Base	2.262 2.505 2.726 2.726 2.726 2.772 kg/ CV 0.750 1.001 1.241 1.507 1.767 2.012 2.259 2.486 2.714 2DL 0.5 Line	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 39.09560 56.75127 48.43117 34.70268 23.08229 16.47601 12.12949 10.68013 9.71074 .2506	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235 0.223 0.194 0.173 0.157 0.167 0.173	-0.109 -0.108 -0.110 Decity H/BPX -0.017 -0.002 -0.049 -0.112 -0.135 -0.142 -0.142 -0.142 -0.142	4.29 3.78 3.39 0.9568E TAO Abs. 6.90 10.42 11.45 10.75 8.80 6.97 5.91 5.06 4.44	1.345 1.315 1.325 -06 m2/s Cwsph
3.246 3.595 3.913 Displace VCG Pos Static Water T Vel m/s 1.077 1.436 1.782 2.163 2.536 2.887 3.243 3.569 3.895 Displace VCG Pos Static Water T	291.3 306.6 336.2 cement D sition trim TA Temp. RT gms 250.6 521.6 571.2 541.2 441.3 420.6 381.9 407.3 421.4 cement D sition trim TA Temp.	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H cm -0.36 -0.04 -1.04 -2.35 -2.83 -2.99 -2.97 -2.98 -2.99 -2.99 IS 304 29 00 42 22	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel. 	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95 22.54 20.13 18.11 17.31 14.89 s	37.84 39.04 41.86 Disp. Co 7.04 cm Density LK cm 58.77 45.08 37.43 34.62 34.62 34.21 34.62 36.22 36.22 Disp. Co 6.72 cm	593.3 580.0 584.4 eff. C @ Base 997 WSPH cm2 1087.5 655.3 624.3 602.1 588.9 562.3 eff. C @ Base	2.262 2.505 2.726 2.726 2.726 2.772 kg/ CV 0.750 1.001 1.241 1.507 1.767 2.012 2.259 2.486 2.714 2DL 0.5 Line	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235 0.223 0.194 0.173 0.157 0.167 0.173	-0.109 -0.108 -0.110 Decity H/BPX -0.017 -0.002 -0.049 -0.112 -0.135 -0.142 -0.142 -0.142 -0.142	4.29 3.78 3.39 0.9568E TAO Abs. 6.90 10.42 11.45 10.75 8.80 6.97 5.91 5.06 4.44	1.345 1.315 1.325 -06 m2/s Cwsph
3.246 3.595 3.913 Displace VCG Pos Static Water T Vel m/s 1.077 1.436 1.782 2.163 2.536 2.887 3.243 3.569 3.895 Displace VCG Pos Static Water T	291.3 306.6 336.2 Cement D Sition trim TA Femp. 250.6 571.2 541.2 471.3 420.6 381.9 407.3 421.4 Cement D Sition trim TA Femp.	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H Cm -0.36 -0.04 -1.04 -2.35 -2.83 -2.99 -2.97 -2.98 -2.99 IS 304 29 00 4 22 H Cm	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel. 	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95 22.54 20.13 18.11 17.31 14.89 s	37.84 39.04 41.86 Disp. Co 7.04 cm Density LK cm 58.77 45.08 37.43 34.62 34.21 34.62 35.42 36.22 36.22 Disp. Co 6.72 cm Density LK cm	593.3 580.0 584.4 eff. Con @ Base 997 WSPH Cm2 1087.5 876.1 730.5 655.3 624.3 602.1 588.9 562.3 eff. Con @ Base 997 WSPH Cm2	2.262 2.505 2.726 2.726 2.72 kg/ CV 0.750 1.001 1.241 1.507 2.012 2.259 2.486 2.714 2.11e 2.772 kg/ CV	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 39.09560 56.75127 48.43117 34.70268 23.08229 16.47601 12.12949 10.68013 9.71074 .2506	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235 0.223 0.194 0.173 0.157 0.167 0.173	-0.109 -0.108 -0.110 Decity H/BPX -0.017 -0.002 -0.049 -0.112 -0.142 -0.142 -0.142 -0.142 -0.142	4.29 3.78 3.39 0.9568E TAO Abs. 6.90 10.42 11.45 10.75 8.80 6.97 5.91 5.06 4.44	1.345 1.315 1.325 -06 m2/s Cwsph 2.466 1.987 1.457 1.486 1.416 1.365 1.335 1.275 -06 m2/s Cwsph
3.246 3.595 3.913 Displace VCG Pos Static Water T Vel m/s 1.077 1.436 1.782 2.163 2.536 2.887 3.243 3.569 3.895 Displace VCG Pos Static Water T	291.3 306.6 336.2 cement D sition trim TA Temp. RT gms 250.6 521.6 571.2 541.2 541.2 471.3 420.6 381.9 407.3 421.4 cement D sition trim TA Temp.	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H Cm 0.36 -0.04 -1.04 -2.35 -2.83 -2.99 -2.97 -2.98 -2.99 IS 304 29 00 4 22 H Cm 0.39	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel. -2.49 6.01 7.04 4.39 2.56 1.50 0.65 0.03 2.0 gm .22 % B .71 deg .71 deg .71 deg	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95 22.54 20.13 18.11 17.31 14.89 s	37.84 39.04 41.86 Disp. Co 7.04 cm Density LK cm 58.77 45.08 37.43 34.62 34.21 34.62 36.22 36.22 Disp. Co 6.72 cm Density LK cm	593.3 580.0 584.4 eff. C @ Base 997 WSPH cm2 1087.5 655.3 602.1 588.9 562.3 eff. C @ Base 997 WSPH cm2	2.262 2.505 2.726 2.726 2.726 2.72 kg/ CV 0.750 1.001 1.241 1.507 1.767 2.012 2.259 2.486 2.714 2.259 2.486 2.714 2.259 2.486 2.714 2.259 2.714 2.259 2.714	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 39.09560 56.75127 48.43117 34.70268 23.08229 16.47601 12.12949 10.68013 9.71074 .2506 /m3 Kin CT x10-3	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235 0.223 0.194 0.173 0.157 0.167 0.173	-0.109 -0.108 -0.110 Decity H/BPX -0.017 -0.002 -0.049 -0.112 -0.142 -0.142 -0.142 -0.142 -0.142 -0.142 -0.142	4.29 3.78 3.39 0.9568E TAO Abs. 6.90 10.42 11.45 10.75 8.80 6.97 5.91 5.06 4.44	1.345 1.315 1.325 -06 m2/s Cwsph
3.246 3.595 3.913 Displace VCG Pos Static Water 1 Vel m/s 	291.3 306.6 336.2 cement D sition trim TA Temp. RT gms 	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H cm -0.36 -0.04 -1.04 -2.35 -2.83 -2.99 -2.97 -2.98 -2.99 IS 304 29 00 4 22 H cm 0.39 0.04	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel. 	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95 22.54 20.13 18.11 17.31 14.89 s	37.84 39.04 41.86 Disp. Co 7.04 cm Density LK cm 58.77 45.08 37.43 34.62 34.62 34.21 34.62 35.42 36.22 Disp. Co 6.72 cm Density LK cm 58.77 44.28	593.3 580.0 584.4 eff. C @ Base 997 WSPH cm2 1087.5 876.1 730.5 655.3 624.3 602.1 588.9 562.3 eff. C @ Base 997 WSPH cm2	2.262 2.505 2.726 2.726 2.726 2.72 kg/ CV 0.750 1.001 1.241 1.507 1.767 2.012 2.259 2.486 2.714 2.012 2.714 2.012 2.714 2.012 2.714 2.012 2.714 2.012 2.714	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 39.09560 56.75127 48.43117 34.70268 23.08229 16.47601 12.12949 10.68013 9.71074 .2506 /m3 Kin CT x10-3	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235 0.123 0.194 0.173 0.157 0.167 0.173	-0.109 -0.108 -0.110 Decity H/BPX -0.017 -0.002 -0.049 -0.112 -0.142 -0.142 -0.142 -0.142 -0.142 -0.142 -0.142	4.29 3.78 3.39 0.9568E TAO Abs. 6.90 10.42 11.45 10.75 8.80 6.97 5.91 5.06 4.44 0.9568E TAO Abs.	1.345 1.315 1.325 -06 m2/s Cwsph 2.466 1.987 1.657 1.486 1.416 1.365 1.335 1.275 -06 m2/s Cwsph 2.573 2.006
3.246 3.595 3.913 Displace VCG Pos Static Water T Vel m/s 1.077 1.436 1.782 2.163 2.536 2.887 3.243 3.569 3.895 Displace VCG Pos Static Water T	291.3 306.6 336.2 cement D sition trim TA Temp. RT gms 250.6 521.6 571.2 541.2 541.2 471.3 420.6 381.9 407.3 421.4 cement D sition trim TA Temp.	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H Cm 0.36 -0.04 -1.04 -2.35 -2.83 -2.99 -2.97 -2.98 -2.99 IS 304 29 00 4 22 H Cm 0.39	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel. -2.49 6.01 7.04 4.39 2.56 1.50 0.65 0.03 2.0 gm .22 % B .71 deg .71 deg .71 deg	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95 22.54 20.13 18.11 17.31 14.89 s	37.84 39.04 41.86 Disp. Co 7.04 cm Density LK cm 58.77 45.08 37.43 34.62 34.21 34.62 36.22 36.22 Disp. Co 6.72 cm Density LK cm	593.3 580.0 584.4 eff. C @ Base 997 WSPH cm2 1087.5 655.3 602.1 588.9 562.3 eff. C @ Base 997 WSPH cm2	2.262 2.505 2.726 2.726 2.726 2.72 kg/ CV 0.750 1.001 1.241 1.507 1.767 2.012 2.259 2.486 2.714 2.259 2.486 2.714 2.259 2.486 2.714 2.259 2.714 2.259 2.714	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 39.09560 56.75127 48.43117 34.70268 23.08229 16.47601 12.12949 10.68013 9.71074 .2506 /m3 Kin CT x10-3	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235 0.123 0.194 0.173 0.157 0.167 0.173	-0.109 -0.108 -0.110 Decity H/BPX -0.017 -0.002 -0.049 -0.112 -0.142 -0.142 -0.142 -0.142 -0.142 -0.142 -0.142	4.29 3.78 3.39 0.9568E TAO Abs. 6.90 10.42 11.45 10.75 8.80 6.97 5.91 5.06 4.44	1.345 1.315 1.325 -06 m2/s Cwsph
3.246 3.595 3.913 Displace VCG Pos Static Water 7 Vel m/s 1.077 1.436 1.782 2.163 2.536 2.887 3.243 3.569 3.895 Displace VCG Pos Static Water 7 Vel Water 7 1.077 1.436 1.782 2.163 2.536 2.887 3.243 3.569 3.895 Displace VCG Pos Static Water 7 VCG Pos Static Water 7 1.436 1.782 2.163 2.887 3.243 3.569 3.895 Displace VCG Pos Static Water 7 Vel Water 7 VCG Pos Static Water 7 VCG Pos Static Water 7 VCG Pos Static	291.3 306.6 336.2 Sement D Sition trim TA Femp. RT gms 	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H cm -0.36 -0.04 -1.04 -2.35 -2.83 -2.99 -2.97 -2.98 -2.99 IS 304 29 00 4 22 H cm 0.39 0.04 -0.86	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel. 	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95 22.54 20.13 18.11 17.31 14.89 s C LC cm	37.84 39.04 41.86 Disp. Cc 7.04 cm Density LK cm 58.77 45.08 37.43 34.62 34.21 34.62 35.42 36.22 Disp. Cc 6.72 cm Density LK cm 58.77 44.28 39.85	593.3 580.0 584.4 eff. C @ Base 997 WSPH Cm2 1087.5 876.1 730.5 655.3 624.3 602.1 588.9 562.3 eff. C @ Base 997 WSPH Cm2 1134.9 884.7 792.5	2.262 2.505 2.726 2.726 2.726 2.11ne 2.772 kg/ CV 0.750 1.001 1.241 1.507 1.767 2.012 2.259 2.486 2.714 2.012 2.714 2.012 2.714 2.012 2.714 2.012 2.714 2.012 2.714 2.012 2.714	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 39.09560 56.75127 48.43117 34.70268 23.08229 16.47601 12.12949 10.68013 9.71074 .2506 /m3 Kin CT x10-3 44.09788 81.91853 62.32779	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235 0.223 0.194 0.173 0.157 0.167 0.173	-0.109 -0.108 -0.110 Docity H/BPX -0.017 -0.002 -0.049 -0.112 -0.142 -0.142 -0.142 -0.142 -0.142 -0.142 -0.142 -0.142 -0.142	4.29 3.78 3.39 0.9568E TAO Abs. 6.90 10.42 11.45 10.75 8.80 6.97 5.91 5.06 4.44 0.9568E TAO Abs.	1.345 1.315 1.325 -06 m2/s Cwsph 2.466 1.987 1.657 1.486 1.365 1.335 1.335 1.275 -06 m2/s Cwsph 2.573 2.006 1.797
3.246 3.595 3.913 Displace VCG Pos Static Water T Vel m/s 1.077 1.436 1.782 2.163 2.536 2.887 3.243 3.569 3.895 Displace VCG Pos Static Water T	291.3 306.6 336.2 Cement D Sition trim TA Femp. RT gms 	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H Cm -0.36 -0.04 -1.04 -2.35 -2.83 -2.99 -2.97 -2.98 -2.99 IS 304 29 00 4 22 H Cm 0.39 0.04 -0.86 -2.16	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel. 2.49 6.01 7.04 6.34 4.39 2.56 1.50 0.65 0.03 2.0 gm .22 % B .71 deg .00 deg	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95 22.54 20.13 18.11 17.31 14.89 s C LC cm	37.84 39.04 41.86 Disp. Cc 7.04 cm Density LK cm	593.3 580.0 584.4 eff. C @ Base 997 WSPH Cm2 1087.5 876.1 730.5 655.3 624.3 602.1 588.9 562.3 eff. C @ Base 997 WSPH Cm2	2.262 2.505 2.726 2.726 2.726 2.726 2.726 2.772 kg/ 2.772 kg/ 2.772 kg/ 2.259 2.486 2.714 2.714 2.715	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 39.09560 56.75127 48.43117 34.70268 23.08229 16.47601 12.12949 10.68013 9.71074 .2506 /m3 Kin CT x10-3 44.09788 81.91853 62.32779 46.12388	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235 0.223 0.194 0.173 0.157 0.167 0.173	-0.109 -0.108 -0.110 Deity H/BPX -0.017 -0.002 -0.049 -0.112 -0.142 -0.142 -0.142 -0.142 -0.142 -0.141 -0.103	4.29 3.78 3.39 0.9568E TAO Abs. 6.90 10.42 11.45 10.75 8.80 6.97 5.91 5.06 4.44 0.9568E TAO Abs. 7.29 11.95 12.53 11.64	1.345 1.315 1.325 -06 m2/s Cwsph 2.466 1.987 1.657 1.486 1.335 1.335 1.275 -06 m2/s Cwsph 2.573 2.006 1.797 1.606
3.246 3.595 3.913 Displace VCG Postatic Water 7 Vel m/s 1.077 1.436 1.782 2.163 2.536 2.887 3.243 3.569 3.895 Displace VCG Postatic Water 7 Vel m/s 1.076 1.433 1.786 2.148 2.163 2.	291.3 306.6 336.2 cement D sition trim TA Temp. RT gms 250.6 521.6 571.2 541.2 541.2 541.2 6381.9 407.3 420.6 381.9 407.3 421.4 cement D sition trim TA Temp. RT gms	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H Cm 0.36 -0.04 -1.04 -2.35 -2.99 -2.97 -2.98 -2.99 -2.97 -2.98 -2.99 IS 304 29 00 4 22 H Cm 0.39 0.04 -0.86 -2.16 -3.55	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg TAO Rel. 	16.10 13.68 11.27 8 C LC cm 40.25 34.62 28.98 24.95 22.54 20.13 18.11 17.31 14.89 8 C LC cm	37.84 39.04 41.86 Disp. Co 7.04 cm Density LK cm 58.77 45.08 37.43 34.62 34.21 34.62 35.42 36.22 36.22 Disp. Co 6.72 cm Density LK cm 58.77 44.28 39.85 36.22 33.00	593.3 580.0 584.4 eff. Co. 6 Base 997 WSPH Cm2 1087.5 655.3 602.1 588.9 562.3 eff. Co. 6 Base 997 WSPH Cm2 1134.9 884.7 792.5 708.4 628.7	2.262 2.505 2.726 2.726 2.726 2.72 kg/ CV 0.750 1.001 1.241 1.507 1.767 2.012 2.259 2.486 2.714 2.716	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 39.09560 56.75127 48.43117 34.70268 23.08229 16.47601 12.12949 10.68013 9.71074 .2506 /m3 Kin CT x10-3 44.09788 81.91853 62.32779 46.12388 34.49077	0.160 0.168 0.184 n. Visce RT/DIS 0.103 0.214 0.235 0.223 0.194 0.173 0.157 0.167 0.173	-0.109 -0.108 -0.110 Decity H/BPX -0.017 -0.002 -0.049 -0.142 -0.142 -0.142 -0.142 -0.142 -0.142 -0.169	4.29 3.78 3.39 0.9568E TAO Abs. 6.90 10.42 11.45 10.75 8.80 6.97 5.91 5.06 4.44 0.9568E TAO Abs.	1.345 1.315 1.325 -06 m2/s Cwsph -2.466 1.987 1.486 1.416 1.365 1.335 1.275 -06 m2/s Cwsph -2.573 2.006 1.797 1.606 1.426
3.246 3.595 3.913 Displace VCG Pos Static Water 1 Vel m/s 1.077 1.436 1.782 2.163 2.536 2.887 3.243 3.569 3.895 Displace VCG Pos Static Water 1 Vel m/s	291.3 306.6 336.2 Cement D Sition trim TA Femp. RT gms 	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H Cm -0.36 -0.04 -1.04 -2.35 -2.83 -2.99 -2.97 -2.98 -2.99 IS 304 29 00 4 22 H Cm 0.39 0.04 -0.86 -2.16	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel. 2.49 6.01 7.04 6.34 4.39 2.56 1.50 0.65 0.03 2.0 gm .22 % B .71 deg .00 deg	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95 22.54 20.13 18.11 17.31 14.89 s C LC cm	37.84 39.04 41.86 Disp. Co 7.04 cm Density LK cm 58.77 45.08 37.43 34.62 34.21 34.62 35.42 36.22 36.22 Disp. Co 6.72 cm Density LK cm 58.77 44.28 39.85 36.22 33.00	593.3 580.0 584.4 eff. C @ Base 997 WSPH Cm2 1087.5 876.1 730.5 655.3 624.3 602.1 588.9 562.3 eff. C @ Base 997 WSPH Cm2 1134.9 84.7 792.5 708.4	2.262 2.505 2.726 2.726 2.726 2.726 2.726 2.772 kg/ 2.772 kg/ 2.772 kg/ 2.259 2.486 2.714 2.714 2.715	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235 0.223 0.194 0.173 0.157 0.167 0.173 n. Visco RT/DIS	-0.109 -0.108 -0.110 Decity H/BPX -0.017 -0.002 -0.049 -0.112 -0.142 -0.142 -0.142 -0.142 -0.142 -0.142 -0.142 -0.142 -0.142	4.29 3.78 3.39 0.9568E TAO Abs. 6.90 10.42 11.45 10.75 8.80 6.97 5.91 5.06 4.44 0.9568E TAO Abs. 7.29 11.95 12.53 11.64	1.345 1.315 1.325 -06 m2/s Cwsph 2.466 1.987 1.657 1.486 1.416 1.365 1.335 1.275 -06 m2/s Cwsph 2.573 2.006 1.797 1.606 1.426 1.385
3.246 3.595 3.913 Displace VCG Pos Static Water 7 Vel m/s 1.077 1.436 1.782 2.163 2.536 2.887 3.569 3.895 Displace VCG Pos Static Water 7 Vel m/s	291.3 306.6 336.2 cement D sition trim TA Temp. RT gms 250.6 521.6 571.2 541.2 541.2 471.3 420.6 381.9 407.3 421.4 cement D sition trim TA Temp. RT gms 294.9 756.5 801.5 766.9 705.1 589.3	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H Cm 0.36 -0.04 -1.04 -2.35 -2.99 -2.97 -2.98 -2.99 -2.97 -2.98 -2.99 IS 304 29 00 4 22 H Cm 0.39 0.04 -0.86 -2.16 -3.55	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg TAO Rel. 	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95 22.54 20.13 18.11 17.31 14.89 s C LC cm	37.84 39.04 41.86 Disp. Co 7.04 cm Density LK cm 58.77 45.08 37.43 34.62 34.21 34.62 35.42 36.22 36.22 Disp. Co 6.72 cm Density LK cm 58.77 44.28 39.85 36.22 33.00	593.3 580.0 584.4 eff. C @ Base 997 WSPH cm2 1087.5 655.3 602.1 588.9 562.3 eff. C @ Base 997 WSPH cm2 1134.9 884.7 792.5 708.4 628.7 611.0	2.262 2.505 2.726 2.726 2.726 2.72 kg/ CV 0.750 1.001 1.241 1.507 1.767 2.012 2.259 2.486 2.714 2.716	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 39.09560 56.75127 48.43117 34.70268 23.08229 16.47601 12.12949 10.68013 9.71074 .2506 /m3 Kin CT x10-3 44.09788 81.91853 62.32779 46.12388 34.49077	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235 0.223 0.194 0.173 0.157 0.167 0.173 n. Visco RT/DIS	-0.109 -0.108 -0.110 Decity H/BPX -0.017 -0.002 -0.049 -0.142 -0.142 -0.142 -0.142 -0.142 -0.142 -0.169	4.29 3.78 3.39 0.9568E TAO Abs. 6.90 10.42 11.45 10.75 8.80 6.97 5.91 5.06 4.44 0.9568E TAO Abs.	1.345 1.315 1.325 -06 m2/s Cwsph -2.466 1.987 1.486 1.416 1.365 1.335 1.275 -06 m2/s Cwsph -2.573 2.006 1.797 1.606 1.426
3.246 3.595 3.913 Displace VCG Pos Static Water 7 1.077 1.436 1.782 2.163 2.887 3.243 3.569 3.895 Displace VCG Pos Static Water 7 Vel m/s	291.3 306.6 336.2 cement D sition trim TA Temp. RT gms 	-2.30 -2.27 -2.31 IS 243 30 Oo 4 22 H Cm -0.36 -0.04 -1.04 -2.35 -2.83 -2.99 -2.97 -2.98 -2.99 IS 304 29 Oo 4 22 H Cm -0.36 -0.04 -1.04	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel. 	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95 22.54 20.13 18.11 17.31 14.89 s C LC cm	37.84 39.04 41.86 Disp. Cc 7.04 cm Density LK cm 58.77 45.08 37.43 34.62 35.42 36.22 36.22 Disp. Cc 6.72 cm LK cm 58.77 44.28 39.85 36.22 33.00 33.81 34.62	593.3 580.0 584.4 eff. C @ Base 997 WSPH Cm2 1087.5 876.1 730.5 655.3 624.3 624.3 625.3 eff. C @ Base 997 WSPH Cm2 1134.9 884.7 792.5 708.4 628.7 611.0 611.0	2.262 2.505 2.726 2.726 2.726 2.11ne 2.772 kg/ CV 2.012 2.259 2.486 2.714 2.012 2.259 2.486 2.714 2.012 2.259 2.486 2.714 2.012 2.259 2.486 2.714 2.010 2.259 2.486 2.714	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 39.09560 56.75127 48.43117 34.70268 23.08229 16.47601 12.12949 10.68013 9.71074 .2506 /m3 Kin CT x10-3 44.09788 81.91853 62.32779 46.12388 34.49077 22.78050 15.98374	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235 0.194 0.173 0.157 0.167 0.173 n. Visco RT/DIS 0.249 0.263 0.252 0.232 0.294 0.252 0.294 0.252 0.294 0.252 0.294 0.263	-0.109 -0.108 -0.110 Docity H/BPX -0.017 -0.002 -0.049 -0.112 -0.142 -0.142 -0.142 -0.142 -0.142 -0.142 -0.142 -0.174 -0.172	4.29 3.78 3.39 0.9568E TAO Abs. 6.90 10.42 11.45 10.75 8.80 6.97 5.91 5.06 4.44 0.9568E TAO Abs. 7.29 11.95 12.53 11.64 10.40 8.18 6.81	1.345 1.315 1.325 -06 m2/s Cwsph 2.466 1.987 1.657 1.486 1.416 1.365 1.335 1.275 -06 m2/s Cwsph 2.573 2.006 1.797 1.606 1.426 1.385 1.385
3.246 3.595 3.913 Displace VCG Pos Static Water 7 1.077 1.436 1.782 2.163 2.536 2.536 2.536 2.887 3.243 3.569 3.895 Displace VCG Pos Static Water 7 Vel m/s	291.3 306.6 336.2 Sement D Sition trim TA Femp. RT gms -250.6 571.2 541.2 471.3 420.6 381.9 407.3 421.4 Sement D Sition trim TA Femp. RT gms -294.9 756.5 801.5 766.9 705.1 589.3 522.5 501.4	-2.30 -2.27 -2.31 IS 243 30 00 4 22 H Cm -0.36 -0.04 -1.04 -2.35 -2.83 -2.99 -2.97 -2.98 -2.99 IS 304 29 00 4 22 H Cm -0.36 -0.04 -1.04 -2.35 -2.83 -2.99 -2.97 -2.98 -2.99 -2.97 -2.98 -2.99 -3.63 -3.63	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel. 	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95 22.54 20.13 18.11 17.31 14.89 s C LC cm	37.84 39.04 41.86 Disp. Cc 7.04 cm Density LK cm 58.77 45.08 37.43 34.62 35.42 36.22 36.22 Disp. Cc 6.72 cm Density LK cm 58.77 44.28 39.85 36.22 33.00 33.81 34.62 36.22	593.3 580.0 584.4 eff. C @ Base 997 WSPH Cm2 	2.262 2.505 2.726 2.726 2.726 2.10e 2.772 kg/ CV 2.772 kg/ 2.012 2.259 2.486 2.714 2.012 2.259 2.486 2.714 2.010 2.259 2.486 2.714 2.010 2.259 2.486 2.714 2.010 2.259 2	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 39.09560 56.75127 48.43117 34.70268 23.08229 16.47601 12.12949 10.68013 9.71074 .2506 /m3 Kin CT x10-3 44.09788 81.91853 62.32779 46.12388 34.49077 22.78050 15.98374 12.51983	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235 0.223 0.194 0.173 0.157 0.167 0.173 n. Visco RT/DIS 0.097 0.249 0.263 0.252 0.232 0.194 0.172 0.165	-0.109 -0.108 -0.110 Deity H/BPX -0.017 -0.002 -0.049 -0.112 -0.142 -0.142 -0.142 -0.142 -0.142 -0.142 -0.142 -0.172 -0.173	4.29 3.78 3.39 0.9568E TAO Abs. 6.90 10.42 11.45 10.75 8.80 6.97 5.91 5.06 4.44 0.9568E TAO Abs. 7.29 11.95 12.53 11.64 10.40 8.18 6.81 5.76	1.345 1.315 1.325 -06 m2/s Cwsph 2.466 1.987 1.657 1.486 1.335 1.335 1.275 -06 m2/s Cwsph 2.573 2.006 1.797 1.606 1.426 1.385 1.385 1.385
3.246 3.595 3.913 Displace VCG Pos Static Water 7 1.077 1.436 1.782 2.163 2.887 3.243 3.569 3.895 Displace VCG Pos Static Water 7 Vel m/s	291.3 306.6 336.2 Sement D Sition trim TA Femp. RT gms -250.6 571.2 541.2 471.3 420.6 381.9 407.3 421.4 Sement D Sition trim TA Femp. RT gms -294.9 756.5 801.5 766.9 705.1 589.3 522.5 501.4	-2.30 -2.27 -2.31 IS 243 30 Oo 4 22 H Cm -0.36 -0.04 -1.04 -2.35 -2.83 -2.99 -2.97 -2.98 -2.99 IS 304 29 Oo 4 22 H Cm -0.36 -0.04 -1.04	0.80 0.29 -0.10 2.0 gm .61 % B .41 deg .00 deg TAO Rel. 	16.10 13.68 11.27 s C LC cm 40.25 34.62 28.98 24.95 22.54 20.13 18.11 17.31 14.89 s C LC cm	37.84 39.04 41.86 Disp. Cc 7.04 cm Density LK cm 58.77 45.08 37.43 34.62 35.42 36.22 36.22 Disp. Cc 6.72 cm LK cm 58.77 44.28 39.85 36.22 33.00 33.81 34.62	593.3 580.0 584.4 eff. C @ Base 997 WSPH Cm2 	2.262 2.505 2.726 2.726 2.726 2.11ne 2.772 kg/ CV 2.012 2.259 2.486 2.714 2.012 2.259 2.486 2.714 2.012 2.259 2.486 2.714 2.012 2.259 2.486 2.714 2.010 2.259 2.486 2.714	9.16116 8.04071 7.38955 .2003 /m3 Kin CT x10-3 39.09560 56.75127 48.43117 34.70268 23.08229 16.47601 12.12949 10.68013 9.71074 .2506 /m3 Kin CT x10-3 44.09788 81.91853 62.32779 46.12388 34.49077 22.78050 15.98374	0.160 0.168 0.184 n. Visco RT/DIS 0.103 0.214 0.235 0.223 0.194 0.173 0.157 0.167 0.173 n. Visco RT/DIS 0.097 0.249 0.263 0.252 0.232 0.194 0.172 0.165	-0.109 -0.108 -0.110 Docity H/BPX -0.017 -0.002 -0.049 -0.112 -0.142 -0.142 -0.142 -0.142 -0.142 -0.142 -0.142 -0.174 -0.172	4.29 3.78 3.39 0.9568E TAO Abs. 6.90 10.42 11.45 10.75 8.80 6.97 5.91 5.06 4.44 0.9568E TAO Abs. 7.29 11.95 12.53 11.64 10.40 8.18 6.81	1.345 1.315 1.325 -06 m2/s Cwsph 2.466 1.987 1.657 1.486 1.416 1.365 1.335 1.275 -06 m2/s Cwsph 2.573 2.006 1.797 1.606 1.426 1.385 1.385

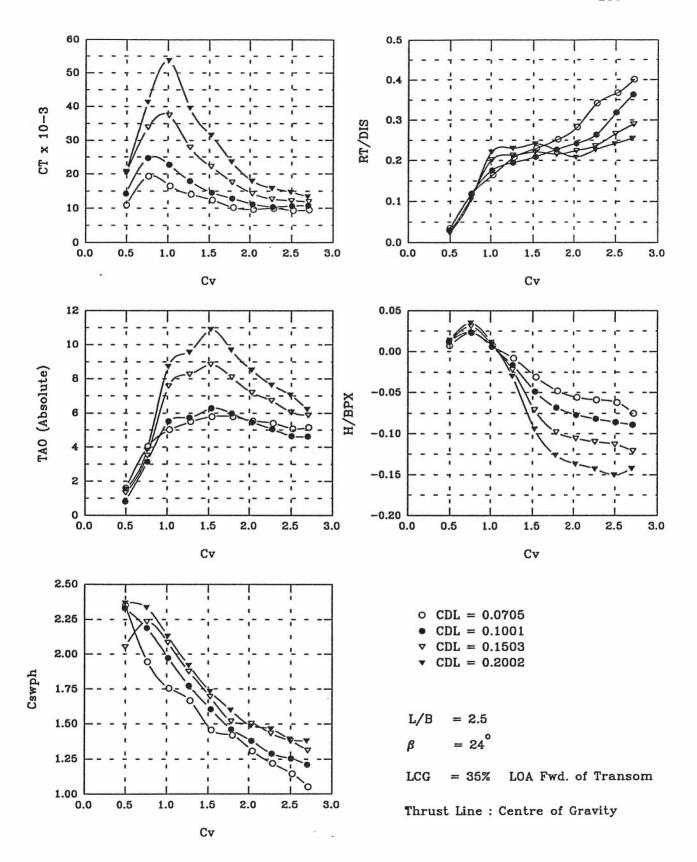


Figure B.37

	Model Model Model Model Model		2	.5 .00 deg	r	Length (Breath	Overal I (Deck) F (Chine) F	23	.50 cm			1	81
	LCG Pos	sition cement I		.00 % I i6.0 gπ			cm (Tra	nsom	.0705				
	VCG Pos Static Water 1	trim TA	.00 1	.22 % E	Ī		n (Base	Line	/m3 Ki	n. Visc	ocity	0.9916E	-06 m2/s
	Vel m/s	RT gms	H	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	CT x10-3	9.000000.00.00	H/BPX	TAO	Cwsph
-	0.715	29.5	0.15	0.07	E1 7E	40.30						1 (1	2.350
	1.099	102.1	0.15	0.07 2.50	51.75 28.75	48.30 46.58	1036.2 857.3	0.498 0.765	10.96224 19.39878			1.61	1.944
	1.474	141.4	0.15	3.48	23.00		773.3	1.027	16.54591			5.02	1.754
	1.838	177.8	-0.17	3.96	20.13	44.56	734.8	1.280	14.08612		-0.008	5.50	1.666
	2.210	197.3	-0.66	4.25	14.38	42.26	641.8	1.540	12.36694		-0.031	5.79	1.455
	2.582	215.8	-1.00	4.25	12.94	42.26		1.799	10.17125		-0.048	5.79	1.418
	2.932 3.279	242.6	-1.18	4.00	9.20	41.69		2.043	9.62420		-0.056	5.54	1.307
	3.618	314.0	-1.24 -1.31	3.87 3.55	5.75 2.88	41.69 41.69		2.284 2.521	9.93928 9.34047		-0.059 -0.062	5.41 5.09	1.218 1.145
	3.896	342.9	-1.57	3.62		40.25	464.6	2.714	9.56048				1.053
	VCG Pos		25	.22 % B		Disp. Co		DL 0	.1001				
	Water 1	trim TA emp.		.82 deg		Density	998	.308 kg	/m3 Ki	n. Visc	ocity	0.1016E	-05 m2/s
	Vel m/s	RT gms	H	TAO Rel.	LC	LK	WSPH cm2	CV	CT x10-3	RT/DIS	H/BPX	TAO	Cwsph
_													
	0.704	36.8	0.25	-0.00	46.63	49.80		0.490	14.23580	0.030	0.012	0.82	2.329
	1.087	143.4	0.51	2.33	38.81	47.44	964.9	0.757	24.71653	0.118	0.024	3.15	2.188
	1.457 1.818	213.9	0.12	4.70	31.63	45.43		1.015	22.76340			5.52	1.974
	2.197	236.6 253.5	-0.33 -1.03	4.91 5.46	25.30 20.13	43.70 42.26	782.2 706.8	1.266 1.531	17.98949 14.60604		-0.016 -0.049	5.73 6.28	1.774 1.603
	2.559	276.2	-1.44	5.16	15.53	41.40		1.783	12.86685		-0.068	5.98	1.461
	2.917	294.6	-1.61		12.94	40.83		2.032	11.19267		-0.077	5.47	1.379
	3.265	321.0	-1.71	4.24	9.60	40.60		2.275	10.42405		-0.082	5.06	1.287
	3.595	387.2	-1.82	3.84	7.76	41.11	553.1	2.505	10.64657		-0.086	4.66	1.254
	3.880	441.6	-1.87	3.82	6.61	40.54	533.0	2.703	10.81570	0.363	-0.089	4.64	1.209
	Displac	ement D	TS 182	5.0 gm	g	Disp. Co	eff. C	DL 0.	1502				
	VCG Pos			.39 % B		6.07 cm			. 1302				
	Static			.34 deg									
	Water T	'emp.	16	.50 deg	С	Density	998	.862 kg/	/m3 Ki	n. Visc	ocity	0.1095E	-05 m2/s
	Vel	RT	H	TAO	LC	LK	WSPH	CA	CT	RT/DIS	H/BPX	TAO	Cwsph
	m/s	gms	cm	Rel.	cm	cm	cm2		x10-3			Abs.	
_	0.712	47 7	^ 25		20.75	40 74	005.6		20 20402	0 006	0 010	1 22	2 052
	1.086	47.7	0.25 0.66	-0.01 2.18	41.98	49.74 47.50	984.2	0.496	20.39402 33.92951	0.026	0.012 0.031	1.33 3.52	2.053 2.232
	1.451	368.4	0.19	6.23	35.94	46.00	919.0	1.011	37.39791	0.202	0.009	7.57	2.084
	1.817	388.0	-0.47	6.92	29.04	43.99		1.266	27.92364		-0.022	8.26	1.875
	2.186	403.2	-1.48	7.51	24.38	41.63	746.8	1.523	22.19420	0.221	-0.071	8.85	1.694
	2.558	393.0	-2.05			38.81	669.2		17.62483			8.09	1.518
	2.910	408.8	-2.22			40.25		2.028	14.30577			7.18	1.503
	3.248	429.8	-2.31			39.79		2.263	12.67226		-0.110	6.72	1.432
	3.583 3.885	485.5 529.9	-2.38 -2.54	4.71		40.25 40.54	607.5 578.5	2.497	12.22466 11.92030			6.05 5.88	1.378 1.312
	3.003	323.3	-2.54	4.34	10.04	40.54	370.3	2.707	11.72030	0.230	-0.121	3.00	1.312
	Displac					Disp. Co			2002				
	VCG Pos	ition	26	.13 % B		Disp. Co 6.01 cm			2002				
		ition trim TA	26 00 1			6.01 cm	@ Base	Line	.2002 /m3 Ki	n. Visco	ocity	0.1028E-	-05 m2/s
	VCG Pos Static Water T	ition trim TA emp.	26 00 1 19	.13 % B .58 deg .00 deg	С	6.01 cm Density	998	Line .407 kg/	/m3 Ki		ATT		
	VCG Pos Static	ition trim TA	26 00 1	.13 % B		6.01 cm	@ Base	Line			ocity H/BPX	0.1028E- TAO Abs.	-05 m2/s Cwsph
_	VCG Pos Static Water T Vel m/s	ition trim TA emp. RT gms	26 00 1 19 H Cm	.13 % B .58 deg .00 deg TAO Rel.	C LC cm	6.01 cm Density LK cm	998 WSPH Cm2	Line .407 kg/	/m3 Ki: CT x10-3	RT/DIS	н/врх	TAO Abs.	Cwsph
_	VCG Pos Static Water T Vel m/s	ition trim TA emp. RT gms	26 00 1 19 H cm	.13 % B .58 deg .00 deg TAO Rel.	C LC cm	Density LK cm 53.53	998 WSPH - cm2	Line .407 kg/ CV 0.496	OT x10-3 20.80085	RT/DIS 0.023	H/BPX 0.014	TAO Abs.	Cwsph 2.367
_	VCG Pos Static Water T Vel m/s 0.711 1.083	ition trim TA emp. RT gms 55.9 253.9	26 00 1 19 H cm 0.28 0.73	.13 % B .58 deg .00 deg TAO Rel. -0.03 2.26	C LC cm 52.50 46.00	Density LK cm 53.53 49.62	998 WSPH Cm2 1043.8 1029.1	Line .407 kg/ CV 0.496 0.754	/m3 Kin CT x10-3 20.80085 41.36673	0.023 0.104	H/BPX 0.014 0.035	TAO Abs. 1.55 3.84	Cwsph 2.367 2.334
_	VCG Pos Static Water T Vel m/s 0.711 1.083 1.445	ition trim TA emp. RT gms 55.9 253.9 537.1	26 00 1 19 H cm 0.28 0.73 0.25	.13 % B .58 deg .00 deg TAO Rel. -0.03 2.26 7.15	C LC cm 52.50 46.00 37.38	6.01 cm Density LK cm 53.53 49.62 46.58	998 WSPH Cm2 1043.8 1029.1 939.8	Line .407 kg/ CV 0.496 0.754 1.007	CT x10-3 20.80085 41.36673 53.78237	0.023 0.104 0.221	H/BPX 0.014 0.035 0.012	TAO Abs. 1.55 3.84 8.73	Cwsph 2.367 2.334 2.131
_	VCG Pos Static Water T Vel m/s 0.711 1.083 1.445 1.813	ition trim TA emp. RT gms 55.9 253.9 537.1 560.2	26 00 1 19 H cm 0.28 0.73 0.25 -0.63	.13 % B .58 deg .00 deg TAO Rel. -0.03 2.26 7.15 7.98	C LC cm 52.50 46.00 37.38 31.63	EX Cm LK Cm 53.53 49.62 46.58 43.41	998 WSPH cm2 1043.8 1029.1 939.8 846.4	Line .407 kg/ CV 0.496 0.754 1.007 1.263	CT x10-3 	0.023 0.104 0.221 0.230	H/BPX 0.014 0.035 0.012 -0.030	TAO Abs. 1.55 3.84 8.73 9.56	Cwsph 2.367 2.334 2.131 1.919
_	VCG Pos Static Water T Vel m/s 0.711 1.083 1.445	ition trim TA emp. RT gms 55.9 253.9 537.1 560.2	26 00 1 19 H cm 0.28 0.73 0.25	.13 % B .58 deg .00 deg TAO Rel. -0.03 2.26 7.15 7.98	C LC cm 52.50 46.00 37.38 31.63 26.05	6.01 cm Density LK cm 53.53 49.62 46.58 43.41 41.52	998 WSPH Cm2 1043.8 1029.1 939.8 846.4 764.0	Line .407 kg/ CV 0.496 0.754 1.007 1.263 1.522	/m3 Kin CT x10-3 	RT/DIS 0.023 0.104 0.221 0.230 0.241	H/BPX 0.014 0.035 0.012 -0.030 -0.094	TAO Abs. 1.55 3.84 8.73	Cwsph 2.367 2.334 2.131
_	VCG Pos Static Water T Vel m/s 0.711 1.083 1.445 1.813 2.185	ition trim TA emp. RT gms 	26 00 1 19 H cm 0.28 0.73 0.25 -0.63 -1.98	.13 % B .58 deg .00 deg TAO Rel. -0.03 2.26 7.15 7.98 9.32 8.12	C LC cm 52.50 46.00 37.38 31.63 26.05	EX Cm LK Cm 53.53 49.62 46.58 43.41	998 WSPH Cm2 1043.8 1029.1 939.8 846.4 764.0 705.0 655.6	CV 0.496 0.754 1.007 1.263 1.522 1.774 2.023	CT x10-3 	0.023 0.104 0.221 0.230 0.241 0.225	0.014 0.035 0.012 -0.030 -0.094 -0.126	TAO Abs. 1.55 3.84 8.73 9.56 10.90	Cwsph 2.367 2.334 2.131 1.919 1.732
_	VCG Pos Static Water T Vel m/s 0.711 1.083 1.445 1.813 2.185 2.546 2.904 3.247	ition trim TA emp. RT gms 55.9 253.9 537.1 560.2 585.4 548.2 505.4	26 1 19 H cm 0.28 0.73 0.25 -0.63 -1.98 -2.64	.13 % B .58 deg .00 deg TAO Rel. -0.03 2.26 7.15 7.98 9.32 8.12 6.94	C LC cm 52.50 46.00 37.38 31.63 26.05 22.14	6.01 cm Density LK cm 53.53 49.62 46.58 43.41 41.52 40.25	998 WSPH cm2 1043.8 1029.1 939.8 846.4 764.0 705.0	CV 0.496 0.754 1.007 1.263 1.522 1.774 2.023	CT x10-3 20.80085 41.36673 53.78237 39.57248 31.54590 23.58276	0.023 0.104 0.221 0.230 0.241 0.225 0.208	H/BPX 0.014 0.035 0.012 -0.030 -0.094 -0.126 -0.137	TAO Abs. 1.55 3.84 8.73 9.56 10.90 9.70	Cwsph 2.367 2.334 2.131 1.919 1.732 1.599 1.487 1.465
-	VCG Pos Static Water T Vel m/s 0.711 1.083 1.445 1.813 2.185 2.546 2.546 3.247 3.571	ition trim TA emp. RT gms 	26 1 19 H Cm 	.13 % B .58 deg .00 deg TAO Rel. -0.03 2.26 7.15 7.98 9.32 8.12 6.94 6.06 5.47	C LC cm 52.50 46.00 37.38 31.63 26.05 22.14 18.92 18.40 15.53	6.01 cm Density LK cm 53.53 49.62 46.58 43.41 41.52 40.25 39.10 38.76 38.81	998 WSPH Cm2 1043.8 1029.1 939.8 846.4 764.0 705.0 655.6 645.9 614.0	CV 0.496 0.754 1.007 1.263 1.522 1.774 2.023 2.262 2.488	Table 10 m 1 m 1 m 1 m 1 m 1 m 1 m 1 m 1 m 1	RT/DIS 0.023 0.104 0.221 0.230 0.241 0.225 0.208 0.226 0.241	H/BPX 0.014 0.035 0.012 -0.030 -0.094 -0.126 -0.137 -0.143 -0.150	TAO Abs. 1.55 3.84 8.73 9.56 10.90 9.70 8.52 7.64 7.05	Cwsph 2.367 2.334 2.131 1.919 1.732 1.599 1.487 1.465 1.392
_	VCG Pos Static Water T Vel m/s 0.711 1.083 1.445 1.813 2.185 2.546 2.904 3.247	ition trim TA emp. RT gms 	26 1 19 H Cm 0.28 0.73 0.25 -0.63 -1.98 -2.64 -2.88 -2.99	.13 % B .58 deg .00 deg TAO Rel. -0.03 2.26 7.15 7.98 9.32 8.12 6.94 6.06 5.47	C LC cm 52.50 46.00 37.38 31.63 26.05 22.14 18.92 18.40	6.01 cm Density LK cm 53.53 49.62 46.58 43.41 41.52 40.25 39.10 38.76 38.81	998 WSPH Cm2 1043.8 1029.1 939.8 846.4 764.0 705.0 655.6 645.9	CV 0.496 0.754 1.007 1.263 1.522 1.774 2.023 2.262 2.488	CT x10-3 20.80085 41.36673 53.78237 39.57248 31.54590 23.58276 17.96347 15.85762	RT/DIS 0.023 0.104 0.221 0.230 0.241 0.225 0.208 0.226 0.241	H/BPX 0.014 0.035 0.012 -0.030 -0.094 -0.126 -0.137 -0.143 -0.150	TAO Abs. 1.55 3.84 8.73 9.56 10.90 9.70 8.52 7.64	Cwsph 2.367 2.334 2.131 1.919 1.732 1.599 1.487 1.465

<u>Table B.37</u> L/B = 2.5 ; β = 24° ; L_{cg} = 35% ; Thrust Line: Centre of Gravity

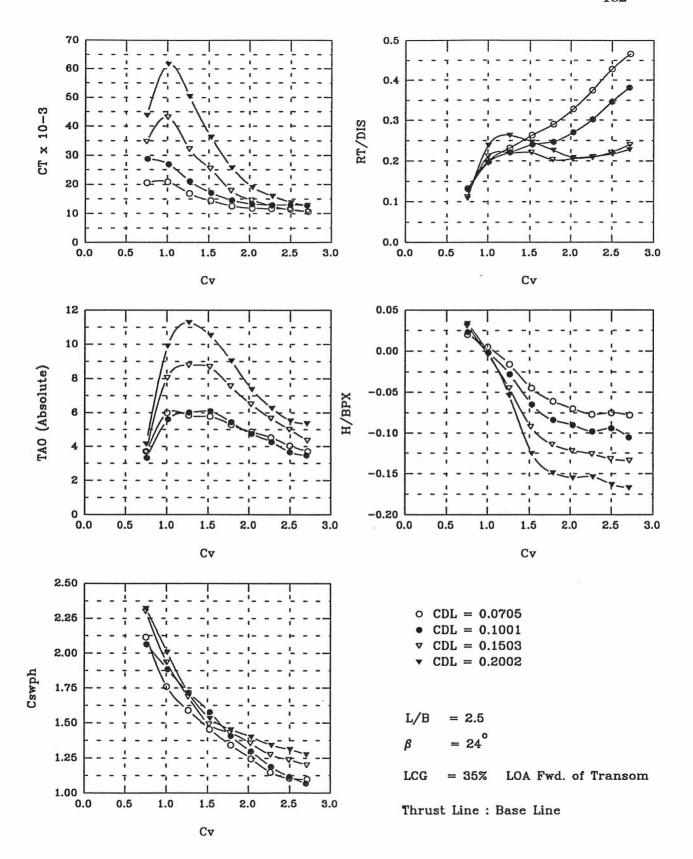


Figure B.38

```
Model No. T-2524
                                     Length Overal LOA
Breath (Deck) B
L/B Ratio
                     2.5
                                                            57.50 cm
Deadrise
                    24.00 deg
                                                            23.00 cm
                                                                                                183
                                      Breath (Chine) BPX
                                                            21.00 cm
LCG Position
                    35.00 % TOA
                                      20.13 cm @ Transom
                    856.0 gms
24.22 % B
Displacement DIS
                                     Disp. Coeff.
                                                     CDL
                                                             0.0705
VCG Position
                                     5.57 cm @ Base Line
                     1.54 deg
Static trim TAOo
Water Temp.
                    19.00 deg C
                                     Density
                                                   998.407 kg/m3
                                                                     Kin. Viscocity 0.1028E-05 m2/s
Vel
          RT
                  H
                         TAO
                                 TC
                                        T.K
                                                 WSPH
                                                        CV
                                                                 CT
                                                                         PT/DTS H/RPY
                                                                                           CAT
                                                                                                  Cwaph
m/g
          qms
                  Cm
                         Rel.
                                 CIM
                                         Cm
                                                  cm2
                                                                x10-3
                                                                                           Abs.
1.079
        113.3
                 0.43
                         2.16
                               34.50
                                       47.73
                                                932.5
                                                        0.752
                                                                20.50770
                                                                           0.132
                                                                                  0.020
                                                                                           3.70
                                                                                                  2.115
1.441
         171.3
                 0.10
                         4.45
                               24.44
                                       43.99
                                                776.2
                                                       1.004
                                                                20.88312
                                                                           0.200
                                                                                  0.005
                                                                                                  1.760
                                                                                           5.99
1.816
         198.3
                -0.34
                         4.30
                               18.69
                                       43.13
                                                701.0
                                                       1.265
                                                                16.85502
                                                                           0.232 - 0.016
                                                                                           5.84
                                                                                                  1.590
         225.2
2.187
                -0.95
                         4.25
                               14.95
                                       41.69
                                                641.3
                                                       1.524
                                                                14.42621
                                                                           0.263 -0.045
                                                                                           5.79
                                                                                                  1.454
         248.6
2.559
                -1.28
                         3.76
                               12.08
                                       40.25
                                                591.3
                                                       1.783
                                                                12.61543
                                                                           0.290 -0.061
                                                                                           5.30
                                                                                                  1.341
2.916
         280.8
                -1.47
                                                       2.032
                                                                11.82059
                         3.33
                                8.91
                                       39.68
                                                549.0
                                                                           0.328 - 0.070
                                                                                           4.87
                                                                                                  1.245
3.255
        320.3
                -1.61
                         3.00
                                6.33
                                      38.53
                                                506.8
                                                       2.267
                                                                11.72621
                                                                          0.374 -0.077
                                                                                           4.54
                                                                                                  1.149
3.585
         366.1
                -1.57
                         2.51
                                2.88
                                       40.25
                                                487.3
                                                       2.498
                                                                11.48819
                                                                          0.428 -0.075
                                                                                           4.05
                                                                                                  1.105
3.897
        398.8
                -1.65
                         2.17
                                2.30
                                      40.54
                                                484.3
                                                       2.715
                                                                10.65671
                                                                          0.466 -0.078
                                                                                           3.71
                                                                                                  1.098
Displacement DIS 1216.0 gms
                                     Disp. Coeff.
                                                    CDL
                                                            0.1001
                    25.22 % B
                                     5.80 cm @ Base Line
VCG Position
Static trim TAOo
                     0.82 deg
Water Temp.
                    19.00 deg C
                                                   998.407 kg/m3
                                                                     Kin. Viscocity 0.1028E-05 m2/s
                                     Density
Vel
                                                                 CT
         RT
                  H
                         TAO
                                 LC
                                        T.K ·
                                                 WSPH
                                                        CV
                                                                         RT/DIS H/BPX
                                                                                           TAO
                                                                                                  Cwsph
m/s
                                                                x10-3
          ams
                  Cm
                        Rel.
                                 CM
                                        CM
                                                  cm2
                                                                                           Abs.
1.088
        157.6
                 0.48
                                                       0.758
                                                                28.75506
                         2.50
                               35.02
                                      45.83
                                                909.3
                                                                          0.130 0.023
                                                                                                  2.062
1.455
        241.1
                -0.04
                         4.79
                               28.75
                                      44.56
                                                831.1
                                                       1.013
                                                                26.94328
                                                                          0.198 -0.002
                                                                                           5.61
                                                                                                  1.885
1.822
                                                                21.06502
        269.1
                -0.60
                               23.58
                                                756.1
                                                                          0.221 -0.028
                        5.19
                                      43.13
                                                       1.270
                                                                                           6.01
                                                                                                  1.715
                               20.13
                                                       1.529
2.195
        292.3
                -1.36
                        5.27
                                                                17.13465
                                                                          0.240 -0.065
                                                                                           6.09
                                                                                                  1.577
                                       41.34
                                                695.5
        300.1
2.559
                -1.76
                         4.62
                               15.24
                                      39.68
                                                620.5
                                                       1.783
                                                                14.51195
                                                                          0.247 -0.084
                                                                                           5.44
                                                                                                  1.407
2.915
        328.8
                -1.88
                         3.94
                               12.94
                                      37.66
                                                571.8
                                                       2.031
                                                                13.29524
                                                                          0.270 -0.090
                                                                                           4.76
                                                                                                  1.297
3.262
        367.8
                -2.06
                         3.45
                               11.10
                                      35.31
                                                524.3
                                                       2.273
                                                                12.95342
                                                                          0.302 -0.098
                                                                                           4.27
                                                                                                  1.189
                                                       2.497
3.585
        420.5
                -1.98
                         2.85
                               10.52
                                      33.12
                                                493.2
                                                                13.03902
                                                                          0.346 -0.094
                                                                                           3.67
                                                                                                  1.118
3.879
               -2.20
                        2.65
                               10.70
                                      30.99
                                                       2.702
                                                                12.83489
                                                                          0.381 -0.105
                                                                                           3.47
                                                                                                  1.068
        462.9
                                                471.1
Displacement DIS 1825.0
                                                             0.1503
                                                     CDT.
                           gms
                                     Disp. Coeff.
                   26.39 % B
                                     6.07 cm @ Base Line
VCG Position
Static trim TAOo
                     1.34 deg
Water Temp.
                    19.50 deg C
                                     Density
                                                   998.308 kg/m3
                                                                     Kin. Viscocity
                                                                                        0.1016E-05 m2/s
Vel
         RT
                         TAO
                                 TC
                                                 WSPH
                                                        CV
                                                                 CT
                                                                         RT/DIS H/BPX
                                                                                           TAO
                  H
                                        T.K
                                                                                                  Cwsph
m/s
                  cm
                        Rel.
                                                                x10-3
         ams
                                 CM
                                         CM
                                                  cm2
                                                                                           Abs.
1.070
        204.9
                 0.65
                         2.33
                               43.70
                                     49.45
                                               1014.3
                                                       0.745
                                                                34.70112 0.112 0.031
                                                                                           3.67
                                                                                                  2.300
                                                       1.002
                                                                                           8.06
1.438
        387.2
                -0.08
                        6.72
                                      43.99
                                                853.2
                                                                43.15956
                               31.63
                                                                          0.212 - 0.004
                                                                                                  1.935
1.813
        400.6
                -0.94
                        7.45
                               25.01
                                      40.83
                                                744.1
                                                       1.263
                                                                32.19615
                                                                          0.220 -0.045
                                                                                           8.79
                                                                                                  1.687
2.176
        403.7
                -1.93
                        7.36
                               19.84
                                      38.30
                                                656.9
                                                       1.516
                                                                25.50198
                                                                          0.221 -0.092
                                                                                           8.70
                                                                                                  1.490
2.542
        369.7
                -2.40
                         6.22
                               18.40
                                      37.38
                                                630.3
                                                       1.771
                                                                17.83732
                                                                          0.203 -0.114
                                                                                           7.56
                                                                                                  1.429
2.903
        374.3
                -2.56
                        5.17
                               16.10
                                      36.80
                                                597.8
                                                       2.023
                                                                14.60286
                                                                          0.205 -0.122
                                                                                           6.51
                                                                                                  1.355
                                                                12.61915
                                                                                                  1.274
3.251
        381.4
                                      36.80
                                                       2.265
                                                                          0.209 -0.126
                                                                                           5.67
               -2.66
                        4.33
                               12.94
                                                562.0
                                                                          0.221 -0.132
3.575
        402.5
               -2.76
                        3.68
                               10.92
                                      37.38
                                                545.8
                                                       2.490
                                                                11.34258
                                                                                           5.02
                                                                                                  1.238
3.890
        437.8
               -2.81
                        3.03
                                9.49
                                      37.38
                                                529.5
                                                       2.710
                                                                10.74119
                                                                          0.240 - 0.134
                                                                                           4.37
                                                                                                  1.201
                                     Disp. Coeff. CDL
6.01 cm @ Base Line
Displacement DIS
                   2432.0 gms
                                                            0.2002
                    26.13 % B
VCG Position
                     1.58 deg
Static trim TAOo
Water Temp.
                    19.50 deg C
                                     Density
                                                   998.308 kg/m3
                                                                     Kin. Viscocity
                                                                                        0.1016E-05 m2/s
Vel
         RT
                  H
                        TAO
                                 LC
                                                 WSPH
                                                        CV
                                                                 CT
                                                                         RT/DIS H/BPX
                                                                                           TAO
                                        T.K
                                                                                                  Cwsph
                                                                x10-3
m/s
         oms
                  CM
                        Rel.
                                 CID
                                        Cm
                                                  cm2
                                                                                           Ahs.
1.076
        264.0
                 0.72
                        2.58
                               44.85
                                      49.74
                                               1023.1
                                                       0.750
                                                                43.78806
                                                                          0.109 0.034
                                                                                           4.16
                                                                                                  2.320
1.445
        580.4
                -0.04
                        8.32
                               35.08
                                      43.70
                                                884.9
                                                       1.007
                                                                61.69358
                                                                          0.239 -0.002
                                                                                           9.90
                                                                                                  2.007
1.815
        638.9
                        9.71
                               27.89
                                                                50.38676
                                                                          0.263 -0.054
                -1.14
                                      39.10
                                                756.2
                                                       1.265
                                                                                          11.29
                                                                                                  1.715
        600.1
                                                675.6
                                                                36.27639
2.194
                                                                          0.247 -0.125
                                                                                          10.52
               -2.62
                        8.94
                               23.58
                                      36.22
                                                       1.528
                                                                                                  1.532
2.559
        549.1
                -3.13
                        7.45
                               20.70
                                      35.94
                                                640.0
                                                       1.783
                                                                25.74650
                                                                          0.226 -0.149
                                                                                           9.03
                                                                                                  1.451
2.917
        507.9
                -3.25
                        5.79
                               18.97
                                      35.65
                                                617.3
                                                       2.033
                                                                19.00268
                                                                          0.209 -0.155
                                                                                           7.37
                                                                                                  1.400
3.268
        513.5
               -3.24
                        4.69
                               16.10
                                      36.22
                                                591.3
                                                       2.277
                                                                15.98159
                                                                          0.211 -0.154
                                                                                           6.27
                                                                                                  1.341
3.596
        526.9
               -3.42
                        3.94
                               14.38
                                      36.80
                                                578.3
                                                       2.505
                                                                13.85048
                                                                          0.217 -0.163
                                                                                           5.52
                                                                                                  1.311
3.884
        554.9
               -3.51
                        3.78
                              12.94
                                      36.80
                                                562.0 2.706
                                                                12.86375 0.228 -0.167
                                                                                           5.36
                                                                                                  1.274
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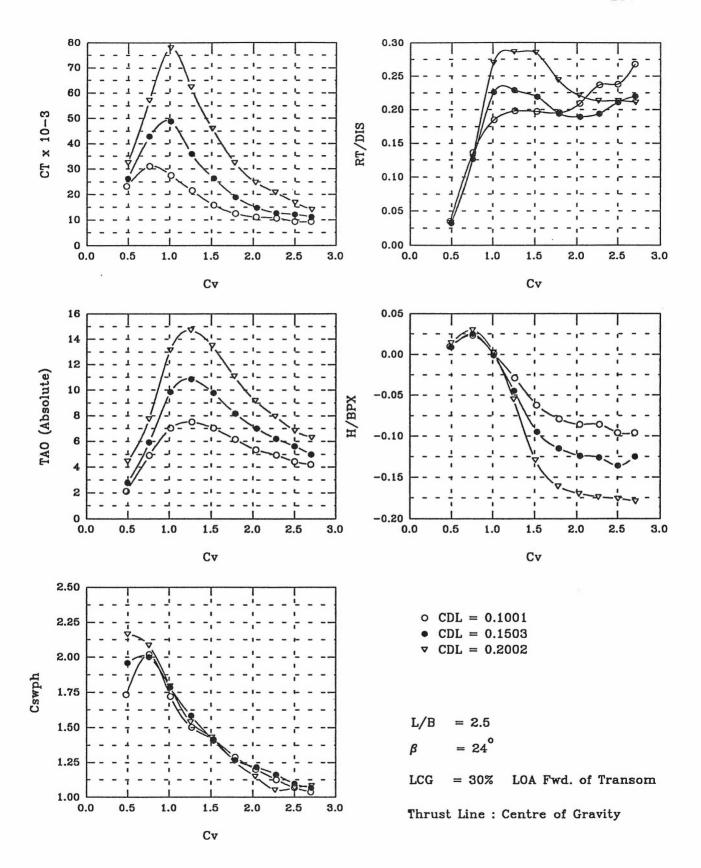


Figure B.39

L/B Ratio Length Overal LOA 57.50 cm Breath (Deck) B 23.00 cm Breath (Chine) BPX 21.00 cm Deadrise 24.00 deg LCG Position 30.00 % LOA 17.25 cm @ Transom

Displacement DIS 1216.0 Disp. Coeff. CDL qms 0.1001

31.65 % B VCG Position 7.28 cm @ Base Line Static trim TAOo 1.72 deg

Model No. T-2524

Water Temp. 20.00 deg C Density Kin. Viscocity 0.1004E-05 m2/s 998.206 kg/m3 Vel PT H LC T.K WSPH CT RT/DTS H/BPX TAO CV TAO Cwsph

gms m/s CM Rel. CIM Cm cm2 x10-3 Abs. 43.1 0.691 0.21 0.39 19.26 47.44 764.6 0.481 23.22338 0.035 0.010 2.11 1.734 890.1 0.757 758.7 1.014 31.05356 1.086 165.9 0.49 3.18 34.50 44.56 0.136 0.023 4.90 2.018 27.44094 224.5 0.185 0.001 1.456 0.01 24.44 42.55 7.04 5.32 1.720 662.7 1.268 623.8 1.527 21.54037 1.819 240.4 -0.62 5.79 20.13 38.53 0.198 -0.029 7.51 1.503 0.197 -0.062 2.191 239.6 -1.305.30 17.25 37.95 15.72359 7.02 1.414 4.43 2.567 236.9 -1.66 12.94 37.38 568.5 1.788 12.43047 0.195 -0.079 6.15 1.289 529.5 2.036 497.1 2.280 2.922 254.2 -1.80 3.62 10.06 36.80 11.05220 0.209 -0.086 5.34 1.201 36.80 10.64199 0.237 -0.086 4.94 3.272 288.2 -1.81 3.22 7.19 1.127 2.500 9.38119 4.43 289.5 -2.01 2.71 4.31 471.1 2.500 458.1 2.699 0.238 -0.096 1.068 3.588 37.38 3.874 325.4 -2.02 2.49 2.88 37.66 9.30527 0.268 -0.096 4.21 1.039

Disp. Coeff. CDL 0.1503 Displacement DIS 1825.0 qms 29.65 % B 6.82 cm @ Base Line VCG Position 2.44 deg

Static trim TAOo 20.00 deg C Density 998.206 kg/m3 Kin. Viscocity 0.1004E-05 m2/s Water Temp.

Vel RT H TAO LC LK WSPH CV CT RT/DIS H/BPX TAO Cwsph x10-3 m/s Rel. CM Cm cm2 ams CM 0.711 58.2 863.7 0.495 26.24694 0.032 0.009 2.78 1.959 0.20 0.34 26.16 48.88 898.12 0.756 5.92 1.085 230.4 0.53 3.48 35.94 44.85 42.86243 0.126 0.025 2.036 48.87731 0.226 -0.001 1.453 412.8 -0.02 7.41 27.89 41.69 786.6 1.012 9.85 1.784 1.809 417.3 -0.94 8.43 23.00 38.81 698.5 1.260 35.88356 0.229 -0.045 10.87 1.584 2.195 -1.99 18.97 35.94 620.5 1.530 558.8 1.786 26.31806 0.219 -0.095 9.77 1.407 400-4 7.33 18.96142 354.3 -2.42 5.73 33.06 0.194 -0.115 1.267 2.564 16.39 8.17 536.0 2.040 513.3 2.276 14.76954 33.06 0.189 -0.124 2.928 345.3 -2.614.57 14.38 7.01 1.216 0.194 -0.126 353.4 3.267 -2.65 3.77 12.65 32.77 12.67562 6.21 1.164 484.1 2.501 471.1 2.702 3.590 385.3 -2.86 3.18 10.06 32.77 12.14003 0.211 -0.136 5.62 1.098 2.56 8.63 33.06 11.15929 0.220 -0.125 5.00 1.068 3.878 402.2 -2.63

Displacement DIS 2432.0 gms VCG Position 28.65 % B CDL 0.2002 Disp. Coeff. 6.59 cm @ Base Line 3.95 deg Static trim TAOo

20.00 deg C Density 998.206 kg/m3 Kin. Viscocity 0.1004E-05 m2/s Water Temp.

Vel m/s	RT gms	em em	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
0.711	79.5	0.29	0.50	33.35	50.03	954.9	0.495	32.37814	0.033	0.014	4.45	2.165
1.083	312.7	0.62	3.78	37.38	44.85	918.7	0.754	57.05672	0.129	0.030	7.73	2.083
1.445	656.3	0.07	9.21	29.33	40.83	791.6	1.007	78.03931	0.270	0.003	13.16	1.795
1.798	696.4	-1.16	10.76	25.01	35.08	678.7	1.253	62.37973	0.286	-0.055	14.71	1.539
2.168	693.2	-2.71	9.55	22.43	33.35	630.3	1.510	46.01358	0.285	-0.129	13.50	1.429
2.546	594.1	-3.39	7.13	18.97	30.19	555.5	1.774	32.43477	0.244	-0.161	11.08	1.260
2.906	538.4	-3.57	5.22	14.95	29.90	506.8	2.025	24.72294	0.221	-0.170	9.17	1.149
3.249	517.6	-3.66	4.00	11.50	29.61	464.6	2.264	20.74617	0.213	-0.174	7.95	1.053
3.592	518.9	-3.69	2.88	11.50	30.19	471.1	2.503	16.77728	0.213	-0.176	6.83	1.068
3.885	512.9	-3.75	2.34	12.08	30.19	477.6	2.707	13.98637	0.211	-0.179	6.29	1.083

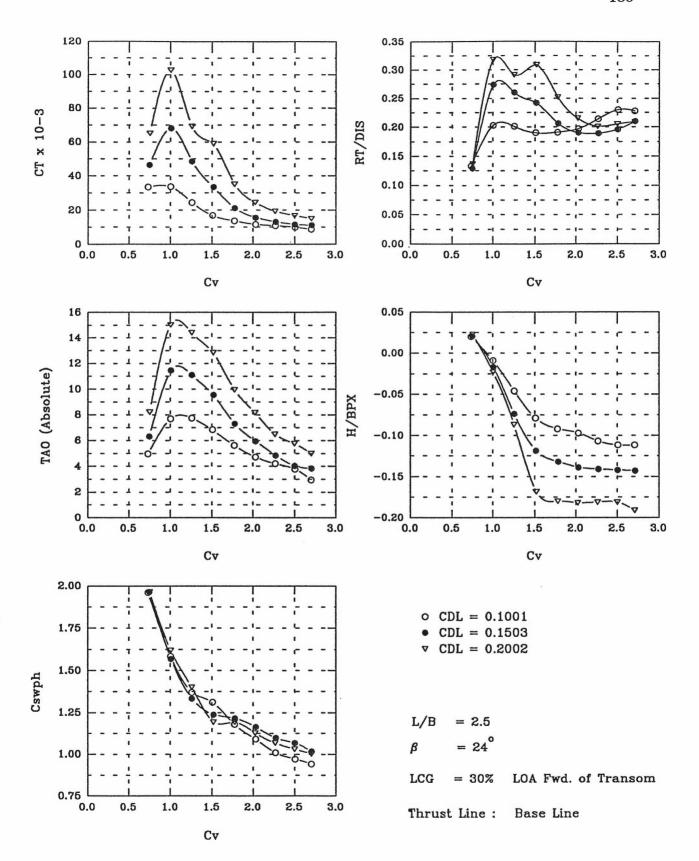


Figure B.40

Water Temp.

3.883

383.8

-3.00

Kin. Viscocity 0.9916E-06 m2/s

3.82

1.017

11.15813 0.210 -0.143

2.5	Length	Overal	LOA	57.50	Cm
24.00 de	g Breath	(Deck)	В	23.00	cm
	Breath	(Chine)	BPX	21.00	CM
30.00 %	LOA 17.25	cm @ Tr	ansom		
	24.00 de	24.00 deg Breath Breath	24.00 deg Breath (Deck) Breath (Chine)	24.00 deg Breath (Deck) B Breath (Chine) BPX	24.00 deg Breath (Deck) B 23.00 Breath (Chine) BPX 21.00

Displacement DIS 1216.0 gms Disp. Coeff. CDL 0.1001 31.65 % B VCG Position 7.28 cm @ Base Line 1.72 deg Static trim TAOo

Density

20.50 deg C

Vel m/s	RT gms	H	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
1.051	162.2	0.42	3.23	33.06	43.70	864.8	0.732	33.38809	0.133	0.020	4.95	1.961
1.438	246.8	-0.18	5.98	22.43	39.39	698.5	1.002	33.58103	0.203	-0.009	7.70	1.584
1.805	244.9	-0.97	6.03	18.11	35.36	604.3	1.258	24.44118	0.201	-0.046	7.75	1.370
2.166	231.0	-1.66	5.13	16.10	35.08	578.3	1.509	16.74141	0.190	-0.079	6.85	1.311
2.546	232.3	-1.93	3.90	11.50	34.50	519.8	1.774	13.55217	0.191	-0.092	5.62	1.179
2.915	240.1	-2.04	3.00	8.63	33.93	480.8	2.031	11.55015	0.197	-0.097	4.72	1.090
3.259	260.8	-2.25	2.48	5.75	33.64	445.1	2.271	10.84317	0.214	-0.107	4.20	1.009
3.596	279.3	-2.35	2.07	4.03	33.93	428.8	2.506	9.89829	0.230	-0.112	3.79	0.972
3.879	277.1	-2.36	1.22	2.30	34.50	415.8	2.703	8.70670	0.228	-0.112	2.94	0.943
	m/s 1.051 1.438 1.805 2.166 2.546 2.915 3.259 3.596	m/s gms 1.051 162.2 1.438 246.8 1.805 244.9 2.166 231.0 2.546 232.3 2.915 240.1 3.259 260.8 3.596 279.3	m/s gms cm 1.051 162.2 0.42 1.438 246.8 -0.18 1.805 244.9 -0.97 2.166 231.0 -1.66 2.546 232.3 -1.93 2.915 240.1 -2.04 3.259 260.8 -2.25 3.596 279.3 -2.35	m/s gms cm Rel. 1.051 162.2 0.42 3.23 1.438 246.8 -0.18 5.98 1.805 244.9 -0.97 6.03 2.166 231.0 -1.66 5.13 2.546 232.3 -1.93 3.90 2.915 240.1 -2.04 3.00 3.259 260.8 -2.25 2.48 3.596 279.3 -2.35 2.07	m/s gms cm Rel. cm 1.051 162.2 0.42 3.23 33.06 1.438 246.8 -0.18 5.98 22.43 1.805 244.9 -0.97 6.03 18.11 2.166 231.0 -1.66 5.13 16.10 2.546 232.3 -1.93 3.90 11.50 2.915 240.1 -2.04 3.00 8.63 3.259 260.8 -2.25 2.48 5.75 3.596 279.3 -2.35 2.07 4.03	m/s gms cm Rel. cm cm 1.051 162.2 0.42 3.23 33.06 43.70 1.438 246.8 -0.18 5.98 22.43 39.39 1.805 244.9 -0.97 6.03 18.11 35.36 2.166 231.0 -1.66 5.13 16.10 35.08 2.546 232.3 -1.93 3.90 11.50 34.50 2.915 240.1 -2.04 3.00 8.63 33.93 3.259 260.8 -2.25 2.48 5.75 33.64 3.596 279.3 -2.35 2.07 4.03 33.93	m/s qms cm Rel. cm cm cm2 1.051 162.2 0.42 3.23 33.06 43.70 864.8 1.438 246.8 -0.18 5.98 22.43 39.39 698.5 1.805 244.9 -0.97 6.03 18.11 35.36 604.3 2.166 231.0 -1.66 5.13 16.10 35.08 578.3 2.546 232.3 -1.93 3.90 11.50 34.50 519.8 2.915 240.1 -2.04 3.00 8.63 33.93 480.8 3.259 260.8 -2.25 2.48 5.75 33.64 445.1 3.596 279.3 -2.35 2.07 4.03 33.93 428.8	m/s gms cm Rel. cm cm cm2 1.051 162.2 0.42 3.23 33.06 43.70 864.8 0.732 1.438 246.8 -0.18 5.98 22.43 39.39 698.5 1.002 1.805 244.9 -0.97 6.03 18.11 35.36 604.3 1.258 2.166 231.0 -1.66 5.13 16.10 35.08 578.3 1.509 2.546 232.3 -1.93 3.90 11.50 34.50 519.8 1.774 2.915 240.1 -2.04 3.00 8.63 33.93 480.8 2.031 3.259 260.8 -2.25 2.48 5.75 33.64 445.1 2.271 3.596 279.3 -2.35 2.07 4.03 33.93 428.8 2.506	m/s gms cm Rel. cm cm cm2 x10-3 1.051 162.2 0.42 3.23 33.06 43.70 864.8 0.732 33.38809 1.438 246.8 -0.18 5.98 22.43 39.39 698.5 1.002 33.58103 1.805 244.9 -0.97 6.03 18.11 35.36 604.3 1.258 24.44118 2.166 231.0 -1.66 5.13 16.10 35.08 578.3 1.509 16.74141 2.546 232.3 -1.93 3.90 11.50 34.50 519.8 1.774 13.55217 2.915 240.1 -2.04 3.00 8.63 33.93 480.8 2.031 11.55015 3.259 260.8 -2.25 2.48 5.75 33.64 445.1 2.271 10.84317 3.596 279.3 -2.35 2.07 4.03 33.93 428.8 2.506 9.89829	m/s gms cm Rel. cm cm cm cm2 x10-3 1.051 162.2 0.42 3.23 33.06 43.70 864.8 0.732 33.38809 0.133 1.438 246.8 -0.18 5.98 22.43 39.39 698.5 1.002 33.58103 0.203 1.805 244.9 -0.97 6.03 18.11 35.36 604.3 1.258 24.44118 0.201 2.166 231.0 -1.66 5.13 16.10 35.08 578.3 1.509 16.74141 0.190 2.546 232.3 -1.93 3.90 11.50 34.50 519.8 1.774 13.55217 0.191 2.915 240.1 -2.04 3.00 8.63 33.93 480.8 2.031 11.55015 0.197 3.259 260.8 -2.25 2.48 5.75 33.64 445.1 2.271 10.84317 0.214 3.596 279.3 -2.35 2.07 4.03 33.93 428.8 2.506 9.89829 0.230	m/s qms cm Rel. cm cm cm2 x10-3 1.051 162.2 0.42 3.23 33.06 43.70 864.8 0.732 33.38809 0.133 0.020 1.438 246.8 -0.18 5.98 22.43 39.39 698.5 1.002 33.58103 0.203 -0.009 1.805 244.9 -0.97 6.03 18.11 35.36 604.3 1.258 24.44118 0.201 -0.046 2.166 231.0 -1.66 5.13 16.10 35.08 578.3 1.509 16.74141 0.190 -0.079 2.546 232.3 -1.93 3.90 11.50 34.50 519.8 1.774 13.55217 0.191 -0.092 2.915 240.1 -2.04 3.00 8.63 33.93 480.8 2.031 11.55015 0.197 -0.097 3.259 260.8 -2.25 2.48 5.75 33.64 445.1 2.271 10.84317 0.214 -0.107 3.596 279.3 -2.35 2.07 4.03 33.93 428.8 2.506 9.89829 0.230 -0.112	m/s gms cm Rel. cm cm cm2 x10-3 Abs. 1.051 162.2 0.42 3.23 33.06 43.70 864.8 0.732 33.38809 0.133 0.020 4.95 1.438 246.8 -0.18 5.98 22.43 39.39 698.5 1.002 33.58103 0.203 -0.009 7.70 1.805 244.9 -0.97 6.03 18.11 35.36 604.3 1.258 24.44118 0.201 -0.046 7.75 2.166 231.0 -1.66 5.13 16.10 35.08 578.3 1.509 16.74141 0.190 -0.079 6.85 2.546 232.3 -1.93 3.90 11.50 34.50 519.8 1.774 13.55217 0.191 -0.092 5.62 2.915 240.1 -2.04 3.00 8.63 33.93 480.8 2.031 11.55015 0.197 -0.097 4.72 3.259 260.8 -2.25 2.48 5.75 33.64 445.1 2.271 10.84317 0.214 -0.107 4.20 3.596 279.3 -2.35 2.07 4.03 33.93 428.8 2.506 9.89829 0.230 -0.112 3.79

998.101 kg/m3

Displacement DIS 1825.0 qms CDL Disp. Coeff. 0.1503 29.65 % B VCG Position 6.82 cm @ Base Line 2.44 deg Static trim TAOo

Water Temp. 20.50 deg C Density 998.101 kg/m3 Kin. Viscocity 0.9916E-06 m2/s Vel RT Н TAO LC T.K WSPH CV CT RT/DIS H/BPX TAO Cwsph m/s x10 - 3Abs. qms Cm Rel. Cm CM cm2

1.074 235.8 0.45 3.88 34.50 42.55 866.5 0.748 46.40932 0.129 0.021 6.32 1.965 500.4 1.445 -0.36 9.03 25.01 36.22 691.7 1.007 68.06971 0.274 -0.017 11.47 1.568 1.806 474.7 -1.55 8.67 20.70 31.34 588.0 1.258 48.66429 0.260 -0.074 11.11 1.333 441.8 33.46123 0.242 -0.119 9.56 1.238 2.181 -2.49 7.12 30.76 545.8 1.519 17.54 1.780 0.206 -0.132 7.31 1.216 2.555 375.6 -2.784.87 15.81 31.63 536.0 21.10280 2.916 346.0 -2.91 3.51 12.94 32.49 513.3 2.032 15.57990 0.190 -0.139 5.95 1.164 3.266 344.1 -2.96 2.40 10.06 32.77 484.1 2.275 13.10021 0.189 -0.141 4.84 1.098 3.589 357.4 -2.98 1.60 8.63 33.06 471.1 2.501 11.57832 0.196 -0.142 4.04 1.068

448.3 2.706

Disp. Coeff. CDL 6.59 cm @ Base Line Displacement DIS 2432.0 0.2003 gms 28.65 % B VCG Position 3.95 deg Static trim TAOo

6.61

33.06

1.38

998.101 kg/m3 Water Temp. 20.50 deg C Density Kin. Viscocity 0.9916E-06 m2/s Vel DT H TAO LC T.K WSPH CV CT RT/DIS H/BPX TAO Cwsph m/s gms cm Rel. CM CM cm2 x10-3 Abs.

1.078 333.3 0.48 4.27 35.94 41.40 866.1 0.751 65.15195 0.137 0.023 8.22 1.964 1.002 102.87750 0.318 -0.023 15.03 1.619 1.438 772.7 -0.48 11.08 27.60 35.65 714.1 1.400 0.291 -0.087 14.42 1.803 706.8 -1.8310.47 23.00 31.63 617.3 1.256 69.21123 2.179 750.5 -3.53 8.90 18.69 27.89 526.3 1.518 59.05526 0.309 -0.168 12.85 1.193 -3.78 35.18974 2.549 6.01 0.252 -0.180 9.96 1.193 612.3 17.54 29.04 526.3 1.776 2.904 522.2 -3.82 4.22 14.95 29.04 497.1 2.023 24.48665 0.215 -0.182 8.17 1.127 3.250 488.7 -3.81 2.55 12.94 28.75 471.1 2.264 19.30673 0.201 -0.181 6.50 1.068 3.585 498.0 -3.81 1.81 11.50 28.75 454.8 2.498 16.74474 0.205 -0.181 5.76 1.031 3.878 508.9 -4.01 1.04 10.06 29.04 441.8 2.702 15.05565 0.209 -0.191 4.99 1.002

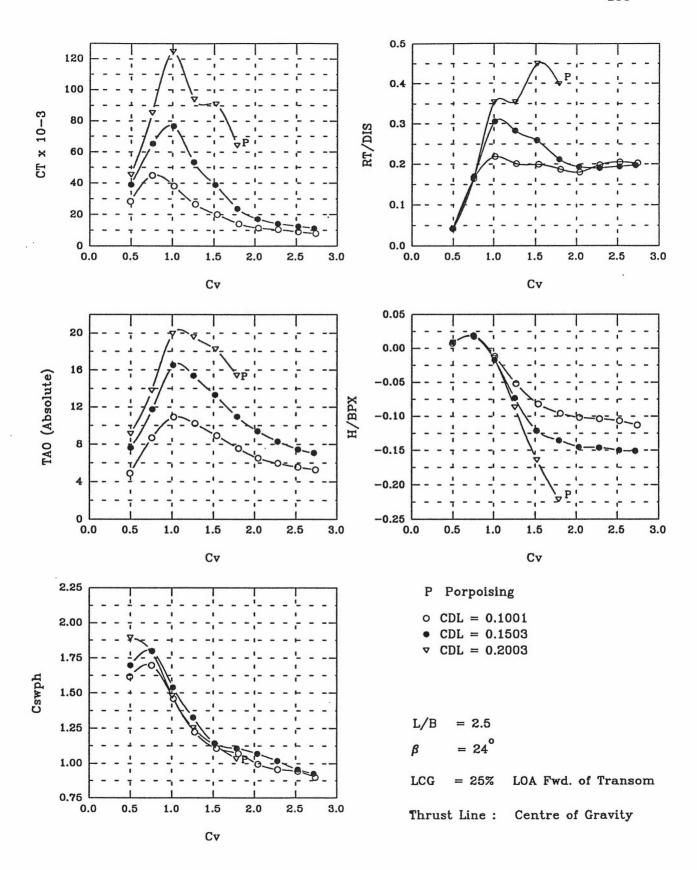


Figure B.41

Model No. T-25 L/B Ratio Deadrise LCG Position	24	.5 .00 deg .00 % LO	A	Length On Breath (1 Breath (0 14.38 cm	Deck) E Chine) E	23 PX 21	.50 cm .00 cm			1	189
Displacement D VCG Position Static trim TA Water Temp.	32	6.0 gms .96 % B .37 deg .50 deg		Disp. Coe 7.58 cm	@ Base		.1001 /m3 Ki	n. Visco	ocity	0.9916E	-06 m2/s
Vel RT m/s gms	H Cm	TAO Rel.	LC cm	LK cm	WSPH cm2	cv	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
0.708 51.5 1.081 199.7 1.459 265.9 1.832 244.9 2.208 242.3 2.587 227.0 2.930 219.1 3.280 240.7 3.624 249.6 3.929 246.2	0.15 0.41 -0.25 -1.09 -1.72 -2.02 -2.14 -2.18 -2.26 -2.37	4.32 6.56 5.84 4.58	17.25 24.44 19.55 16.10 12.94 10.06 7.19 5.75 4.60 2.88	32.20	712.8 748.2 643.3 539.3 487.3 471.1 438.6 422.3 415.8 396.3	0.493 0.753 1.017 1.276 1.538 1.802 2.041 2.286 2.525 2.737	28.34547 44.92320 38.15171 26.58881 20.04890 14.14883 11.43639 10.41004 8.98238 7.91025	0.164 0.219 0.201 0.199 0.187 0.180 0.198 0.205	0.007 0.019 -0.052 -0.082 -0.096 -0.102 -0.104 -0.107 -0.113	4.88 8.69 10.93 10.21 8.95 7.54 6.50 5.94 5.53	1.616 1.697 1.459 1.223 1.105 1.068 0.995 0.958 0.943 0.899
Displacement D VCG Position Static trim TA Water Temp.	.0o 6	5.0 gms 52 % B .73 deg .50 deg (Disp. Coe 7.02 cm	@ Base		.1503 /m3 Ki	n. Visco	city	0.9916E-	-06 m2/s
Vel RT m/s gms	H cm	TAO Rel.	LC	· LK	WSPH cm2	CV	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
0.717 76.2 1.086 311.1 1.453 558.5 1.804 516.7 2.178 472.8 2.559 387.3 2.917 352.6 3.275 346.4 3.622 354.7 3.897 359.6	0.18 0.36 -0.35 -1.52 -2.53 -2.83 -3.05 -3.07 -3.15	5.00 9.81 8.67 6.58 4.22	20.13 30.19 24.15 20.13 16.39 13.80 11.50 9.78 7.19 5.75	45.71 40.25 35.94 31.63 28.18 29.33 30.19 29.90 30.19 30.48	748.8 793.6 678.8 584.8 503.6 487.3 471.1 448.3 422.3 409.3	0.499 0.757 1.012 1.257 1.517 1.783 2.033 2.282 2.524 2.715	38.92160 65.34623 76.62452 53.37108 38.90901 23.84911 17.28655 14.16055 12.58352 11.37007	0.170 0.306 0.283 0.259 0.212 0.193 0.190 0.194	0.009 0.017 -0.017 -0.073 -0.121 -0.135 -0.145 -0.146 -0.150	7.61 11.73 16.54 15.40 13.31 10.95 9.43 8.33 7.45 7.06	1.698 1.799 1.539 1.326 1.142 1.105 1.068 1.017 0.958 0.928
Displacement D VCG Position Static trim TA	30.	2.0 gms .04 % B .13 deq		Disp. Coe 6.91 cm	eff. C @ Base		.2003				
Water Temp.		50 deg (2	Density	998	.101 kg	/m3 Ki	n. Visco	city	0.9916E-	-06 m2/s
Vel RT m/s gms	H Cm	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
0.715 98.6 1.078 399.9 1.440 859.7 1.805 860.4 2.181 1095.2 2.553 970.6	0.18 0.37 -0.29 -1.82 -3.44 -4.65	5.68 11.83 11.44 10.12	27.60 31.63 25.01 20.99 18.11 14.38	46.00 38.81 32.77 27.89 25.88 25.88	835.7 792.7 652.7 552.3 497.1 454.8	0.498 0.751 1.003 1.258 1.520 1.779	45.33721 85.25516 124.91870 93.96161 91.02374 64.34322	0.354	0.009 0.018 -0.014 -0.087 -0.164 -0.221	9.14 13.80 19.96 19.57 18.25 15.42	1.895 1.797 1.480 1.252 1.127 1.031

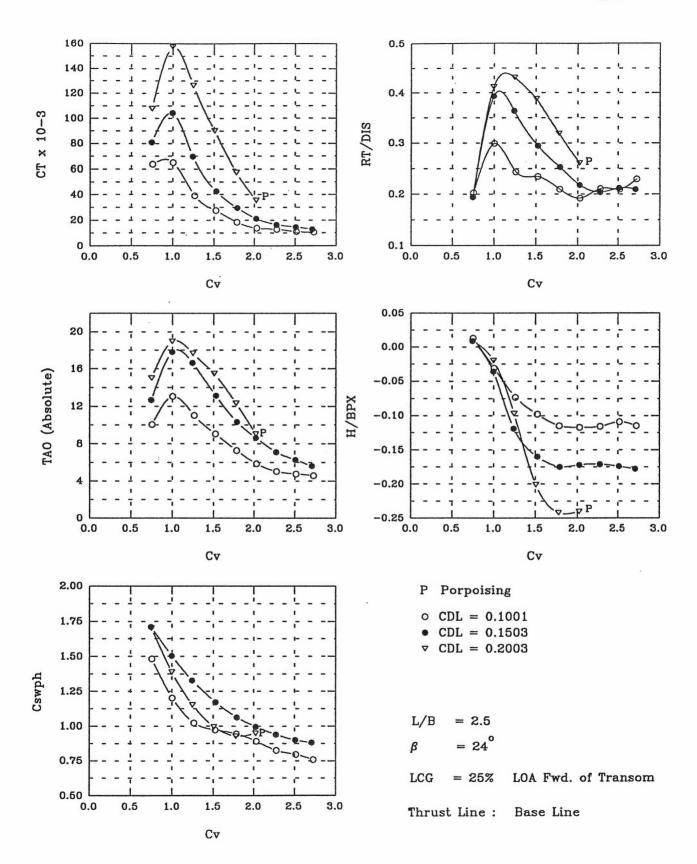


Figure B.42

					~							
Model	No. T-25	524										
L/B Ra			2.5		Length O	veral T	ΩA 5	7.50 cm				
Deadri	ise		.00 dec	ī	Breath (1			3.00 cm				101
					Breath (1.00 cm				191
LCG Po	sition	25	.00 % I	.OA	14.38 CI							
Displa	acement I	DIS 121	.6.0 gm	ເຮ	Disp. Co			.1001				
	sition		.96 % E		7.58 cm	@ Base	Line					
	trim TA		.37 deg									
Water	Temp.	21	00 deg	C	Density	997	.994 kg	g/m3 Ki	n. Visc	ocity	0.9798E	-06 m2/s
** 7										(
Vel	RT	H	TAO	LC	LK	WSPH	CA	CT	RT/DIS	H/BPX		Cwsph
m/s	gms	cm	Rel.	cm	cm	cm2		x10-3			Abs.	
1.080	247.1	0.27		23.29			0.753	63.78748		0 013	10.05	1.481
1.442	364.1	-0.66	8.70	18.11			1.004			-0.031	13.07	1.201
1.814		-1.53	6.66	14.09			1.264			-0.031	11.03	1.024
2.187		-2.06		11.50			1.524				9.05	0.972
2.560		-2.41	2.91	8.91			1.783				7.28	0.943
2.912		-2.45	1.49				2.029			-0.117		0.891
3.271		-2.44	0.64				2.279			-0.116		0.825
3.612	256.0	-2.29	0.38	2.88	28.18	350.9	2.516	10.99449	0.210	-0.109	4.75	0.796
3.916	279.5	-2.41	0.21	1.44	28.18	334.6	2.728	10.70663	0.230	-0.115	4.58	0.759
Displa	cement D	IS 182	5.0 gm	s	Disp. Coe	eff. C	DL C	.1503				
VCG Po	sition		.52 % B		7.02 cm							
Static	trim TA	00 6	.73 deg									
Water			.50 deg	C	Density	998	.101 kg	y/m3 Ki:	n. Visc	ocity	0.9916E	-06 m2/s
Vel	RT	H	TAO	LC	I.K	WSPH	CV	CT	RT/DIS	H/BPX	TAO	Cwsph
	RT	H	TAO Rel.	LC	LK	WSPH cm2	CV	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
Vel m/s	RT gms	H cm	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	CT x10-3	RT/DIS	н/врх	TAO Abs.	Cwsph
	gms	cm	Rel.	cm	Cm	cm2		x10-3			Abs.	
m/s 	gms 354.2	0.18	Rel. 5.94	cm 26.47	cm 40.29	cm2 753.8	0.744	x10-3 81.05500	0.194	0.009	Abs. 12.67	1.709
m/s 1.068 1.427	gms 354.2 717.1	0.18 -0.75	Rel. 5.94 11.08	26.47 21.68	cm 40.29 36.98	753.8 662.9	0.744 0.995	x10-3 81.05500 104.35690	0.194 0.393	0.009 -0.036	Abs. 12.67 17.81	1.709 1.503
1.068 1.427 1.784	gms 354.2 717.1 663.7	0.18 -0.75 -2.49	Rel. 5.94 11.08 9.89	26.47 21.68 17.45	cm 40.29 36.98 34.45	753.8 662.9 586.4	0.744 0.995 1.243	x10-3 81.05500 104.35690 69.86053	0.194 0.393 0.364	0.009 -0.036 -0.119	Abs. 12.67 17.81 16.62	1.709 1.503 1.330
m/s 1.068 1.427 1.784 2.192	gms 354.2 717.1 663.7 538.3	0.18 -0.75 -2.49 -3.36	5.94 11.08 9.89 6.42	26.47 21.68 17.45 13.24	40.29 36.98 34.45 32.49	753.8 662.9 586.4 516.7	0.744 0.995 1.243 1.527	x10-3 81.05500 104.35690 69.86053 42.64344	0.194 0.393 0.364 0.295	0.009 -0.036 -0.119 -0.160	Abs. 12.67 17.81 16.62 13.15	1.709 1.503 1.330 1.172
m/s 1.068 1.427 1.784 2.192 2.566	354.2 717.1 663.7 538.3 461.8	0.18 -0.75 -2.49 -3.36 -3.67	Rel. 5.94 11.08 9.89 6.42 3.59	26.47 21.68 17.45 13.24 9.94	40.29 36.98 34.45 32.49 31.55	753.8 662.9 586.4 516.7 468.8	0.744 0.995 1.243 1.527 1.788	x10-3 81.05500 104.35690 69.86053 42.64344 29.39379	0.194 0.393 0.364 0.295 0.253	0.009 -0.036 -0.119 -0.160 -0.175	12.67 17.81 16.62 13.15 10.32	1.709 1.503 1.330 1.172 1.063
m/s 1.068 1.427 1.784 2.192 2.566 2.904	gms 354.2 717.1 663.7 538.3 461.8 397.9	0.18 -0.75 -2.49 -3.36 -3.67	Rel. 5.94 11.08 9.89 6.42 3.59 1.90	26.47 21.68 17.45 13.24 9.94 7.46	Cm 40.29 36.98 34.45 32.49 31.55 31.41	753.8 662.9 586.4 516.7 468.8 439.2	0.744 0.995 1.243 1.527 1.788 2.023	x10-3 81.05500 104.35690 69.86053 42.64344 29.39379 21.11864	0.194 0.393 0.364 0.295 0.253 0.218	0.009 -0.036 -0.119 -0.160 -0.175 -0.172	12.67 17.81 16.62 13.15 10.32 8.63	1.709 1.503 1.330 1.172 1.063 0.996
m/s	gms 354.2 717.1 663.7 538.3 461.8 397.9 371.4	0.18 -0.75 -2.49 -3.36 -3.67 -3.60	S.94 11.08 9.89 6.42 3.59 1.90 0.38	26.47 21.68 17.45 13.24 9.94 7.46 5.30	Cm 40.29 36.98 34.45 32.49 31.55 31.41 31.34	753.8 662.9 586.4 516.7 468.8 439.2 414.0	0.744 0.995 1.243 1.527 1.788 2.023 2.275	x10-3 81.05500 104.35690 69.86053 42.64344 29.39379 21.11864 16.54163	0.194 0.393 0.364 0.295 0.253 0.218 0.204	0.009 -0.036 -0.119 -0.160 -0.175 -0.172	Abs. 12.67 17.81 16.62 13.15 10.32 8.63 7.11	1.709 1.503 1.330 1.172 1.063 0.996 0.939
m/s 1.068 1.427 1.784 2.192 2.566 2.904 3.265 3.602	gms 354.2 717.1 663.7 538.3 461.8 397.9 371.4 386.4	0.18 -0.75 -2.49 -3.36 -3.67 -3.60 -3.60	Rel. 5.94 11.08 9.89 6.42 3.59 1.90 0.38 -0.46	26.47 21.68 17.45 13.24 9.94 7.46 5.30 3.76	Cm 40.29 36.98 34.45 32.49 31.55 31.41 31.34 31.34	753.8 662.9 586.4 516.7 468.8 439.2 414.0 396.5	0.744 0.995 1.243 1.527 1.788 2.023 2.275 2.510	x10-3 81.05500 104.35690 69.86053 42.64344 29.39379 21.11864 16.54163 14.76255	0.194 0.393 0.364 0.295 0.253 0.218 0.204 0.212	0.009 -0.036 -0.119 -0.160 -0.175 -0.172 -0.171	Abs. 12.67 17.81 16.62 13.15 10.32 8.63 7.11 6.27	1.709 1.503 1.330 1.172 1.063 0.996 0.939 0.899
m/s	gms 354.2 717.1 663.7 538.3 461.8 397.9 371.4	0.18 -0.75 -2.49 -3.36 -3.67 -3.60	S.94 11.08 9.89 6.42 3.59 1.90 0.38	26.47 21.68 17.45 13.24 9.94 7.46 5.30 3.76	Cm 40.29 36.98 34.45 32.49 31.55 31.41 31.34	753.8 662.9 586.4 516.7 468.8 439.2 414.0 396.5	0.744 0.995 1.243 1.527 1.788 2.023 2.275	x10-3 81.05500 104.35690 69.86053 42.64344 29.39379 21.11864 16.54163	0.194 0.393 0.364 0.295 0.253 0.218 0.204 0.212	0.009 -0.036 -0.119 -0.160 -0.175 -0.172 -0.171	Abs. 12.67 17.81 16.62 13.15 10.32 8.63 7.11	1.709 1.503 1.330 1.172 1.063 0.996 0.939
m/s	9ms 354.2 717.1 663.7 538.3 461.8 397.9 371.4 386.4 384.0	0.18 -0.75 -2.49 -3.36 -3.67 -3.60 -3.60	Rel. 5.94 11.08 9.89 6.42 3.59 1.90 0.38 -0.46 -1.13	26.47 21.68 17.45 13.24 9.94 7.46 5.30 3.76 2.80	40.29 36.98 34.45 32.49 31.55 31.41 31.34 31.34	753.8 662.9 586.4 516.7 468.8 439.2 414.0 396.5 389.0	0.744 0.995 1.243 1.527 1.788 2.023 2.275 2.510 2.710	**10-3 **81.05500 104.35690 69.86053 42.64344 29.39379 21.11864 16.54163 14.76255 12.83040	0.194 0.393 0.364 0.295 0.253 0.218 0.204 0.212	0.009 -0.036 -0.119 -0.160 -0.175 -0.172 -0.171	Abs. 12.67 17.81 16.62 13.15 10.32 8.63 7.11 6.27	1.709 1.503 1.330 1.172 1.063 0.996 0.939 0.899
m/s 1.068 1.427 1.784 2.192 2.566 2.904 3.265 3.602 3.889 Displa	9ms 354.2 717.1 63.7 538.3 461.8 397.9 371.4 386.4 384.0	0.18 -0.75 -2.49 -3.36 -3.67 -3.60 -3.60	Rel. 5.94 11.08 9.89 6.42 3.59 1.90 0.38 -0.46 -1.13	26.47 21.68 17.45 13.24 9.94 7.46 5.30 3.76 2.80	Cm 40.29 36.98 34.45 32.49 31.55 31.41 31.34 31.63 Disp. Coe	753.8 662.9 586.4 516.7 468.8 439.2 414.0 396.5 389.0	0.744 0.995 1.243 1.527 1.788 2.023 2.275 2.510 2.710	x10-3 81.05500 104.35690 69.86053 42.64344 29.39379 21.11864 16.54163 14.76255	0.194 0.393 0.364 0.295 0.253 0.218 0.204 0.212	0.009 -0.036 -0.119 -0.160 -0.175 -0.172 -0.171	Abs. 12.67 17.81 16.62 13.15 10.32 8.63 7.11 6.27	1.709 1.503 1.330 1.172 1.063 0.996 0.939 0.899
m/s	9ms 354.2 717.1 663.7 538.3 461.8 397.9 371.4 386.4 384.0	0.18 -0.75 -2.49 -3.36 -3.67 -3.60 -3.66 -3.73 US 243	Rel. 5.94 11.08 9.89 6.42 3.59 1.90 0.38 -0.46 -1.13 2.0 gm .04 % B	26.47 21.68 17.45 13.24 9.94 7.46 5.30 3.76 2.80	40.29 36.98 34.45 32.49 31.55 31.41 31.34 31.34	753.8 662.9 586.4 516.7 468.8 439.2 414.0 396.5 389.0	0.744 0.995 1.243 1.527 1.788 2.023 2.275 2.510 2.710	**10-3 **81.05500 104.35690 69.86053 42.64344 29.39379 21.11864 16.54163 14.76255 12.83040	0.194 0.393 0.364 0.295 0.253 0.218 0.204 0.212	0.009 -0.036 -0.119 -0.160 -0.175 -0.172 -0.171	Abs. 12.67 17.81 16.62 13.15 10.32 8.63 7.11 6.27	1.709 1.503 1.330 1.172 1.063 0.996 0.939 0.899
m/s	gms 354.2 717.1 663.7 538.3 461.8 397.9 371.4 386.4 384.0 cement D sition trim TA	0.18 -0.75 -2.49 -3.36 -3.67 -3.60 -3.66 -3.73 US 243 300	Rel. 5.94 11.08 9.89 6.42 3.59 1.90 0.38 -0.46 -1.13 2.0 gm .04 % B	26.47 21.68 17.45 13.24 9.94 7.46 5.30 3.76 2.80	40.29 36.98 34.45 32.49 31.55 31.41 31.34 31.63 Disp. Coe 6.91 cm	753.8 662.9 586.4 516.7 468.8 439.2 414.0 396.5 389.0 eff. C	0.744 0.995 1.243 1.527 1.788 2.023 2.275 2.510 2.710 DL 0	x10-3 81.05500 104.35690 69.86053 42.64344 29.39379 21.11864 16.54163 14.76255 12.83040	0.194 0.393 0.364 0.295 0.253 0.218 0.204 0.212 0.210	0.009 -0.036 -0.119 -0.160 -0.175 -0.171 -0.174 -0.178	Abs. 12.67 17.81 16.62 13.15 10.32 8.63 7.11 6.27 5.60	1.709 1.503 1.330 1.172 1.063 0.996 0.999 0.899 0.882
m/s	gms 354.2 717.1 663.7 538.3 461.8 397.9 371.4 386.4 384.0 cement D sition trim TA	0.18 -0.75 -2.49 -3.36 -3.67 -3.60 -3.66 -3.73 US 243 300	Rel. 5.94 11.08 9.89 6.42 3.59 1.90 0.38 -0.46 -1.13 2.0 gm .04 % B	26.47 21.68 17.45 13.24 9.94 7.46 5.30 3.76 2.80	Cm 40.29 36.98 34.45 32.49 31.55 31.41 31.34 31.63 Disp. Coe	753.8 662.9 586.4 516.7 468.8 439.2 414.0 396.5 389.0 eff. C	0.744 0.995 1.243 1.527 1.788 2.023 2.275 2.510 2.710 DL 0	**10-3 **81.05500 104.35690 69.86053 42.64344 29.39379 21.11864 16.54163 14.76255 12.83040	0.194 0.393 0.364 0.295 0.253 0.218 0.204 0.212 0.210	0.009 -0.036 -0.119 -0.160 -0.175 -0.171 -0.174 -0.178	Abs. 12.67 17.81 16.62 13.15 10.32 8.63 7.11 6.27 5.60	1.709 1.503 1.330 1.172 1.063 0.996 0.999 0.899 0.882
m/s 1.068 1.427 1.784 2.192 2.566 2.904 3.265 3.602 3.889 Displa VCG Po Static Water	9ms 354.2 717.1 663.7 538.3 461.8 397.9 371.4 386.4 384.0 cement D sition trim TA Temp.	0.18 -0.75 -2.49 -3.36 -3.67 -3.60 -3.66 -3.73 OS 243 30 00 8	Rel. 5.94 11.08 9.89 6.42 3.59 1.90 0.38 -0.46 -1.13 2.0 gm .04 % B .13 deg .50 deg	26.47 21.68 17.45 13.24 9.94 7.46 5.30 3.76 2.80	40.29 36.98 34.45 32.49 31.55 31.41 31.34 31.63 Disp. Coe 6.91 cm	753.8 662.9 586.4 516.7 468.8 439.2 414.0 396.5 389.0 eff. C	0.744 0.995 1.243 1.527 1.788 2.023 2.275 2.510 2.710 DL 0 Line	*10-3 81.05500 104.35690 69.86053 42.64344 29.39379 21.11864 16.54163 14.76255 12.83040 0.2003	0.194 0.393 0.364 0.295 0.253 0.218 0.204 0.212	0.009 -0.036 -0.119 -0.160 -0.175 -0.172 -0.171 -0.174 -0.178	Abs. 12.67 17.81 16.62 13.15 10.32 8.63 7.11 6.27 5.60	1.709 1.503 1.330 1.172 1.063 0.996 0.939 0.889 0.882
m/s 1.068 1.427 1.784 2.192 2.566 2.904 3.265 3.602 3.889 Displa VCG Po Static Water Vel	9ms 354.2 717.1 663.7 538.3 461.8 397.9 371.4 386.4 384.0 ccement D sition trim TA Temp. RT	0.18 -0.75 -2.49 -3.36 -3.67 -3.60 -3.66 -3.73 TS 243 30 00 8 20	Rel. 5.94 11.08 9.89 6.42 3.59 1.90 0.38 -0.46 -1.13 2.0 gm .04 % B .13 deg .50 deg	26.47 21.68 17.45 13.24 9.94 7.46 5.30 3.76 2.80	Cm 40.29 36.98 34.45 32.49 31.55 31.41 31.34 31.63 Disp. Coe 6.91 cm Density LK	753.8 662.9 586.4 516.7 468.8 439.2 414.0 396.5 389.0 eff. C @ Base	0.744 0.995 1.243 1.527 1.788 2.023 2.275 2.510 2.710 DL 0	**10-3 **81.05500 104.35690 69.86053 42.64344 29.39379 21.11864 16.54163 14.76255 12.83040 22003 **I/m3 Kin	0.194 0.393 0.364 0.295 0.253 0.218 0.204 0.212	0.009 -0.036 -0.119 -0.160 -0.175 -0.171 -0.174 -0.178	Abs. 12.67 17.81 16.62 13.15 10.32 8.63 7.11 6.27 5.60 0.9916E	1.709 1.503 1.330 1.172 1.063 0.996 0.999 0.899 0.882
m/s 1.068 1.427 1.784 2.192 2.566 2.904 3.265 3.602 3.889 Displa VCG Po Static Water	9ms 354.2 717.1 663.7 538.3 461.8 397.9 371.4 386.4 384.0 cement D sition trim TA Temp.	0.18 -0.75 -2.49 -3.36 -3.67 -3.60 -3.66 -3.73 OS 243 30 00 8	Rel. 5.94 11.08 9.89 6.42 3.59 1.90 0.38 -0.46 -1.13 2.0 gm .04 % B .13 deg .50 deg	26.47 21.68 17.45 13.24 9.94 7.46 5.30 3.76 2.80	40.29 36.98 34.45 32.49 31.55 31.41 31.34 31.63 Disp. Coe 6.91 cm	753.8 662.9 586.4 516.7 468.8 439.2 414.0 396.5 389.0 eff. C	0.744 0.995 1.243 1.527 1.788 2.023 2.275 2.510 2.710 DL 0 Line	*10-3 81.05500 104.35690 69.86053 42.64344 29.39379 21.11864 16.54163 14.76255 12.83040 0.2003	0.194 0.393 0.364 0.295 0.253 0.218 0.204 0.212	0.009 -0.036 -0.119 -0.160 -0.175 -0.172 -0.171 -0.174 -0.178	Abs. 12.67 17.81 16.62 13.15 10.32 8.63 7.11 6.27 5.60	1.709 1.503 1.330 1.172 1.063 0.996 0.939 0.889 0.882
m/s 1.068 1.427 1.784 2.192 2.566 2.904 3.265 3.602 3.889 Displa VCG Po Static Water Vel m/s	gms 354.2 717.1 663.7 538.3 461.8 397.9 371.4 386.4 384.0 cement D sition trim TA Temp. RT gms	0.18 -0.75 -2.49 -3.36 -3.67 -3.60 -3.66 -3.73 US 243 30 00 8 20 H	Rel. 5.94 11.08 9.89 6.42 3.59 1.90 0.38 -0.46 -1.13 2.0 gm .04 % B .13 deg .50 deg TAO Rel.	26.47 21.68 17.45 13.24 9.94 7.46 5.30 3.76 2.80	0.29 36.98 34.45 32.49 31.55 31.41 31.34 31.63 Disp. Coe 6.91 cm Density LK cm	753.8 662.9 586.4 516.7 468.8 439.2 414.0 396.5 389.0 eff. C @ Base 998 WSPH cm2	0.744 0.995 1.243 1.527 1.788 2.023 2.275 2.510 2.710 DL 0 Line .101 kg	**10-3 **81.05500 104.35690 69.86053 42.64344 29.39379 21.11864 16.54163 14.76255 12.83040 22003 **I/m3 King CT	0.194 0.393 0.364 0.295 0.253 0.218 0.204 0.212 0.210	0.009 -0.036 -0.119 -0.160 -0.175 -0.171 -0.174 -0.178	Abs. 12.67 17.81 16.62 13.15 10.32 8.63 7.11 6.27 5.60 0.9916E-TAO Abs.	1.709 1.503 1.330 1.172 1.063 0.996 0.993 0.899 0.882
m/s	gms 354.2 717.1 663.7 538.3 461.8 397.9 371.4 386.4 384.0 ccement D strim TA Temp. RT gms 473.5	0.18 -0.75 -2.49 -3.36 -3.67 -3.60 -3.66 -3.73 -3.243 30 00 8 20 H cm	Rel. 5.94 11.08 9.89 6.42 3.59 1.90 0.38 -0.46 -1.13 2.0 gm .04 % B 13 deg .50 deg TAO Rel. 6.90	26.47 21.68 17.45 13.24 9.94 7.46 5.30 3.76 2.80 S	Cm 40.29 36.98 34.45 32.49 31.55 31.41 31.34 31.34 31.63 Disp. Coe 6.91 cm Density LK cm	753.8 662.9 586.4 516.7 468.8 439.2 414.0 396.5 389.0 eff. C @ Base 998 WSPH Cm2	0.744 0.995 1.243 1.527 1.788 2.023 2.275 2.510 2.710 DL 0 Line .101 kg	**10-3 **81.05500 104.35690 69.86053 42.64344 29.39379 21.11864 16.54163 14.76255 12.83040 22003 **/m3 King CT	0.194 0.393 0.364 0.295 0.253 0.218 0.204 0.212 0.210	0.009 -0.036 -0.119 -0.160 -0.175 -0.171 -0.174 -0.178	Abs. 12.67 17.81 16.62 13.15 10.32 8.63 7.11 6.27 5.60 TAO Abs.	1.709 1.503 1.330 1.172 1.063 0.996 0.939 0.882 -06 m2/s Cwsph
m/s 1.068 1.427 1.784 2.192 2.566 2.904 3.265 3.602 3.889 Displa VCG Po Static Water Vel m/s 1.072 1.430	gms 354.2 717.1 663.7 538.3 461.8 397.9 371.4 386.4 384.0 ccement D sition trim TA Temp. RT gms 473.5 1003.0	0.18 -0.75 -2.49 -3.36 -3.67 -3.60 -3.66 -3.73 IS 243 30 00 8 20 H cm -0.18 -0.42	Rel. 5.94 11.08 9.89 6.42 3.59 1.90 0.38 -0.46 -1.13 2.0 gm .04 % B .13 deg .50 deg TAO Rel. 6.90 10.86	26.47 21.68 17.45 13.24 9.94 7.46 5.30 3.76 2.80 s	Cm 40.29 36.98 34.45 32.49 31.55 31.41 31.34 31.63 Disp. Coe 6.91 cm Density LK cm 36.00 29.41	753.8 662.9 586.4 516.7 468.8 439.2 414.0 396.5 389.0 eff. C @ Base 998 WSPH cm2	0.744 0.995 1.243 1.527 1.788 2.023 2.275 2.510 2.710 DL 0 Line .101 kg	**10-3 **81.05500 104.35690 69.86053 42.64344 29.39379 21.11864 16.54163 14.76255 12.83040 22003 **I/m3 Kin CT **x10-3	0.194 0.393 0.364 0.295 0.253 0.218 0.204 0.212 0.210	0.009 -0.036 -0.119 -0.160 -0.175 -0.171 -0.174 -0.178	Abs. 12.67 17.81 16.62 13.15 10.32 8.63 7.11 6.27 5.60 0.9916E- TAO Abs.	1.709 1.503 1.330 1.172 1.063 0.996 0.939 0.899 0.882 -06 m2/s Cwsph
m/s	gms 354.2 717.1 663.7 538.3 461.8 397.9 371.4 386.4 384.0 cement D sition trim TA Temp. RT gms 473.5 1003.0 1047.9	0.18 -0.75 -2.49 -3.36 -3.67 -3.60 -3.66 -3.73 OO 8 20 H cm -0.18 -0.42 -2.03	Rel. 5.94 11.08 9.89 6.42 3.59 1.90 0.38 -0.46 -1.13 2.0 gm .04 % B .13 deg .50 deg TAO Rel. 6.90 10.86 9.54	26.47 21.68 17.45 13.24 9.94 7.46 5.30 3.76 2.80 S	Cm 40.29 36.98 34.45 32.49 31.55 31.41 31.34 31.63 Disp. Coe 6.91 cm Density LK cm 36.00 29.41 25.01	Cm2	0.744 0.995 1.243 1.527 1.788 2.023 2.275 2.510 2.710 DL 0 Line .101 kg	x10-3 81.05500 104.35690 69.86053 42.64344 29.39379 21.11864 16.54163 14.76255 12.83040 0.2003 (/m3 King CT	0.194 0.393 0.364 0.295 0.253 0.218 0.204 0.212 0.210 n. Visco RT/DIS 0.195 0.431	0.009 -0.036 -0.119 -0.160 -0.175 -0.172 -0.171 -0.178 -0.178	Abs. 12.67 17.81 16.62 13.15 10.32 8.63 7.11 6.27 5.60 TAO Abs. 15.02 18.99 17.66	1.709 1.503 1.330 1.172 1.063 0.996 0.939 0.899 0.882 -06 m2/s Cwsph 1.702 1.389 1.152
m/s	gms	0.18 -0.75 -2.49 -3.36 -3.67 -3.60 -3.66 -3.73 IS 243 30 00 8 20 H cm -0.18 -0.42	Rel. 5.94 11.08 9.89 6.42 3.59 1.90 0.38 -0.46 -1.13 2.0 gm .04 % B .13 deg .50 deg TAO Rel. 6.90 10.86 9.54 7.35	26.47 21.68 17.45 13.24 9.94 7.46 5.30 3.76 2.80 s	Cm 40.29 36.98 34.45 32.49 31.55 31.41 31.34 31.63 Disp. Coe 6.91 cm Density LK cm 36.00 29.41	Cm2 753.8 662.9 586.4 516.7 468.8 439.2 414.0 396.5 389.0 eff. Ce @ Base 998 WSPH Cm2 750.7 612.5 508.2 438.8	0.744 0.995 1.243 1.527 1.788 2.023 2.275 2.510 2.710 DL 0 Line .101 kg CV	x10-3 81.05500 104.35690 69.86053 42.64344 29.39379 21.11864 16.54163 14.76255 12.83040 0.2003 (/m3 King CT	0.194 0.393 0.364 0.295 0.253 0.218 0.204 0.212 0.210 n. Visco RT/DIS 0.195 0.431	0.009 -0.036 -0.119 -0.160 -0.175 -0.171 -0.174 -0.178	Abs. 12.67 17.81 16.62 13.15 10.32 8.63 7.11 6.27 5.60 0.9916E- TAO Abs.	1.709 1.503 1.330 1.172 1.063 0.996 0.993 0.899 0.882 -06 m2/s Cwsph 1.702 1.389 1.152 0.995
m/s	gms 354.2 717.1 663.7 538.3 461.8 397.9 371.4 386.4 384.0 cement D sition trim TA Temp. RT gms 473.5 1003.0 1047.9	0.18 -0.75 -2.49 -3.36 -3.67 -3.60 -3.66 -3.73 OO 8 20 H cm -0.18 -0.42 -2.03	Rel. 5.94 11.08 9.89 6.42 3.59 1.90 0.38 -0.46 -1.13 2.0 gm .04 % B .13 deg .50 deg TAO Rel. 6.90 10.86 9.54	26.47 21.68 17.45 13.24 9.94 7.46 5.30 3.76 2.80 S	Cm 40.29 36.98 34.45 32.49 31.55 31.41 31.34 31.63 Disp. Coe 6.91 cm Density LK cm 36.00 29.41 25.01	Cm2 753.8 662.9 586.4 516.7 468.8 439.2 414.0 396.5 389.0 eff. Ce @ Base 998 WSPH cm2 750.7 612.5 508.2 438.8	0.744 0.995 1.243 1.527 1.788 2.023 2.275 2.510 2.710 DL 0 Line .101 kg	x10-3 81.05500 104.35690 69.86053 42.64344 29.39379 21.11864 16.54163 14.76255 12.83040 0.2003 (/m3 King CT	0.194 0.393 0.364 0.295 0.253 0.218 0.204 0.212 0.210 n. Visco RT/DIS 0.412 0.412 0.431 0.388	0.009 -0.036 -0.119 -0.160 -0.175 -0.172 -0.171 -0.178 -0.178	Abs. 12.67 17.81 16.62 13.15 10.32 8.63 7.11 6.27 5.60 TAO Abs. 15.02 18.99 17.66	1.709 1.503 1.330 1.172 1.063 0.996 0.939 0.899 0.882 -06 m2/s Cwsph 1.702 1.389 1.152
m/s	gms	0.18 -0.75 -2.49 -3.36 -3.67 -3.60 -3.66 -3.73 0.18 243 30 00 8 20 H cm -0.18 -0.42 -2.03 -4.22	Rel. 5.94 11.08 9.89 6.42 3.59 1.90 0.38 -0.46 -1.13 2.0 gm .04 % B .13 deg .50 deg TAO Rel. 6.90 10.86 9.54 7.35	26.47 21.68 17.45 13.24 9.94 7.46 5.30 3.76 2.80 8 C LC cm 30.62 24.81 19.96 16.01	Cm 40.29 36.98 34.45 32.49 31.55 31.41 31.34 31.63 Disp. Coe 6.91 cm Density LK cm 36.00 29.41 25.01 22.83	Cm2 753.8 662.9 586.4 516.7 468.8 439.2 414.0 396.5 389.0 eff. Ce Base 998 WSPH cm2 750.7 612.5 508.2 438.8 408.7	0.744 0.995 1.243 1.527 1.788 2.023 2.275 2.510 2.710 DL 0 Line .101 kg CV	x10-3 81.05500 104.35690 69.86053 42.64344 29.39379 21.11864 16.54163 14.76255 12.83040 22003 (/m3 King CT	0.194 0.393 0.364 0.295 0.253 0.218 0.204 0.212 0.210 n. Visco RT/DIS 0.195 0.412 0.431 0.388 0.319	0.009 -0.036 -0.119 -0.160 -0.175 -0.171 -0.174 -0.178 Decity H/BPX	Abs. 12.67 17.81 16.62 13.15 10.32 8.63 7.11 6.27 5.60 TAO Abs. 15.02 18.99 17.66 15.48	1.709 1.503 1.330 1.172 1.063 0.996 0.993 0.899 0.882 -06 m2/s Cwsph 1.702 1.389 1.152 0.995
m/s	gms 354.2 717.1 663.7 538.3 461.8 397.9 371.4 386.4 384.0 cement D sition trim TA Temp. RT gms 473.5 1003.0 1047.9 943.9 775.5	0.18 -0.75 -2.49 -3.36 -3.67 -3.60 -3.66 -3.73 IS 243 30 00 8 20 H cm 0.18 -0.42 -2.03 -4.22 -5.08	Rel. 5.94 11.08 9.89 6.42 3.59 1.90 0.38 -0.46 -1.13 2.0 gm .04 % B .13 deg .50 deg TAO Rel. 6.90 10.86 9.54 7.35 4.22	Cm 26.47 21.68 17.45 13.24 9.94 7.46 5.30 3.76 2.80 S	Cm 40.29 36.98 34.45 32.49 31.55 31.41 31.34 31.63 Disp. Coe 6.91 cm Density LK cm 36.00 29.41 25.01 22.83 23.10	Cm2 753.8 662.9 586.4 516.7 468.8 439.2 414.0 396.5 389.0 eff. Ce Base 998 WSPH cm2 750.7 612.5 508.2 438.8 408.7	0.744 0.995 1.243 1.527 1.788 2.023 2.275 2.510 2.710 DL 0 Line .101 kg CV	**10-3 **81.05500 104.35690 69.86053 42.64344 29.39379 21.11864 16.54163 14.76255 12.83040 22003 **(m3 King CT	0.194 0.393 0.364 0.295 0.253 0.218 0.204 0.212 0.210 n. Visco RT/DIS 0.195 0.412 0.431 0.388 0.319	0.009 -0.036 -0.119 -0.160 -0.175 -0.171 -0.174 -0.178 Docity H/BPX -0.009 -0.020 -0.097 -0.2201 -0.242	Abs. 12.67 17.81 16.62 13.15 10.32 8.63 7.11 6.27 5.60 0.9916E- TAO Abs. 15.02 18.99 17.66 15.48 12.34	1.709 1.503 1.330 1.172 1.063 0.996 0.939 0.899 0.882 -06 m2/s Cwsph 1.702 1.389 1.152 0.995 0.927

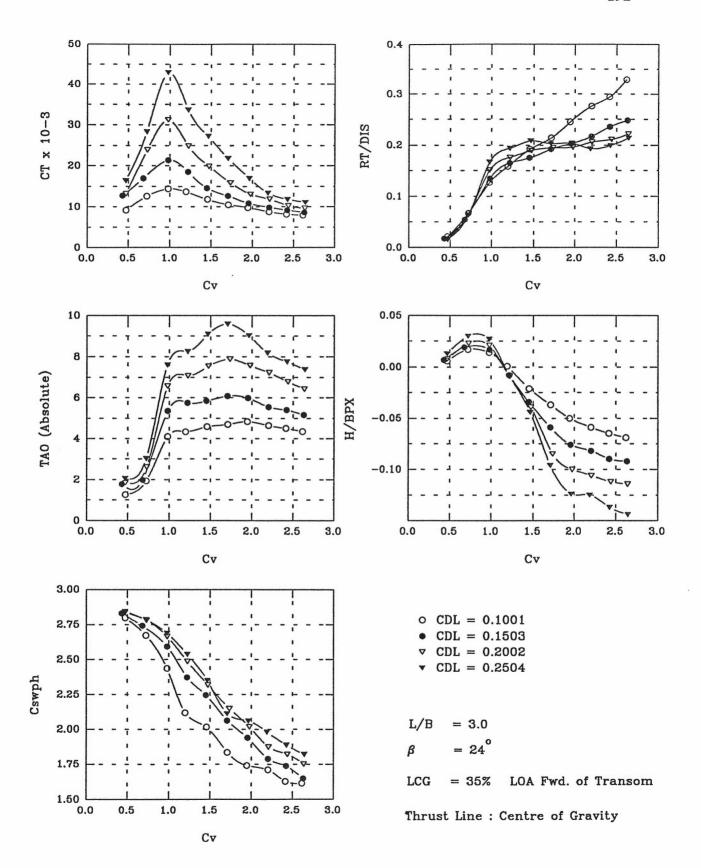


Figure B.43

Model No. . L/B Ratio 3.U 24.00 deg Length Overal LOA 69.00 cm Breath (Deck) B 23.00 cm Breath (Chine) BPX 21.00 cm 23.00 cm

LCG Position 35.00 % LOA

Displacement DIS 1216.0 gms Disp. Coeff. CDL 0.1001 6.83 cm @ Base Line

29.70 % B 1.25 deg VCG Position Static trim TAOo Water Temp. 19.50 deg C Density 998.308 kg/m3 Kin. Viscocity 0.1016E-05 m2/s

24.15 cm @ Transom

Vel m/s	RT gms	H cm	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
0.675	26.1	0.12	0.01	60.73	58.98	1233.8	0.470	9.13207	0.021	0.006	1.26	2.798
1.037	81.3	0.36	0.68	48.99	57.62	1179.0	0.722	12.60481	0.067	0.017	1.93	2.673
1.404	155.0	0.30	2.84	38.90	56.34	1074.2	0.978	14.39229	0.127	0.014	4.09	2.436
1.717	191.8	0.03	3.08	27.60	54.86	933.9	1.196	13.69101	0.158	0.001	4.33	2.118
2.090	232.9	-0.44	3.34	24.07	54.42	888.9	1.456	11.78906	0.192	-0.021	4.59	2.016
2.453	260.1	-0.79	3.44	17.94	53.48	808.7	1.709	10.50075	0.214	-0.037	4.69	1.834
2.788	297.7	-1.06	3.59	14.73	53.01	767.1	1.942	9.81458	0.245	-0.050	4.84	1.739
3.162	335.8	-1.23	3.39	13.80	52.79	753.9	2.203	8.75688	0.276	-0.059	4.64	1.709
3.468	357.3	-1.37	3.25	11.18	52.18	717.3	2.416	8.14061	0.294	-0.065	4.50	1.626
3.753	400.5	-1.44	3.10	11.04	51.75	710.7	2.615	7.86331	0.329	-0.069	4.35	1.611

Disp. Coeff. CDL 0.1503 Displacement DIS 1825.0 gms 28.30 % B 1.58 deg 6.51 cm @ Base Line VCG Position

Static trim TAOo Water Temp. 998.308 kg/m3 Kin. Viscocity 0.1016E-05 m2/s 19.50 deg C Density

Vel m/s	RT gms	H Cm	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
0.617	30.9	0.15	0.20	61.76	62.10	1247.8	0.430	12.76844	0.017	0.007	1.78	2.829
0.975	99.2	0.41	0.40	51.75	59.34	1208.6	0.679	16.95311	0.054	0.019	1.98	2.741
1.407	246.1	0.35	3.77	44.94	57.40	1143.7	0.980	21.37042	0.135	0.017	5.35	2.593
1.750	301.0	-0.18	4.16	37.61	55.20	1045.5	1.219	18.47296	0.165	-0.008	5.74	2.371
2.083	319.2	-0.71	4.27	33.23	54.33	990.3	1.451	14.59544	0.175	-0.034	5.85	2.246
2.449	351.3	-1.24	4.50	27.25	53.13	909.9	1.706	12.65398	0.192	-0.059	6.08	2.063
2.800	370.5	-1.60	4.40	23.54	52.03	855.2	1.951	10.85865	0.203	-0.076	5.98	1.939
3.161	396.3	-1.73	3.97	19.32	50.44	789.0	2.203	9.87613	0.217	-0.082	5.55	1.789
3.477	430.1	-1.89	3.82	16.97	50.77	766.2	2.422	9.12433	0.236	-0.090	5.40	1.737
3.775	452.4	-1.93	3.58	13.80	50.37	725.8	2.630	8.59543	0.248	-0.092	5.16	1.646

Displacement DIS 2432.0 gms Disp. Coeff. CDL 0.2002 27.65 % B 6.36 cm @ Base Line VCG Position Static trim TAOo 1.78 deg

Water Temp. 19.50 deq C Density 998.308 kg/m3 Kin. Viscocity 0.1016E-05 m2/s

Vel m/s	RT gms	H cm	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
0.674	38.3	0.18	0.07	64.67	62.60	1250.9	0.470	13.24905	0.016	0.008	1.85	2.837
1.045	163.3	0.48	0.84	55.89	59.34	1226.6	0.728	23.95665	0.067	0.023	2.62	2.781
1.404	368.2	0.44	4.79	49.58	57.18	1175.8	0.978	31.23725	0.151	0.021	6.57	2.666
1.755	427.3	-0.19	5.29	42.78	55.20	1096.3	1.223	24.87754	0.176	-0.009	7.07	2.486
2.117	463.3	-0.81	5.77	37.59	53.17	1022.2	1.475	19.87765	0.190	-0.039	7.55	2.318
2.487	473.6	-1.79	6.11	32.09	51.75	947.6	1.733	15.88498	0.195	-0.085	7.89	2.149
2.834	477.0	-2.11	5.79	28.28	50.41	889.8	1.974	13.11963	0.196	-0.100	7.57	2.018
3.169	501.4	-2.24	5.45	24.15	48.99	826.7	2.208	11.86604	0.206	-0.106	7.23	1.875
3.500	512.5	-2.36	5.00	22.10	49.00	803.6	2.438	10.23232	0.211	-0.112	6.78	1.822
3.786	541.0	-2.39	4.65	19.32	48.99	772.1	2.638	9.60517	0.222	-0.114	6.43	1.751

Displacement DIS 3042.0 gms Disp. Coeff. CDL 0.2504 6.55 cm @ Base Line 28.48 % B VCG Position Static trim TAOo 2.01 deg

Water Temp. 19.50 deg C Density 998.308 kg/m3 Kin. Viscocity 0.1016E-05 m2/s

Vel m/s	RT gms	cm H	TAO Rel.	LC cm	Cm	WSPH Cm2	CV	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
0.672	47.1	0.27	0.05	66.39	64.11	1253.5	0.468	16.37259	0.015	0.013	2.06	2.843
1.035	190.2	0.62	1.01	57.27	60.03	1228.4	0.721	28.38085	0.063	0.030	3.02	2.785
1.401	508.3	0.56	5.60	51.05	57.53	1186.0	0.976	42.94175	0.167	0.027	7.61	2.689
1.753	588.6	-0.18	6.24	44.85	55.55	1119.0	1.221	33.65789	0.194	-0.008	8.25	2.537
2.105	636.5	-0.92	7.09	39.30	52.86	1036.4	1.467	27.23288	0.209	-0.044	9.10	2.350
2.447	618.4	-2.02	7.58	32.78	49.68	931.3	1.705	21.79093	0.203	-0.096	9.59	2.112
2.815	620.3	-2.60	7.02	30.54	49.84	908.2	1.961	16.93708	0.204	-0.124	9.03	2.060
3.142	587.4	-2.62	6.18	27.60	49.68	873.7	2.189	13.38306	0.193	-0.125	8.19	1.981
3.481	606.3	-2.87	5.75	25.13	48.54	832.5	2.425	11.81175	0.199	-0.137	7.76	1.888
3.793	650.8	-3.02	5.37	22.77	48.30	803.1	2.642	11.07336	0.214	-0.144	7.38	1.821

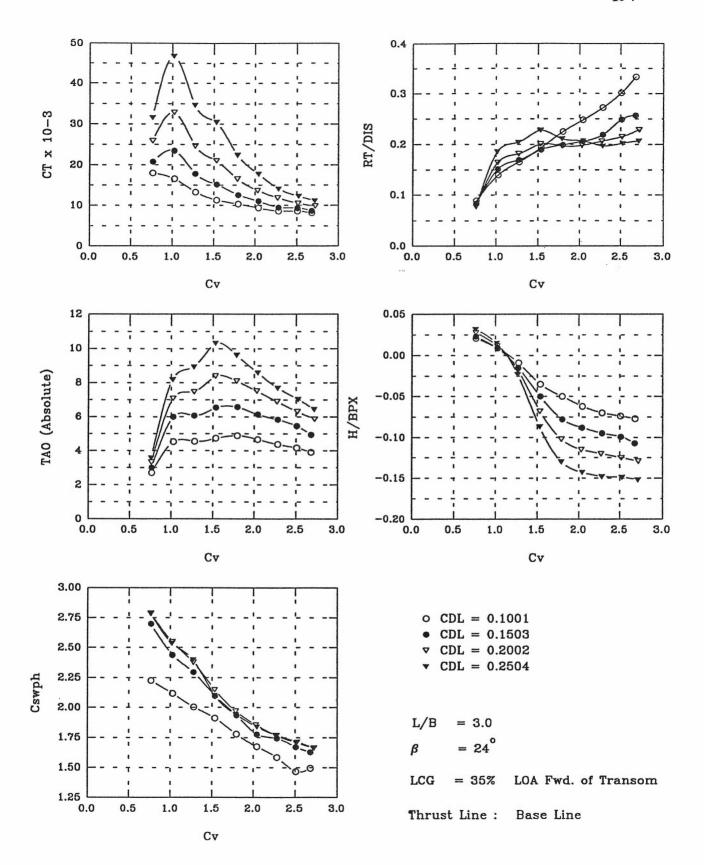


Figure B.44

Model No. T-30 L/B Ratio Deadrise LCG Position	3.0 24.0 35.0 0IS 1216	00 deg 00 % LO .0 gms)A	Length O Breath (Breath (24.15 c	Deck) B Chine) B m @ Tra	23. PX 21. nsom	00 cm 00 cm 00 cm				195
VCG Position Static trim TA Water Temp.	.00 1.3	70 % B 25 deg 50 deg	С	6.83 cm Density			m3 Kii	n. Visc	ocity	0.1016E	-05 m2/s
Vel RT m/s gms	H	TAO Rel.	LC cm	LK cm	WSPH cm2	cv	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
2.206 235.5 2.579 273.5 2.932 301.3 3.282 330.4 3.599 366.5	0.44 0.19 -0.18 -0.73 -1.06 -1.30 -1.47 -1.55	3.31 3.49 3.65 3.43 3.13 2.92	29.28 27.17 24.73 22.43 18.71 15.53 12.77	48.99 49.34	784.0 737.3 698.1 647.5	0.765 1.025 1.281 1.537 1.797 2.043 2.287 2.507	17.94784 16.55047 13.27409 11.27599 10.30281 9.34436 8.63493 8.59048	0.194 0.225 0.248 0.272 0.301	0.021 0.009 -0.009 -0.035 -0.050 -0.062 -0.070 -0.074	2.71 4.53 4.56 4.74 4.90 4.68 4.38 4.17	2.226 2.116 2.004 1.912 1.778 1.672 1.583 1.468
Displacement D			5	49.68 Disp. Co		DL 0.	8.16606 1503	0.333	-0.077	3.90	1.495
VCG Position Static trim TA Water Temp.	.00 1.	30 % B 58 deg 50 deg		6.51 cm Density			'm3 Kii	. ***		0 10169	_05 m2/a
Vel RT	н	TAO	LC	LK	WSPH	.308 kg/				TAO	-05 m2/s Cwsph
m/s gms	cm	Rel.	cm	cm	cm2		CT x10-3	RT/DIS	H/BPX	Abs.	Cwspn
2.204 346.3 2.576 362.3 2.929 376.5 3.283 399.6 3.602 453.6 3.842 468.9 Displacement I VCG Position Static trim TA Water Temp. Vel RT m/s gms	27.00 1. 19.5 H Cm 0.59 0.25 -0.37 -1.42 -2.14 -2.53	4.96 4.99 4.56 4.26 3.88 3.38 .0 gms 65 % B 78 deg 50 deg TAO Rel. 	15.18 3 C LC cm 55.20 44.85 37.95 33.12 28.64 25.88 22.43		854.2 783.6 768.2 737.0 717.3 eff. C @ Base 998 WSPH cm2 1229.4 1123.4 1049.0 947.1 869.2 818.7 779.7	2.677 DL 0. Line .308 kg/ CV 0.762 1.019 1.275 1.531 1.784 2.029 2.274	CT x10-3 25.93886 32.89164 24.69360 21.06310 16.53040 13.65822 11.82738	0.170 0.190 0.199 0.206 0.219 0.249 0.257 n. Visco RT/DIS 0.080 0.165 0.182 0.201 0.197 0.198	-0.018 -0.068 -0.102 -0.115 -0.120	TAO Abs. 3.32 7.08 7.47 8.39 8.11 7.52 6.90	2.698 2.440 2.295 2.096 1.937 1.777 1.742 1.671 1.627 -05 m2/s Cwsph -2.788 2.547 2.379 2.148 1.971 1.856 1.768
	-2.62 -2.71	4.53 4.09		46.58 46.92		2.514 2.718	10.48560 9.83085		-0.125 -0.129	6.31 5.87	1.706 1.662
Displacement I VCG Position Static trim TA	28.	.0 gms 48 % B 01 deg		Disp. Co	eff. C Base		2504				
Water Temp.		50 deg		Density	998	.308 kg	m3 Ki	n. Visc	ocity	0.1016E-	-05 m2/s
Vel RT m/s gms	CM H	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
1.090 234.7 1.457 565.9 1.822 619.4 2.194 692.4 2.561 642.1 2.930 628.3 3.277 598.9 3.620 614.5 3.892 630.2	-1.82 -2.72 -2.99 -3.10 -3.13	1.57 6.18 6.91 8.31 7.61 6.58 5.69 5.02 4.43	26.91 24.15 22.43	53.82	1058.4 926.9 857.3 810.9 779.7 756.3	0.759 1.015 1.270 1.529 1.784 2.041 2.283 2.522 2.712	31.61958 46.80551 34.64003 30.49041 22.44868 17.74419 14.05950 12.18484 11.15680	0.186 0.204 0.228 0.211 0.207 0.197 0.202	0.032 0.015 -0.023 -0.087 -0.130 -0.143 -0.148 -0.149	3.58 8.19 8.92 10.32 9.62 8.59 7.70 7.03 6.44	2.785 2.537 2.400 2.102 1.944 1.839 1.768 1.715

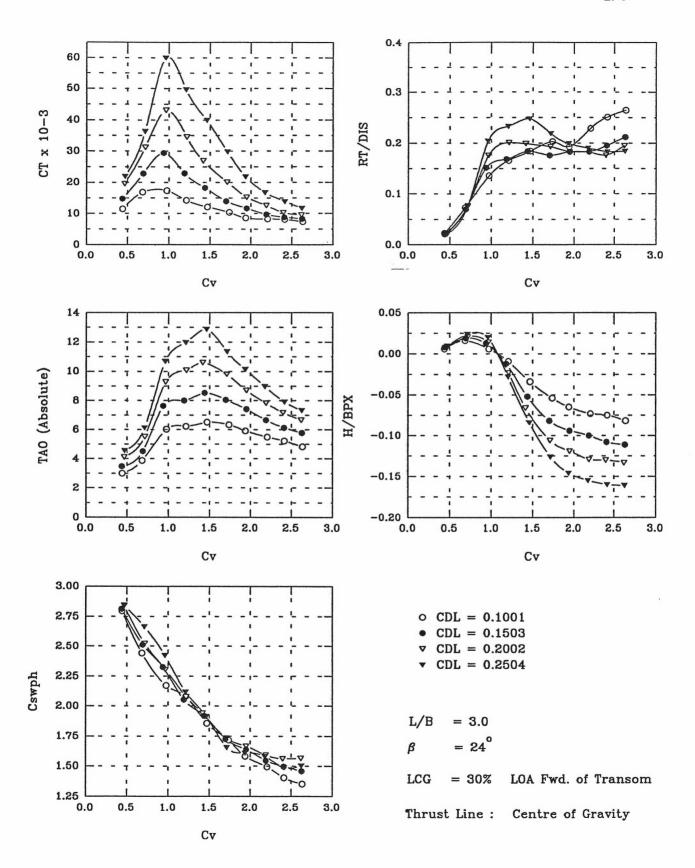


Figure B.45

Deadrise

3.0 24.00 deg

Length Overal LOA 69.00 cm Breath (Deck) B 23.00 cm Breath (Chine) BPX 21.00 cm 20.70 cm @ Transom

197

LCG Position 30.00 % LOA

Displacement DIS 1216.0 gms VCG Position 27.39 % B Static trim TAOo 2.75 deg

0.1001

Disp. Coeff. CDL 6.30 cm @ Base Line

Water Temp. 20.00 deg C Density 998.206 kg/m3 Kin. Viscocity 0.1004E-05 m2/s

_	Vel m/s	RT gms	H cm	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	СТ ж10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
	0.630	28.5	0.13	0.24	48.30	62.10	1232.4	0.439	11.44954	0.023	0.006	2.99	2.795
	0.982	88.7	0.34	1.13	34.50	59.69	1076.6	0.684	16.79316	0.073	0.016	3.88	2.441
	1.398	165.2	0.12	3.27	29.33	55.20	957.0	0.974	17.34463	0.136	0.006	6.02	2.170
	1.738	201.6	-0.19	3.48	27.53	53.47	916.9	1.211	14.29873	0.166	-0.009	6.23	2.079
	2.108	223.8	-0.71	3.75	21.39	51.02	819.1	1.469	12.07707	0.184	-0.034	6.50	1.857
	2.490	246.3	-1.14	3.59	17.89	49.05	756.7	1.735	10.31541	0.203	-0.054	6.34	1.716
	2.779	235.1	-1.37	3.17	13.72	47.94	696.8	1.936	8.58813	0.193	-0.065	5.92	1.580
	3.168	278.9	-1.53	2.75	11.04	47.27	658.8	2.207	8.29113	0.229	-0.073	5.50	1.494
	3.466	305.2	-1.58	2.47	8.20	46.61	619.3	2.415	8.05947	0.251	-0.075	5.22	1.404
	3.784	322.1	-1.73	2.08	6.21	46.58	596.5	2.636	7.41354	0.265	-0.082	4.83	1.353

Disp. Coeff. CDL 6.17 cm @ Base Line Displacement DIS 1825.0 gms 0.1503 VCG Position

26.83 % B 3.24 deg Static trim TAOo

Water Temp. 20.00 deg C Density 998.206 kg/m3 Kin. Viscocity 0.1004E-05 m2/s

_	Vel m/s	RT gms	H Cm	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
	0.625	36.4	0.16	0.23	49.34	62.66	1239.9	0.436	14.74637	0.020	0.008	3.47	2.812
	0.995	127.6	0.41	1.27	41.40	56.93	1107.9	0.693	22.88577	0.070	0.019	4.51	2.512
	1.343	276.8	0.28	4.39	37.00	53.97	1025.2	0.936	29.43614	0.152	0.013	7.63	2.325
	1.702	306.5	-0.25	4.77	30.02	50.03	904.5	1.186	22.97869	0.168	-0.012	8.01	2.051
	2.066	335.5	-1.10	5.29	26.95	47.94	846.3	1.439	18.26471	0.184	-0.052	8.53	1.919
	2.438	320.7	-1.71	4.82	22.43	44.85	760.2	1.699	13.94670	0.176	-0.082	8.06	1.724
	2.792	334.6	-1.97	4.17	19.27	44.66	722.4	1.946	11.67383	0.183	-0.094	7.41	1.638
	3.143	333.5	-2.10	3.42	15.53	44.85	682.2	2.190	9.72537	0.183	-0.100	6.66	1.547
	3.459	355.2	-2.26	2.90	14.36	44.09	660.5	2.410	8.83587	0.195	-0.108	6.14	1.498
	3.772	387.3	-2.33	2.53	12.08	44.85	643.3	2.628	8.31605	0.212	-0.111	5.77	1.459

Displacement DIS 2432.0 gms Disp. Coeff. CDL 0.2002 26.52 % B VCG Position 6.10 cm @ Base Line Static trim TAOo 3.89 deg

Water Temp. 19.50 deg C Kin. Viscocity 0.1016E-05 m2/s Density 998.308 kg/m3

Vel m/s	RT gms	H cm	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
0.667	55.5	0.15	0.24	47.88	63.92	1252.8	0.465	19.55655	0.023	0.007	4.13	2.841
1.026	186.2	0.45	1.63	41.40	57.27	1112.6	0.715	31.27106	0.077	0.021	5.52	2.523
1.385	427.6	0.30	5.39	37.37	52.86	1016.4	0.965	43.07522	0.176	0.014	9.28	2.305
1.742	489.1	-0.49	6.19	32.78	48.30	915.3	1.214	34.61571	0.201	-0.023	10.08	2.076
2.032	484.7	-1.38	6.72	29.60	46.24	856.7	1.415	26.93756	0.199	-0.066	10.61	1.943
2.451	469.4	-2.22	5.91	24.84	42.78	764.1	1.708	20.09205	0.193	-0.106	9.80	1.733
2.792	444.5	-2.51	4.82	22.50	42.50	734.6	1.946	15.25041	0.183	-0.119	8.71	1.666
3.143	443.7	-2.70	3.94	18.97	43.13	701.7	2.190	12.57594	0.182	-0.129	7.83	1.591
3.442	427.8	-2.73	3.29	18.20	42.78	689.0	2.398	10.29953	0.176	-0.130	7.18	1.562
3.756	474.3	-2.80	2.77	16.22	44.85	690.0	2.617	9.57620	0.195	-0.133	6.66	1.565

Displacement DIS 3042.0 gms VCG Position 27.57 % B Static trim TAOo 4.32 deg Disp. Coeff. CDL 6.34 cm @ Base Line 0.2504

Water Temp. 19.50 deg C Density 998.308 kg/m3 Kin. Viscocity 0.1016E-05 m2/s

Vel m/s	RT gms	H Cm	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
0.673	63.2	0.20	0.25	59.06	64.82	1252.5	0.469	21.90165	0.021	0.010	4.57	2.840
1.023	227.4	0.51	1.80	50.03	56.93	1174.6	0.713	36.33271	0.075	0.024	6.12	2.664
1.378	620.0	0.42	6.37	43.26	52.23	1067.9	0.960	60.04266	0.204	0.020	10.69	2.422
1.731	707.5	-0.58	7.65	35.19	47.61	933.9	1.206	49.67536	0.233	-0.028	11.97	2.118
2.099	755.7	-1.76	8.56	31.12	43.68	844.7	1.462	39.92371	0.248	-0.084	12.88	1.915
2.456	666.8	-2.64	7.03	24.84	39.68	729.0	1.711	29.81281	0.219	-0.126	11.35	1.653
2.772	606.1	-3.06	5.83	23.25	39.54	709.5	1.932	21.84235	0.199	-0.146	10.15	1.609
3.123	577.9	-3.25	4.66	22.08	39.68	697.8	2.176	16.69016	0.190	-0.155	8.98	1.582
3.466	555.4	-3.36	3.60	18.84	39.26	656.5	2.415	13.84132	0.183	-0.160	7.92	1.489
3.765	558.9	-3.37	3.01	17.25	41.40	662.7	2.623	11.69099	0.184	-0.161	7.33	1.503

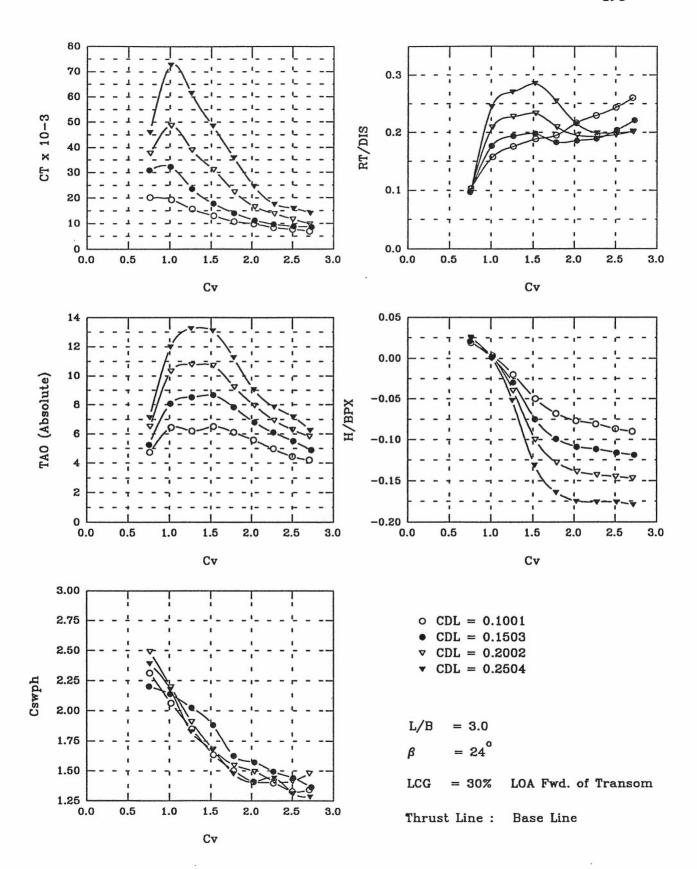


Figure B.46

```
Model No. T-3024
L/B Ratio
                     3.0
                                     Length Overal LOA
                                                          69.00 cm
Deadrise
                    24.00 deg
                                     Breath (Deck) B
                                                           23.00 cm
                                                                                              199
                                     Breath (Chine) BPX
                                                           21.00 cm
LCG Position
                    30.00 % TOA
                                     20.70 cm @ Transom
Displacement DIS 1216.0 gms
                                     Disp. Coeff.
                                                    CDL
                                                           0.1001
                    27.39 % B
VCG Position
                                     6.30 cm @ Base Line
Static trim TAOo
                     2.75 deg
Water Temp.
                     20.00 deg C
                                     Density
                                                   998.206 kg/m3
                                                                    Kin. Viscocity 0.1004E-05 m2/s
Vel
         RT
                  H
                         TAO
                                 LC
                                        T.K
                                                 WSPH
                                                        CV
                                                                CT
                                                                         RT/DIS H/BPX
                                                                                          TAO
                                                                                                 Cwsph
m/s
                                                               x10-3
          ams
                         Rel.
                                                                                          Abs.
                  CM
                                 CM
                                        CM
                                                  cm2
1.090
                                                                20.23245
                         1.99
                                               1019.9
                                                       0.759
                                                                          0.103 0.019
                                                                                          4.74
        124.7
                 0.39
                               34.15
                                      55.87
                                                                                                 2.313
1.464
         191.6
                 0.06
                         3.69
                               28.64
                                      51.75
                                                909.3
                                                       1.020
                                                                19.31862
                                                                          0.158 0.003
                                                                                          6.44
                                                                                                 2.062
1.820
         214.0
                -0.42
                         3.45
                               22.43
                                      49.68
                                                815.2
                                                       1.268
                                                                15.57546
                                                                          0.176 -0.020
                                                                                          6.20
                                                                                                 1.849
                                                                12.98967
2.198
         230.2
                -1.05
                         3.76
                               18.97
                                      44.85
                                                721.2
                                                       1.531
                                                                          0.189 -0.050
                                                                                          6.51
                                                                                                 1.635
2.553
         236.6
                -1.43
                         3.36
                               15.53
                                      43.13
                                                662.7
                                                       1.778
                                                               10.77071
                                                                          0.195 -0.068
                                                                                          6.11
                                                                                                 1.503
2.902
                                                620.9
                                                       2.022
                                                                9.85533
                                                                          0.216 -0.077
                                                                                          5.58
         262.1
                -1.62
                         2.83
                               12.28
                                                                                                 1.408
                                      42.66
                                                                8.39630
                                                                          0.229 -0.081
3.255
         278.9
                -1.71
                         2.22
                               10.35
                                      44.16
                                                616.0
                                                       2.268
                                                                                          4.97
                                                                                                 1.397
3.592
         294.9
                -1.83
                         1.69
                                8.63
                                      43.13
                                                584.8
                                                       2.503
                                                                7.68236
                                                                          0.243 -0.087
                                                                                          4.44
                                                                                                 1.326
3.883
                -1.89
                         1.45
                                6.90
                                                591.3
                                                       2.705
                                                                 6.95651 0.260 -0.090
                                                                                          4.20
         315.6
                                      45.43
                                                                                                 1.341
Displacement DIS 1825.0 gms
                                                     CDL
                                                            0.1503
                                     Disp. Coeff.
                   26.83 % B
                                     6.17 cm @ Base Line
VCG Position
                     3.24 deg
Static trim TAOo
Water Temp.
                    19.50 deg C
                                     Density
                                                   998.308 kg/m3
                                                                    Kin. Viscocity 0.1016E-05 m2/s
Vel
         RT
                  H
                        TAO
                                 LC
                                        T.K
                                                 WSPH
                                                        CV
                                                                CT
                                                                         RT/DIS H/BPX
                                                                                          TAO
                                                                                                 Cwsph
                                                               x10-3
                                                                                          Abs.
m/s
         ams
                  CM
                        Rel.
                                        CM
                                                  cm2
                                 CM
1.074
        176.3
                 0.43
                        2.02
                               34.15
                                      51.75
                                                970.7
                                                       0.749
                                                               30.93112
                                                                          0.097 0.021
                                                                                          5.26
                                                                                                 2.201
1.446
        323.5
                 0.03
                         4.84
                               33.12
                                      50.37
                                                943.1
                                                       1.007
                                                                32.25171
                                                                          0.177 0.001
                                                                                          8.08
                                                                                                 2.139
                                                               23.60678
1.816
        354.1
                -0.63
                         5.28
                               30.77
                                      48.30
                                                893.5
                                                       1.266
                                                                          0.194 -0.030
                                                                                          8.52
                                                                                                 2.026
2.191
        360.5
                -1.58
                        5.42
                               27.60
                                      45.89
                                                830.4
                                                       1.527
                                                               17.77515
                                                                          0.198 -0.075
                                                                                          8.66
                                                                                                 1.883
2.552
                -2.08
                                                       1.778
                                                               14.02794
                                                                          0.183 -0.099
                                                                                          7.83
        333.6
                         4.59
                               23.11
                                      40.36
                                                717.3
                                                                                                 1.627
                                                               11.30298
                                                                          0.186 -0.109
2.918
                -2.28
                        3.56
                                                                                          6.80
                                                                                                 1.574
        339.9
                               21.05
                                                693.9
                                                       2.033
                                      40.36
                                                                          0.189 -0.112
3.258
        345.6
                -2.35
                        2.86
                               18.29
                                      40.02
                                                658.8
                                                       2.270
                                                                9.71289
                                                                                          6.10
                                                                                                 1.494
3.609
        372.8
                -2.45
                        2.27
                               14.84
                                      41.40
                                                635.5
                                                       2.514
                                                                8.85393
                                                                          0.204 -0.116
                                                                                          5.51
                                                                                                 1.441
3.915
        403.1
               -2.49
                        1.65
                               10.35
                                      42.78
                                                600.4 2.727
                                                                8.60939
                                                                          0.221 -0.119
                                                                                          4.89
                                                                                                 1.361
Displacement DIS 2432.0 gms
                                                           0.2002
                                     Disp. Coeff. CDL
6.10 cm @ Base Line
                    26.52 % B
VCG Position
Static trim TAOo
                     3.89 deg
Water Temp.
                    19.50 deg C
                                                   998.308 kg/m3
                                                                    Kin. Viscocity
                                                                                        0.1016E-05 m2/s
                                     Density
Vel
                                                 WSPH
         RT
                                 LC
                                                        CV
                                                                CT
                                                                         RT/DTS H/BPX
                                                                                          TAO
                  H
                        TAO
                                        T.K
                                                                                                 Cwsph
                                                               x10-3
m/s
         gms
                  cm
                        Rel.
                                 CM
                                        CM
                                                  cm2
                                                                                          Abs.
1.093
        251.6
                 0.50
                        2.62
                               40.53
                                      56.86
                                               1098.0
                                                       0.761
                                                               37.71460
                                                                          0.103
                                                                                0.024
                                                                                          6.51
                                                                                                 2.490
1.456
        508.2
                 0.05
                               35.54
                                      50.37
                                               969.1
                                                       1.014
                                                               48.61756
                                                                          0.209 0.002
                                                                                         10.32
                                                                                                 2.197
                        6.43
                        6.88
                                                                                         10.77
        552.3
               -0.84
                               30.32
                                                841.8
                                                                                                 1.909
1.817
                                      44.21
                                                       1.266
                                                               39.03550
                                                                          0.227 - 0.040
2.197
        566.5
                -2.10
                        6.83
                               25.88
                                      39.68
                                                740.7
                                                       1.530
                                                               31.15022
                                                                          0.233 - 0.100
                                                                                         10.72
                                                                                                 1.680
2.563
        508.6
                -2.69
                        5.33
                               22.43
                                      37.95
                                                682.2
                                                       1.786
                                                               22.30379
                                                                          0.209 -0.128
                                                                                          9.22
                                                                                                 1.547
2.921
        473.4
                -2.91
                         4.06
                               20.36
                                      37.95
                                                658.8
                                                       2.035
                                                               16.54920
                                                                          0.195 -0.139
                                                                                          7.95
                                                                                                 1.494
3.274
        468.8
               -3.00
                        3.03
                              17.25
                                      37.95
                                                623.7
                                                       2.281
                                                               13.78279
                                                                          0.193 -0.143
                                                                                          6.92
                                                                                                 1.414
3.594
        476.2
               -3.05
                        2.39
                               15.53
                                      39.68
                                                623.8
                                                       2.504
                                                               11.61947
                                                                          0.196 -0.145
                                                                                          6.28
                                                                                                 1.414
3.885
        490.1
               -3.09
                        1.93
                              14.72
                                      42.94
                                                       2.707
                                                                9.79289
                                                                          0.202 -0.147
                                                                                          5.82
                                                                                                 1.478
                                                651.6
                   3042.0 gms
27.57 % B
Displacement DIS
                                     Disp. Coeff.
                                                    CDL
                                                            0.2505
                                     6.34 cm € Base Line
VCG Position
Static trim TAOo
                     4.32 deg
                                                                                        0.9916E-06 m2/s
Water Temp.
                    20.50 deg C
                                                  998.101 kg/m3
                                                                    Kin. Viscocity
                                     Density
Vel
         RT
                  H
                        TAO
                                 LC
                                        LK
                                                 WSPH
                                                                CT
                                                                         RT/DIS H/BPX
                                                                                          TAO
                                                                                                 Cwsph
                                                               x10-3
m/s
                                                                                          Abs.
                        Rel.
                                 CM
         qms
                  CM
                                        CM
                                                 cm2
                                                       0.757
1.087
        291.5
                 0.54
                        2.81
                               41.91
                                      52.05
                                               1053.9
                                                               46.04670 0.096 0.026
                                                                                          7.13
                                                                                                 2.390
                                               959.5
                                                       1.008
                                                               72.77737
                                                                          0.245 0.000
                                                                                                 2.176
1.447
        744.2
                 0.00
                        7.68
                              36.92
                                      48.30
                                                                                         12.00
1.803
        820.5
                -1.10
                        8.94
                               31.05
                                      40.36
                                                806.6
                                                       1.256
                                                               61.51017
                                                                          0.270 -0.052
                                                                                         13.26
                                                                                                 1.829
2.182
        867.6
                -2.75
                        8.78
                              26.88
                                      38.45
                                               738.2
                                                       1.520
                                                               48,52996
                                                                          0.285 -0.131
                                                                                         13.10
                                                                                                 1.674
                                                                          0.254 -0.164
2.548
        772.7
                -3.45
                        6.94
                              23.11
                                      34.50
                                                651.0
                                                       1.775
                                                               35.94795
                                                                                         11.26
                                                                                                 1.476
2.906
        653.4
                -3.67
                         4.72
                               20.38
                                      34.48
                                                619.9
                                                       2.025
                                                               24.53310
                                                                          0.215 -0.175
                                                                                          9.04
                                                                                                 1.406
                                                       2.279
3.271
        605.8
                -3.70
                        3.53
                               19.32
                                                635.5
                                                               17.51299
                                                                          0.199 -0.176
                                                                                          7.85
                                                                                                 1.441
                                      36.92
                                                               15.83174
                                                                          0.199 -0.176
                                                                                          7.16
3.607
        605.3
               -3.70
                        2.84
                              16.67
                                      34.46
                                                577.8
                                                      2.513
                                                                                                 1.310
3.895
                        1.93
                              15.53 34.50
                                               565.3 2.714
                                                               14.04388 0.201 -0.179
                                                                                          6.25
                                                                                                 1.282
        612.7
               -3.76
```

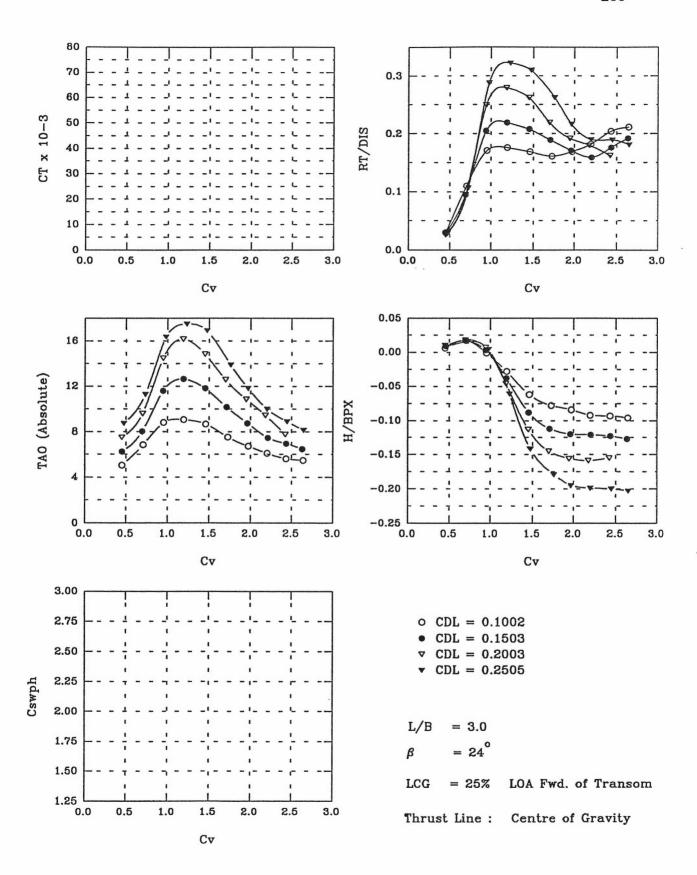


Figure B.47

						~							
	Model N	lo. T-30	24										
	L/B Rat			.0		Tonath O							
	Deadris					Length O			.00 cm				
	DeadLis	e	24	.00 deg		Breath (.00 cm			1	201
	TOO De-					Breath (.00 cm			100	
	LCG Pos	ition	25	.00 % L	OA	17.25 c	m @ Tra	ansom					
				20.00									
	Displac	ement D		6.0 gm		Disp. Co			.1002				
	VCG Pos	ition		.78 % B		7.77 cm	€ Base	Line					
	Static	trim TA	.00 4	.60 deg									
	Water 7	emp.	21	.50 deg	C	Density	997	.885 kg	/m3 Ki	n. Visc	ocity	0.9682E	-06 m2/s
						-					-		
	Vel	RT	н	TAO	LC	LK	WSPH	CV	CT	RT/DIS	H/BPX	TAO	Cwsph
	m/s	gms	cm	Rel.	cm	cm	cm2		x10-3			Abs.	•
_		_											
	0.647	36.2	0.12	0.45	0.00			0.451			0.006	5.05	0.000
	1.009	134.2	0.35	2.24	0.00			0.703	0.00000				0.000
	1.366		-0.02										
				4.22	0.00			0.951	0.00000				0.000
	1.717		-0.58	4.47	0.00	0.00		1.196			-0.028		0.000
	2.099		-1.31	4.09	0.00	0.00		1.462	0.00000				0.000
	2.475		-1.65	2.92	0.00	0.00		1.724	0.00000				0.000
	2.829		-1.76	2.11	0.00	0.00	0.0	1.971	0.00000		-0.084		0.000
	3.161		-1.92	1.48	0.00	0.00	0.0	2.202	0.00000				0.000
	3.492		-1.96	1.02	0.00	0.00	0.0	2.433					0.000
	3.790	256.7	-2.02	0.87	0.00	0.00	0.0	2.641	0.00000	0.211	-0.096	5.47	0.000
	Displac	ement D	IS 182	5.0 gm:	S	Disp. Co	eff. C	DL 0	.1503				
	VCG Pos	ition	31	.04 % B		7.14 cm	<pre>@ Base</pre>	Line					
	Static	trim TA	.00 5	.68 deg									
	Water T	emp.	21	.50 deg	C	Density	997	.885 kg	/m3 Ki	n. Visc	ocity	0.9682E	-06 m2/s
											_		
	Vel	RT	н	TAO	LC	LK	WSPH	CV	CT	RT/DIS	H/BPX	TAO	Cwsph
	m/s	gms	cm	Rel.	cm	cm	cm2		x10-3			Abs.	
_													
	0.648	52.4	0.18	0.56	0.00	0.00		0.452	0.00000			6.24	0.000
	0.992	173.8						0.691					0.000
	1.352		0.35	2.34	0.00	0.00			0.00000				
		373.9	0.07	5.93	0.00	0.00		0.942	0.00000			11.61	0.000
	1.711	398.8		6.96	0.00	0.00		1.192	0.00000		-0.038	12.64	0.000
	2.089		-1.86	6.13	0.00	0.00		1.455	0.00000			11.81	0.000
	2.449		-2.35	4.51	0.00	0.00		1.707				10.19	0.000
	2.815	312.6		3.09	0.00	0.00		1.961	0.00000	0.171	-0.120	8.77	0.000
	3.171	290.5		1.79	0.00	0.00		2.209					0.000
											0 100		0 000
	3.493	321.8	-2.58	1.27	0.00	0.00	0.0	2.434	0.00000	0.176	-0.123	6.95	0.000
	3.493 3.777	321.8 351.0		1.27 0.78	0.00	0.00		2.434	0.00000				0.000
	3.777	351.0	-2.67	0.78	0.00	0.00	0.0	2.631	0.00000				
	3.777	351.0 ement D	-2.67 IS 243	0.78 2.0 gm:	0.00	0.00 Disp. Coe	0.0 eff. C	2.631 DL 0					
	3.777 Displac VCG Pos	351.0 ement D ition	-2.67 IS 243 29	0.78 2.0 gm:	0.00	0.00	0.0 eff. C	2.631 DL 0	0.00000				
	3.777 Displac VCG Pos Static	351.0 ement D ition trim TA	-2.67 IS 243 29 00 6	0.78 2.0 gm: .70 % B .91 deg	0.00	0.00 Disp. Coe 6.83 cm	0.0 eff. C @ Base	2.631 DL 0 Line	0.00000	0.192	-0.127	6.46	0.000
	3.777 Displac VCG Pos	351.0 ement D ition trim TA	-2.67 IS 243 29 00 6	0.78 2.0 gm: .70 % B .91 deg	0.00	0.00 Disp. Coe 6.83 cm	0.0 eff. C @ Base	2.631 DL 0 Line	0.00000	0.192	-0.127	6.46	0.000
	3.777 Displac VCG Pos Static Water T	351.0 ement D ition trim TA emp.	-2.67 IS 243 29 00 6 21	0.78 2.0 gm: .70 % B .91 deg .50 deg	0.00 s	0.00 Disp. Coe 6.83 cm Density	0.0 eff. C @ Base 997	2.631 DL 0 Line .885 kg	0.00000 .2003 /m3 Ki:	0.192 n. Visco	-0.127	6.46 0.9682E	0.000 -06 m2/s
	3.777 Displace VCG Pos Static Water T	351.0 ement D ition trim TA emp. RT	-2.67 IS 243 29 00 6 21	0.78 2.0 gms .70 % B .91 deg .50 deg	0.00 c LC	0.00 Disp. Coe 6.83 cm Density LK	0.0 eff. C @ Base 997 WSPH	2.631 DL 0 Line	0.00000 .2003 /m3 Ki:	0.192 n. Visco	-0.127	6.46 0.9682E TAO	0.000
	3.777 Displac VCG Pos Static Water T	351.0 ement D ition trim TA emp.	-2.67 IS 243 29 00 6 21	0.78 2.0 gm: .70 % B .91 deg .50 deg	0.00 s	0.00 Disp. Coe 6.83 cm Density	0.0 eff. C @ Base 997	2.631 DL 0 Line .885 kg	0.00000 .2003 /m3 Ki:	0.192 n. Visco	-0.127	6.46 0.9682E	0.000 -06 m2/s
	J.777 Displac VCG Pos Static Water T Vel m/s	351.0 ement D ition trim TA emp. RT gms	-2.67 IS 243 29 00 6 21 H Cm	0.78 2.0 gm: .70 % B .91 deg .50 deg TAO Rel.	0.00	0.00 Disp. Coe 6.83 cm Density LK cm	0.0 eff. C @ Base 997 WSPH cm2	2.631 DL 0 Line .885 kg	0.00000 .2003 /m3 Ki: CT x10-3	0.192	-0.127	6.46 0.9682E TAO Abs.	0.000 -06 m2/s Cwsph
_	3.777 Displac VCG Pos Static Water T Vel m/s 0.646	351.0 ement D ition trim TA emp. RT gms 63.7	-2.67 IS 243 29 00 6 21 H cm	0.78 2.0 gms .70 % B .91 deg .50 deg TAO Rel.	0.00 C LC cm 0.00	0.00 Disp. Coe 6.83 cm Density LK cm	0.0 eff. C @ Base 997 WSPH cm2	2.631 DL 0 Line .885 kg CV	0.00000 .2003 /m3 Ki: cr x10-3	0.192 n. Visco RT/DIS 0.026	-0.127 ocity H/BPX 0.010	6.46 0.9682E TAO Abs.	0.000 -06 m2/s Cwsph
	3.777 Displac VCG Pos Static Water T Vel m/s 0.646 0.999	asi.0 ement D ition trim TA emp. RT gms 63.7 230.1	-2.67 IS 243 29 00 6 21 H cm 0.20 0.37	0.78 2.0 gms .70 % B .91 deg .50 deg TAO Rel.	0.00 LC cm 0.00 0.00	0.00 Disp. Coc 6.83 cm Density LK cm 0.00 0.00	0.0 eff. C @ Base 997 WSPH cm2 0.0	2.631 DL 0 Line .885 kg CV 0.450 0.696	0.00000 .2003 /m3 Ki: x10-3 0.00000 0.00000	0.192 n. Visco RT/DIS 0.026 0.095	-0.127 ocity H/BPX 0.010 0.018	0.9682E TAO Abs. 7.50 9.62	0.000 -06 m2/s Cwsph 0.000 0.000
-	3.777 Displac VCG Pos Static Water T Vel m/s 0.646 0.999 1.354	351.0 ement D ition trim TA emp. RT gms 63.7 230.1 604.5	-2.67 IS 243 29 00 6 21 H cm 0.20 0.37 0.14	0.78 2.0 gm: .70 % B .91 deg .50 deg TAO Rel. 0.59 2.71 7.57	0.00 LC Cm 0.00 0.00 0.00	0.00 Disp. Coe 6.83 cm Density LK cm 0.00 0.00 0.00	0.0 eff. C @ Base 997 WSPH cm2	2.631 DL 0 Line .885 kg CV 0.450 0.696 0.943	0.00000 .2003 /m3 Ki: CT x10-3 0.00000 0.00000	0.192 n. Visco RT/DIS 0.026 0.095 0.249	-0.127 ocity H/BPX 0.010 0.018 0.007	0.9682E TAO Abs. 7.50 9.62 14.48	0.000 -06 m2/s Cwsph 0.000 0.000
	3.777 Displace VCG Pos Static Water T Vel m/s 0.646 0.999 1.354 1.703	351.0 ement D ition trim TA emp. RT gms 63.7 230.1 604.5 679.2	-2.67 IS 243. 29 00 6 21 H cm 0.20 0.37 0.14 -0.98	0.78 2.0 gms .70 % B .91 deg .50 deg TAO Rel. 0.59 2.71 7.57 9.26	0.00 LC Cm 0.00 0.00 0.00 0.00	0.00 Disp. Coe 6.83 cm Density LK cm 0.00 0.00 0.00	0.0 eff. C @ Base 997 WSPH cm2 0.0 0.0 0.0	2.631 DL 0 Line .885 kg CV 0.450 0.696 0.943 1.187	0.00000 .2003 /m3 Ki: CT x10-3 0.00000 0.00000 0.00000	0.192 n. Visco RT/DIS 0.026 0.095 0.249 0.279	-0.127 ocity H/BPX 0.010 0.018 0.007 -0.046	7.50 9.62 14.48 16.17	0.000 -06 m2/s Cwsph 0.000 0.000 0.000
_	3.777 Displac VCG Pos Static Water T Vel m/s 0.646 0.999 1.354 1.703 2.083	351.0 ement D ition trim TA emp. RT gms 	-2.67 IS 243. 29 00 6 21 H cm 0.20 0.37 0.14 -0.98 -2.38	0.78 2.0 gms .70 % B .91 deg .50 deg TAO Rel. 0.59 2.71 7.57 9.26 7.95	0.000 E	0.00 Disp. Coe 6.83 cm Density LK cm 0.00 0.00 0.00 0.00	0.0 eff. C @ Base 997 WSPH cm2 0.0 0.0 0.0	2.631 DL 0 Line .885 kg CV 0.450 0.696 0.943 1.187 1.451	0.00000 .2003 /m3 Ki: x10-3 0.00000 0.00000 0.00000 0.00000	0.192 n. Visco RT/DIS 0.026 0.095 0.249 0.279 0.262	-0.127 ocity H/BPX 0.010 0.018 0.007 -0.046 -0.113	7.50 9.622 14.48 16.17	0.000 -06 m2/s Cwsph 0.000 0.000 0.000 0.000
-	3.777 Displac VCG Pos Static Water T Vel m/s 0.646 0.999 1.354 1.703 2.083 2.432	351.0 ement D ition trim TA emp. RT gms 	-2.67 IS 243. 29 00 6 21 H Cm 0.20 0.37 0.14 -0.98 -2.38 -3.04	0.78 2.0 gms .70 % B .91 deg .50 deg TAO Rel. 0.59 2.71 7.57 9.26 7.95 5.68	0.000 LC Cm 0.000 0.000 0.000 0.000 0.000 0.000	0.00 Disp. Coe 6.83 cm Density LK cm 0.00 0.00 0.00 0.00 0.00	0.0 eff. C @ Base 997 WSPH cm2 0.0 0.0 0.0	2.631 DL 0 Line .885 kg CV 0.450 0.696 0.943 1.187 1.451 1.695	0.00000 .2003 /m3 Ki: x10-3 0.00000 0.00000 0.00000 0.00000 0.00000	0.192 n. Visco RT/DIS 0.026 0.095 0.249 0.279 0.262 0.219	-0.127 ocity H/BPX 0.010 0.018 0.007 -0.046 -0.113 -0.145	7.50 9.62 14.48 16.17 14.86 12.59	0.000 -06 m2/s Cwsph 0.000 0.000 0.000 0.000 0.000
-	3.777 Displac VCG Pos Static Water T Vel m/s 0.646 0.999 1.354 1.703 2.083 2.432 2.791	351.0 ement D ition trim TA emp. RT gms 	-2.67 IS 243. 29 Oo 6 21 H Cm 0.20 0.37 0.14 -0.98 -2.38 -3.04 -3.28	0.78 2.0 gms .70 % B .91 deg .50 deg TAO Rel. 0.59 2.71 7.57 9.26 7.95	0.000 E	0.00 Disp. Coe 6.83 cm Density LK cm 0.00 0.00 0.00 0.00	0.0 eff. C @ Base 997 WSPH cm2 0.0 0.0 0.0	2.631 DL 0 Line .885 kg CV 0.450 0.696 0.943 1.187 1.451	0.00000 .2003 /m3 Ki: x10-3 0.00000 0.00000 0.00000 0.00000	0.192 n. Visco RT/DIS 0.026 0.095 0.249 0.279 0.262 0.219	-0.127 ocity H/BPX 0.010 0.018 0.007 -0.046 -0.113	7.50 9.622 14.48 16.17	0.000 -06 m2/s Cwsph 0.000 0.000 0.000 0.000 0.000
	3.777 Displace VCG Pos Static Water T Vel m/s 0.646 0.999 1.354 1.703 2.083 2.432 2.791 3.129	351.0 ement D ition trim TA emp. RT gms 	-2.67 IS 243. 29 00 6 21 H Cm 0.20 0.37 0.14 -0.98 -2.38 -3.04	0.78 2.0 gms .70 % B .91 deg .50 deg TAO Rel. 0.59 2.71 7.57 9.26 7.95 5.68	0.000 LC CM 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.00 Disp. Coe 6.83 cm Density LK cm 0.00 0.00 0.00 0.00 0.00	0.0 eff. C @ Base 997 WSPH cm2 0.0 0.0 0.0	2.631 DL 0 Line .885 kg CV 0.450 0.696 0.943 1.187 1.451 1.695	0.00000 .2003 /m3 Ki: x10-3 0.00000 0.00000 0.00000 0.00000 0.00000	0.192 n. Visco RT/DIS 0.026 0.095 0.249 0.279 0.262 0.219 0.192	-0.127 ocity H/BPX 0.010 0.018 0.007 -0.046 -0.113 -0.145	7.50 9.62 14.48 16.17 14.86 12.59	0.000 -06 m2/s Cwsph 0.000 0.000 0.000 0.000 0.000
_	3.777 Displac VCG Pos Static Water T Vel m/s 0.646 0.999 1.354 1.703 2.083 2.432 2.791	351.0 ement D ition trim TA emp. RT gms 	-2.67 IS 243. 29 00 6 21 H Cm 0.20 0.37 0.14 -0.98 -2.38 -3.04 -3.28 -3.33	0.78 2.0 gms .70 % B .91 deg .50 deg TAO Rel. 0.59 2.71 7.57 9.26 7.95 5.68 3.94	0.000 LC CM 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.00 Disp. Coc 6.83 cm Density LK cm 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.0 eff. C @ Base 997 WSPH cm2 0.0 0.0 0.0 0.0	2.631 DL 0 Line .885 kg CV 0.450 0.696 0.943 1.187 1.451 1.695 1.945	0.00000 .2003 /m3 Ki: x10-3 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.192 n. Visco RT/DIS 0.026 0.095 0.249 0.279 0.262 0.219 0.192 0.180	-0.127 ocity H/BPX 0.010 0.018 0.007 -0.046 -0.113 -0.145 -0.156	0.9682E TAO Abs. 7.50 9.62 14.48 16.17 14.86 12.59 10.85	0.000 -06 m2/s Cwsph 0.000 0.000 0.000 0.000 0.000
	3.777 Displace VCG Pos Static Water T Vel m/s 0.646 0.999 1.354 1.703 2.083 2.432 2.791 3.129	351.0 ement D ition trim TA emp. RT gms 63.7 230.1 604.5 679.2 638.3 533.2 467.0 439.0	-2.67 IS 243. 29 00 6 21 H cm 0.20 0.37 0.14 -0.98 -2.38 -3.04 -3.28 -3.33 -2.01	0.78 2.0 gms .70 % B .91 deg .50 deg TAO Rel 0.59 2.71 7.57 9.26 7.95 5.68 3.94 2.56	0.000 LC CM 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.00 Disp. Coe 6.83 cm Density LK cm 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.0 eff. C @ Base 997 WSPH cm2 0.0 0.0 0.0 0.0 0.0	2.631 DL 0 Line .885 kg CV 	0.00000 .2003 /m3 Ki: x10-3 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.192 n. Visco RT/DIS 0.026 0.095 0.249 0.279 0.262 0.219 0.192 0.180 0.095	-0.127 Docity H/BPX 0.010 0.018 0.007 -0.046 -0.113 -0.145 -0.156 -0.159 -0.096	7.50 9.62 14.48 16.17 14.86 12.59 10.85 9.47 7.42	0.000 -06 m2/s Cwsph 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
	3.777 Displace VCG Pos Static Water T Vel m/s 0.646 0.999 1.354 1.703 2.083 2.432 2.791 3.129 3.472	351.0 ement D ition trim TA emp. RT gms 63.7 230.1 604.5 679.2 638.3 533.2 467.0 439.0 229.9	-2.67 IS 243. 29 00 6 21 H cm 0.20 0.37 0.14 -0.98 -2.38 -3.04 -3.28 -3.33 -2.01	0.78 2.0 gms .70 % B .91 deg .50 deg TAO Rel. 0.59 2.71 7.57 9.26 7.95 5.68 3.94 2.56 0.51	0.00 E C LC Cm 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.00 Disp. Coe 6.83 cm Density LK cm 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.0 eff. C @ Base 997 WSPH cm2 0.0 0.0 0.0 0.0 0.0	2.631 DL 0 Line .885 kg CV 0.450 0.696 0.943 1.187 1.695 1.945 2.180 2.419	0.00000 .2003 /m3 Ki: CT x10-3 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.192 n. Visco RT/DIS 0.026 0.095 0.249 0.279 0.262 0.219 0.192 0.180 0.095	-0.127 Docity H/BPX 0.010 0.018 0.007 -0.046 -0.113 -0.145 -0.156 -0.159 -0.096	7.50 9.62 14.48 16.17 14.86 12.59 10.85 9.47 7.42	0.000 -06 m2/s Cwsph 0.000 0.000 0.000 0.000 0.000 0.000
	3.777 Displac VCG Pos Static Water T Vel m/s 0.646 0.999 1.354 1.703 2.083 2.432 2.791 3.129 3.472 3.478	351.0 ement D ition trim TA emp. RT gms	-2.67 IS 243. 29 00 6 21 H Cm 0.20 0.37 0.14 -0.98 -2.38 -3.04 -3.28 -3.33 -2.01 -3.26	0.78 2.0 gms .70 % B .91 deg .50 deg TAO Rel. 0.59 2.71 7.57 9.26 7.95 5.68 3.94 2.56 0.51 0.86	0.000 LC Cm 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.00 Disp. Coe 6.83 cm Density LK cm 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	0.0 eff. C @ Base 997 WSPH cm2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	2.631 DL 0 Line .885 kg CV 0.450 0.696 0.943 1.187 1.451 1.695 1.945 2.180 2.419 2.423	0.00000 .2003 /m3 Ki: x10-3 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.192 n. Visco RT/DIS 0.026 0.095 0.249 0.279 0.262 0.219 0.192 0.180 0.095	-0.127 Docity H/BPX 0.010 0.018 0.007 -0.046 -0.113 -0.145 -0.156 -0.159 -0.096	7.50 9.62 14.48 16.17 14.86 12.59 10.85 9.47 7.42	0.000 -06 m2/s Cwsph 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
	3.777 Displace VCG Pos Static Water T Vel m/s	351.0 ement D ition trim TA emp. RT gms 63.7 230.1 604.5 679.2 638.3 533.2 467.0 439.0 229.9 394.8 ement D	-2.67 IS 243 29 00 6 21 H Cm 0.20 0.37 0.14 -0.98 -2.38 -3.04 -3.28 -3.33 -2.01 -3.26 IS 304	0.78 2.0 gms 70 % B .91 deg .50 deg TAO Rel 0.59 2.71 7.57 9.26 7.95 5.68 3.94 2.56 0.51 0.86 2.0 gms	0.000 LC cm 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.00 Disp. Coe 6.83 cm Density LK cm 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	0.0 eff. C @ Base 997 WSPH cm2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	2.631 DL 0 Line .885 kg CV 	0.00000 .2003 /m3 Ki: x10-3 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.192 n. Visco RT/DIS 0.026 0.095 0.249 0.279 0.262 0.219 0.192 0.180 0.095	-0.127 Docity H/BPX 0.010 0.018 0.007 -0.046 -0.113 -0.145 -0.156 -0.159 -0.096	7.50 9.62 14.48 16.17 14.86 12.59 10.85 9.47 7.42	0.000 -06 m2/s Cwsph 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
	3.777 Displace VCG Pos Static Water T Vel m/s	351.0 ement D ition trim TA emp. RT gms 63.7 230.1 604.5 679.2 638.3 533.2 467.0 439.0 229.9 394.8 ement D ition	-2.67 IS 243. 29 00 6 21 H Cm 0.20 0.37 0.14 -0.98 -2.38 -3.04 -3.28 -3.33 -2.01 -3.26 IS 304: 30	0.78 2.0 gms .70 % B .91 deg .50 deg TAO Rel 0.59 2.71 7.57 9.26 7.95 5.68 3.94 2.56 0.51 0.86 2.0 gms .09 % B	0.000 LC cm 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.00 Disp. Coe 6.83 cm Density LK cm 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	0.0 eff. C @ Base 997 WSPH cm2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	2.631 DL 0 Line .885 kg CV 	0.00000 .2003 /m3 Ki: x10-3 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.192 n. Visco RT/DIS 0.026 0.095 0.249 0.279 0.262 0.219 0.192 0.180 0.095	-0.127 Docity H/BPX 0.010 0.018 0.007 -0.046 -0.113 -0.145 -0.156 -0.159 -0.096	7.50 9.62 14.48 16.17 14.86 12.59 10.85 9.47 7.42	0.000 -06 m2/s Cwsph 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
	3.777 Displace VCG Pos Static Water T Vel m/s	351.0 ement D ition trim TA emp. RT gms 63.7 230.1 604.5 679.2 638.3 533.2 467.0 439.0 229.9 394.8 ement D ition trim TA	-2.67 IS 243. 29 00 6 21 H cm 0.20 0.37 0.14 -0.98 -2.38 -3.04 -3.28 -3.33 -2.01 -3.26 IS 304: 300 00 8	0.78 2.0 gms .70 % B .91 deg .50 deg TAO Rel. 0.59 2.71 7.57 9.26 7.95 5.68 3.94 2.56 0.51 0.86 2.0 gms .09 % B	0.000 LC cm 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.00 Disp. Coe 6.83 cm Density LK cm 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.0 eff. C @ Base 997 WSPH cm2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	2.631 DL 0 Line .885 kg CV 0.450 0.696 0.943 1.187 1.451 1.695 1.945 2.180 2.419 2.423 DL 0 Line	0.00000 .2003 /m3 Ki: x10-3 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.192 n. Visco RT/DIS 0.026 0.095 0.249 0.279 0.262 0.219 0.192 0.180 0.095 0.162	-0.127 M/BPX 0.010 0.018 0.007 -0.046 -0.113 -0.145 -0.156 -0.159 -0.096 -0.155	7.50 9.622 14.48 16.17 14.86 12.59 10.85 9.47 7.42 7.77	0.000 -06 m2/s Cwsph 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
	3.777 Displace VCG Pos Static Water T Vel m/s	351.0 ement D ition trim TA emp. RT gms 63.7 230.1 604.5 679.2 638.3 533.2 467.0 439.0 229.9 394.8 ement D ition trim TA	-2.67 IS 243. 29 00 6 21 H cm 0.20 0.37 0.14 -0.98 -2.38 -3.04 -3.28 -3.33 -2.01 -3.26 IS 304: 300 00 8	0.78 2.0 gms .70 % B .91 deg .50 deg TAO Rel 0.59 2.71 7.57 9.26 7.95 5.68 3.94 2.56 0.51 0.86 2.0 gms .09 % B	0.000 LC cm 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.00 Disp. Coe 6.83 cm Density LK cm 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	0.0 eff. C @ Base 997 WSPH cm2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	2.631 DL 0 Line .885 kg CV 0.450 0.696 0.943 1.187 1.451 1.695 1.945 2.180 2.419 2.423 DL 0 Line	0.00000 .2003 /m3 Ki: x10-3 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.192 n. Visco RT/DIS 0.026 0.095 0.249 0.279 0.262 0.219 0.192 0.180 0.095 0.162	-0.127 M/BPX 0.010 0.018 0.007 -0.046 -0.113 -0.145 -0.156 -0.159 -0.096 -0.155	7.50 9.622 14.48 16.17 14.86 12.59 10.85 9.47 7.42 7.77	0.000 -06 m2/s Cwsph 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
	Jarra	351.0 ement D ition trim TA emp. RT gms 63.7 230.1 604.5 679.2 638.3 533.2 467.0 439.0 229.9 394.8 ement D ition trim TA emp.	-2.67 IS 243 29 00 6 21 H Cm 0.20 0.37 0.14 -0.98 -2.38 -3.04 -3.28 -3.33 -2.01 -3.26 IS 304 30 00 8 20	0.78 2.0 gms .70 % B .91 deg .50 deg TAO Rel 0.59 2.71 7.57 9.26 7.95 5.68 3.94 2.56 0.51 0.86 2.0 gms .09 % B .02 deg .50 deg	0.000 LC cm 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.00 Disp. Coe 6.83 cm Density LK cm 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.0 eff. C @ Base 997 WSPH cm2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	2.631 DL 0 Line .885 kg CV 0.450 0.696 0.943 1.187 1.451 1.695 1.945 2.180 2.419 2.423 DL 0 Line	0.00000 .2003 /m3 Ki: CT x10-3 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.192 n. Visco RT/DIS 0.026 0.095 0.249 0.279 0.262 0.219 0.192 0.180 0.095 0.162	-0.127 H/BPX 0.010 0.018 0.007 -0.046 -0.113 -0.145 -0.156 -0.159 -0.096 -0.155	7.50 Abs. 7.50 9.62 14.48 16.17 14.86 12.59 10.85 9.47 7.42 7.77	0.000 -06 m2/s Cwsph 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
-	J.777 Displace VCG Pos Static Water T Vel m/s 0.646 0.999 1.354 1.703 2.083 2.432 2.791 3.129 3.472 3.478 Displace VCG Pos Static Water T	351.0 ement D ition trim TA emp. RT gms 63.7 230.1 604.5 679.2 638.3 533.2 467.0 439.0 229.9 394.8 ement D ition trim TA emp. RT	-2.67 IS 243. 29 00 6 21 H Cm 0.20 0.37 0.14 -0.98 -2.38 -3.04 -3.28 -3.33 -2.01 -3.26 IS 304: 30 00 8 20 H	0.78 2.0 gms 70 % B .91 deg .50 deg TAO Rel 0.59 2.71 7.57 9.26 7.95 5.68 3.94 2.56 0.51 0.86 2.0 gms .09 % B .02 deg .50 deg	0.000 LC Cm 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.00 Disp. Coe 6.83 cm Density LK cm 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	0.0 eff. C @ Base 997 WSPH cm2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	2.631 DL 0 Line .885 kg CV 0.450 0.696 0.943 1.187 1.451 1.695 1.945 2.180 2.419 2.423 DL 0 Line	0.00000 .2003 /m3 Ki: CT x10-3 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.192 n. Visco RT/DIS 0.026 0.095 0.249 0.279 0.262 0.219 0.192 0.180 0.095 0.162	-0.127 M/BPX 0.010 0.018 0.007 -0.046 -0.113 -0.145 -0.156 -0.159 -0.096 -0.155	0.9682E TAO Abs 7.50 9.62 14.48 16.17 14.86 12.59 10.85 9.47 7.42 7.77	0.000 -06 m2/s Cwsph 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
	Jarra	351.0 ement D ition trim TA emp. RT gms 63.7 230.1 604.5 679.2 638.3 533.2 467.0 439.0 229.9 394.8 ement D ition trim TA emp.	-2.67 IS 243 29 00 6 21 H Cm 0.20 0.37 0.14 -0.98 -2.38 -3.04 -3.28 -3.33 -2.01 -3.26 IS 304 30 00 8 20	0.78 2.0 gms .70 % B .91 deg .50 deg TAO Rel 0.59 2.71 7.57 9.26 7.95 5.68 3.94 2.56 0.51 0.86 2.0 gms .09 % B .02 deg .50 deg	0.000 LC cm 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.00 Disp. Coe 6.83 cm Density LK cm 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.0 eff. C @ Base 997 WSPH cm2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	2.631 DL 0 Line .885 kg CV 0.450 0.696 0.943 1.187 1.451 1.695 1.945 2.180 2.419 2.423 DL 0 Line	0.00000 .2003 /m3 Ki: CT x10-3 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.192 n. Visco RT/DIS 0.026 0.095 0.249 0.279 0.262 0.192 0.192 0.192 0.1962 n. Visco RT/DIS	-0.127 h/BPX 0.010 0.018 0.007 -0.046 -0.113 -0.145 -0.156 -0.155 -0.155	0.9682E TAO Abs. 7.50 9.62 14.48 16.17 14.86 12.59 10.85 9.47 7.42 7.77	0.000 -06 m2/s Cwsph 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
	3.777 Displace VCG Pos Static Water T Vel m/s 0.646 0.999 1.354 1.703 2.083 2.432 2.791 3.129 3.472 3.478 Displace VCG Pos Static Water T Vel m/s	351.0 ement D ition trim TA emp. RT gms 63.7 230.1 604.5 679.2 638.3 533.2 467.0 439.0 229.9 394.8 ement D ition trim TA emp. RT gms	-2.67 IS 243. 29 00 6 21 H cm 0.20 0.37 0.14 -0.98 -2.38 -3.04 -3.28 -3.201 -3.26 IS 3043 300 8 20 H cm	0.78 2.0 gms .70 % B .91 deg .50 deg TAO Rel. 0.59 2.71 7.57 9.26 7.95 5.68 3.94 2.56 0.51 0.86 2.0 gms .09 % B .02 deg .50 deg TAO Rel.	0.000 I.C. cm 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0.00 Disp. Coe 6.83 cm Density LK cm 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.0 eff. C @ Base 997 WSPH cm2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 WSPH cm2	2.631 DL 0 Line .885 kg CV 0.450 0.696 0.943 1.187 1.451 1.695 2.180 2.419 2.423 DL 0 Line .101 kg	0.00000 .2003 /m3 Ki: x10-3 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.192 n. Visco RT/DIS 0.026 0.095 0.249 0.279 0.262 0.219 0.192 0.180 0.095 0.162	-0.127 M/BPX 0.010 0.018 0.007 -0.046 -0.113 -0.145 -0.156 -0.159 -0.096 -0.155	7.50 9.62 14.48 16.17 14.86 12.59 10.85 9.47 7.42 7.77	0.000 -06 m2/s Cwsph 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 -06 m2/s Cwsph
	3.777 Displace VCG Pos Static Water T Vel m/s	351.0 ement D ition trim TA emp. RT gms 63.7 230.1 604.5 679.2 638.3 533.2 467.0 439.0 229.9 394.8 ement D ition trim TA emp. RT gms 86.3	-2.67 IS 243. 29 00 6 21 H CM 0.20 0.37 0.14 -0.98 -2.38 -3.04 -3.28 -3.33 -2.01 -3.26 IS 304: 300 00 8 20 H CM	0.78 2.0 gms .70 % B .91 deg .50 deg TAO Rel. 0.59 2.71 7.57 9.26 7.95 5.68 3.94 2.56 0.51 0.86 2.0 gms .09 % B .02 deg .50 deg TAO Rel. 0.72	0.000 LC cm 0.000	0.00 Disp. Coe 6.83 cm Density LK cm 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.0 eff. C @ Base 997 WSPH cm2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 WSPH cm2	2.631 DL 0 Line .885 kg CV 0.450 0.696 0.943 1.187 1.451 1.695 1.945 2.180 2.419 2.423 DL 0 Line .101 kg	0.00000 .2003 /m3 Ki: x10-3 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.192 n. Visco RT/DIS 0.026 0.095 0.249 0.279 0.262 0.219 0.192 0.180 0.095 0.162	-0.127 Docity H/BPX -0.010 0.018 0.007 -0.046 -0.113 -0.145 -0.156 -0.159 -0.096 -0.155	0.9682E TAO Abs. 7.50 9.62 14.48 16.17 14.86 12.59 10.85 9.47 7.42 7.77	0.000 -06 m2/s Cwsph 0.000 0.000 0.000 0.000 0.000 0.000 0.000 -06 m2/s Cwsph
	3.777 Displace VCG Pos Static Water T Vel m/s 0.646 0.999 1.354 1.703 2.083 2.432 2.791 3.129 3.472 3.478 Displace VCG Pos Static Water T Vel m/s 0.679 1.044	351.0 ement D ition trim TA emp. RT gms 63.7 230.1 604.5 679.2 638.3 533.2 467.0 439.0 229.9 394.8 ement D ition trim TA emp. RT gms 86.3 325.3	-2.67 IS 243. 29 00 6 21 H Cm 0.20 0.37 0.14 -0.98 -2.38 -3.04 -3.28 -3.33 -2.01 -3.26 IS 304: 30 00 8 20 H Cm 0.17 0.34	0.78 2.0 gms 70 % B .91 deg .50 deg TAO Rel 0.59 2.71 7.57 9.26 7.95 5.68 3.94 2.56 0.51 0.86 2.0 gms .09 % B .02 deg .50 deg TAO Rel 0.72 3.27	0.000 LC Cm 0.000	0.00 Disp. Coe 6.83 cm Density LK cm 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	0.0 eff. C @ Base 997 WSPH cm2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	2.631 DL 0 Line .885 kg CV 0.450 0.696 0.943 1.187 1.451 1.695 1.945 2.180 2.419 2.423 DL 0 Line .101 kg	0.00000 .2003 /m3 Ki: CT x10-3	0.192 n. Visco RT/DIS 0.026 0.095 0.249 0.279 0.262 0.219 0.192 0.180 0.095 0.162 n. Visco RT/DIS 0.028 0.107	-0.127 H/BPX -0.010 0.018 0.007 -0.046 -0.113 -0.145 -0.156 -0.159 -0.096 -0.155	0.9682E TAO Abs. 7.50 9.62 14.48 16.17 14.86 12.59 10.85 9.47 7.42 7.77	0.000 -06 m2/s Cwsph 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 -06 m2/s Cwsph 0.000 0.000
	3.777 Displace VCG Pos Static Water T Vel m/s	351.0 ement D ition trim TA emp. RT gms 63.7 230.1 604.5 679.2 638.3 533.2 467.0 439.0 229.9 394.8 ement D ition trim TA emp. RT gms 86.3 325.3 877.3	-2.67 IS 243. 29 00 6 21 H Cm 0.20 0.37 0.14 -0.98 -2.38 -3.04 -3.28 -3.33 -2.01 -3.26 IS 304: 30 00 8 20 H Cm 0.17 0.34 0.09	0.78 2.0 gms 70 % B .91 deg .50 deg TAO Rel. 0.59 2.71 7.57 9.26 7.95 5.68 3.94 2.56 0.51 0.86 2.0 gms .09 % B .02 deg .50 deg TAO Rel. 0.72 3.27 8.32	0.000 LC Cm 0.000	0.00 Disp. Coe 6.83 cm Density LK cm 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.0 eff. C @ Base 997 WSPH Cm2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	2.631 DL 0 Line .885 kg CV 0.450 0.696 0.943 1.187 1.451 1.695 1.945 2.180 2.419 2.423 DL 0 Line .101 kg CV	0.00000 .2003 /m3 Ki: CT x10-3 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.192 n. Visco RT/DIS 0.026 0.095 0.249 0.279 0.262 0.192 0.180 0.095 0.162 n. Visco RT/DIS 0.028 0.107 0.288	-0.127 h/BPX 0.010 0.018 0.007 -0.046 -0.113 -0.156 -0.156 -0.155 city H/BPX	0.9682E TAO Abs. 7.50 9.62 14.48 16.17 14.86 12.59 10.85 9.47 7.42 7.77 0.9916E TAO Abs. 8.74 11.29 16.34	0.000 -06 m2/s Cwsph 0.000 0.000 0.000 0.000 0.000 0.000 0.000 -06 m2/s Cwsph 0.000 0.000
	3.777 Displace VCG Pos Static Water T Vel m/s	351.0 ement D ition trim TA emp. RT gms 63.7 230.1 604.5 679.2 638.3 533.2 467.0 439.0 229.9 394.8 ement D ition trim TA emp. RT gms 86.3 325.3 877.3 979.2	-2.67 IS 243. 29 00 6 21 H Cm 0.20 0.37 0.14 -0.98 -2.38 -3.04 -3.28 -3.33 -2.01 -3.26 IS 304: 30 00 8 20 H Cm 0.17 0.34 0.09 -1.29	0.78 2.0 gms 70 % B .91 deg .50 deg TAO Rel. 0.59 2.71 7.57 9.26 7.95 5.68 3.94 2.56 0.51 0.86 2.0 gms .09 % B .02 deg .50 deg TAO Rel 0.72 3.27 8.32 9.46	0.000 LC cm 0.000	0.00 Disp. Coe 6.83 cm Density LK cm 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.0 eff. C @ Base 997 WSPH cm2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	2.631 DL 0 Line .885 kg CV 0.450 0.696 0.943 1.187 1.451 1.695 1.945 2.180 2.419 2.423 DL 0 Line .101 kg CV 0.473 0.728 0.977 1.230	0.00000 .2003 /m3 Ki: CT x10-3	0.192 n. Visco RT/DIS 0.026 0.095 0.249 0.279 0.262 0.192 0.180 0.095 0.162 n. Visco RT/DIS 0.028 0.107 0.288 0.322	-0.127 Docity H/BPX -0.010 0.018 0.007 -0.046 -0.113 -0.156 -0.159 -0.096 -0.155 Docity H/BPX 0.008 0.004 -0.061	7.50 9.62 14.48 16.17 14.86 12.59 10.85 9.47 7.42 7.77	0.000 -06 m2/s Cwsph 0.000 0.000 0.000 0.000 0.000 0.000 0.000 -06 m2/s Cwsph 0.000 0.000 0.000
	3.777 Displace VCG Pos Static Water T Vel m/s	351.0 ement D ition trim TA emp. RT gms 63.7 230.1 604.5 679.2 638.3 533.2 467.0 439.0 229.9 394.8 ement D ition trim TA emp. RT gms 86.3 325.3 877.3 979.2 942.0	-2.67 IS 243. 29 00 6 21 H cm 0.20 0.37 0.14 -0.98 -2.38 -3.04 -3.28 -3.201 -3.26 IS 3043 300 8 20 H cm 0.17 0.34 0.09 -1.29 -2.98	0.78 2.0 gms .70 % B .91 deg .50 deg TAO Rel. 0.59 2.71 7.57 9.26 7.95 5.68 3.94 2.56 0.51 0.86 2.0 gms .09 % B .02 deg .50 deg TAO Rel. 0.72 3.27 8.32 9.46 8.89	0.000 I.C. cm 0.000	0.00 Disp. Coe 6.83 cm Density LK cm 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.0 eff. C @ Base 997 WSPH cm2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	2.631 DL 0 Line .885 kg CV 0.450 0.696 0.943 1.187 1.451 1.695 2.180 2.419 2.423 DL 0 Line .101 kg CV 0.473 0.728 0.977 1.230 1.475	0.00000 .2003 /m3 Ki: x10-3 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.192 n. Visco RT/DIS 0.026 0.095 0.249 0.279 0.262 0.219 0.192 0.180 0.095 0.162 n. Visco RT/DIS 0.028 0.107 0.288 0.322 0.310	-0.127 Docity H/BPX 0.010 0.018 0.007 -0.046 -0.113 -0.145 -0.159 -0.096 -0.155 Docity H/BPX 0.008 0.004 -0.004 -0.004 -0.0142	0.9682E TAO Abs. 7.50 9.62 14.48 16.17 14.86 12.59 10.85 9.47 7.42 7.77 0.9916E TAO Abs. 8.74 11.29 16.34 17.48 16.91	0.000 -06 m2/s Cwsph 0.000 0.000 0.000 0.000 0.000 0.000 0.000 -06 m2/s Cwsph 0.000 0.000 0.000 0.000
	3.777 Displace VCG Pos Static Water T Vel m/s 0.646 0.999 1.354 1.703 2.083 2.432 2.791 3.129 3.472 3.478 Displace VCG Pos Static Water T Vel m/s 0.679 1.044 1.402 1.766 2.118 2.521	351.0 ement D ition trim TA emp. RT gms 63.7 230.1 604.5 679.2 638.3 533.2 467.0 439.0 229.9 394.8 ement D ition trim TA emp. RT gms 86.3 325.3 877.3 979.2 942.0 798.1	-2.67 IS 243 29 00 6 21 H Cm 0.20 0.37 0.14 -0.98 -2.38 -3.04 -3.28 -3.33 -2.01 -3.26 IS 304 30 00 8 20 H Cm 0.17 0.34 0.09 -1.29 -2.98 -3.77	0.78 2.0 gms .70 % B .91 deg .50 deg TAO Rel 0.59 2.71 7.57 9.26 7.95 5.68 3.94 2.56 0.51 0.86 2.0 gms .09 % B .02 deg .50 deg TAO Rel 0.72 3.27 8.32 9.46 8.89 5.87	0.000 LC cm 0.000	0.00 Disp. Coe 6.83 cm Density LK cm 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.0 eff. C @ Base 997 WSPH cm2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	2.631 DL 0 Line .885 kg CV 0.450 0.696 0.943 1.187 1.451 1.695 1.945 2.180 2.419 2.423 DL 0 Line .101 kg CV 0.473 0.728 0.977 1.230 1.475 1.757	0.00000 .2003 /m3 Ki: CT x10-3	0.192 n. Visco RT/DIS 0.026 0.095 0.249 0.279 0.262 0.180 0.095 0.162 n. Visco RT/DIS 0.028 0.107 0.288 0.322 0.310 0.262	-0.127 H/BPX -0.010 0.018 0.007 -0.046 -0.113 -0.145 -0.156 -0.159 -0.096 -0.155 Docity H/BPX -0.008 0.006 0.004 -0.061 -0.142 -0.179	0.9682E TAO Abs. 7.50 9.62 14.48 16.17 14.86 12.59 10.85 9.47 7.42 7.77 0.9916E TAO Abs. 8.74 11.29 16.34 17.48 16.91 13.89	0.000 -06 m2/s Cwsph -0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 -06 m2/s Cwsph -0.000 0.000 0.000 0.000 0.000 0.000
	3.777 Displace VCG Pos Static Water T Vel m/s 0.646 0.999 1.354 1.703 2.083 2.432 2.791 3.129 3.472 3.478 Displace VCG Pos Static Water T Vel m/s 0.679 1.044 1.402 1.766 2.118 2.521 2.821	351.0 ement D ition trim TA emp. RT gms 63.7 230.1 604.5 679.2 638.3 533.2 467.0 439.0 229.9 394.8 ement D ition trim TA emp. RT gms 86.3 325.3 877.3 979.2 942.0 798.1 655.8	-2.67 IS 243. 29 00 6 21 H Cm 0.20 0.37 0.14 -0.98 -2.38 -3.04 -3.28 -3.33 -2.01 -3.26 IS 304: 30 00 8 20 H Cm 0.17 0.34 0.09 -1.29 -2.98 -3.77 -4.10	0.78 2.0 gms 70 % B .91 deg .50 deg TAO Rel. 0.59 2.71 7.57 9.26 7.95 5.68 3.94 2.56 0.51 0.86 2.0 gms .09 % B .02 deg .50 deg TAO Rel. 0.72 3.27 8.32 9.46 8.89 5.87 3.81	0.000 LC Cm 0.000	0.00 Disp. Coe 6.83 cm Density LK cm 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.0 eff. C @ Base 997 WSPH cm2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	2.631 DL 0 Line .885 kg CV 0.450 0.696 0.943 1.187 1.451 1.695 1.945 2.180 2.419 2.423 DL 0 Line .101 kg CV 0.473 0.728 0.977 1.230 1.475 1.757 1.966	0.00000 .2003 /m3 Ki: CT x10-3 0.00000	0.192 n. Visco RT/DIS 0.026 0.095 0.249 0.279 0.262 0.192 0.180 0.095 0.162 n. Visco RT/DIS 0.028 0.107 0.288 0.322 0.310 0.262 0.216	-0.127 h/BPX 0.010 0.018 0.007 -0.046 -0.113 -0.145 -0.156 -0.159 -0.096 -0.155 city H/BPX 0.008 0.016 0.004 -0.061 -0.142 -0.179 -0.195	0.9682E TAO Abs. 7.50 9.62 14.48 16.17 14.86 12.59 10.85 9.47 7.42 7.77 0.9916E TAO Abs. 8.74 11.29 16.34 17.48 16.91	0.000 -06 m2/s Cwsph 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 -06 m2/s Cwsph 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
	3.777 Displace VCG Pos Static Water T Vel m/s 0.646 0.999 1.354 1.703 2.083 2.432 2.791 3.129 3.472 3.478 Displace VCG Pos Static Water T Vel m/s 0.679 1.044 1.402 1.766 2.118 2.521 2.821 3.160	351.0 ement D ition trim TA emp. RT gms 63.7 230.1 604.5 679.2 638.3 533.2 467.0 439.0 229.9 394.8 ement D ition trim TA emp. RT gms 86.3 325.3 877.3 979.2 942.0 798.1 655.8	-2.67 IS 243 29 00 6 21 H Cm 0.20 0.37 0.14 -0.98 -2.38 -3.04 -3.28 -3.33 -2.01 -3.26 IS 304 30 00 8 20 H Cm 0.17 0.34 0.09 -1.29 -2.98 -3.77	0.78 2.0 gms .70 % B .91 deg .50 deg TAO Rel 0.59 2.71 7.57 9.26 7.95 5.68 3.94 2.56 0.51 0.86 2.0 gms .09 % B .02 deg .50 deg TAO Rel 0.72 3.27 8.32 9.46 8.89 5.87	0.000 LC cm 0.000	0.00 Disp. Coe 6.83 cm Density LK cm 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.0 eff. C @ Base 997 WSPH cm2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	2.631 DL 0 Line .885 kg CV 0.450 0.696 0.943 1.187 1.451 1.695 1.945 2.180 2.419 2.423 DL 0 Line .101 kg CV 0.473 0.728 0.977 1.230 1.475 1.757	0.00000 .2003 /m3 Ki: CT x10-3	0.192 n. Visco RT/DIS 0.026 0.095 0.249 0.279 0.262 0.192 0.180 0.095 0.162 n. Visco RT/DIS 0.028 0.107 0.288 0.322 0.310 0.262 0.216	-0.127 H/BPX -0.010 0.018 0.007 -0.046 -0.113 -0.145 -0.156 -0.159 -0.096 -0.155 Docity H/BPX -0.008 0.006 0.004 -0.061 -0.142 -0.179	0.9682E TAO Abs. 7.50 9.62 14.48 16.17 14.86 12.59 10.85 9.47 7.42 7.77 0.9916E TAO Abs. 8.74 11.29 16.34 17.48 16.91 13.89	0.000 -06 m2/s Cwsph -0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 -06 m2/s Cwsph -0.000 0.000 0.000 0.000 0.000 0.000
	3.777 Displace VCG Pos Static Water T Vel m/s 0.646 0.999 1.354 1.703 2.083 2.432 2.791 3.129 3.472 3.478 Displace VCG Pos Static Water T Vel m/s 0.679 1.044 1.402 1.766 2.118 2.521 2.821	351.0 ement D ition trim TA emp. RT gms 63.7 230.1 604.5 679.2 638.3 533.2 467.0 439.0 229.9 394.8 ement D ition trim TA emp. RT gms 86.3 325.3 877.3 979.2 942.0 798.1 655.8	-2.67 IS 243. 29 00 6 21 H Cm 0.20 0.37 0.14 -0.98 -2.38 -3.04 -3.28 -3.33 -2.01 -3.26 IS 304: 30 00 8 20 H Cm 0.17 0.34 0.09 -1.29 -2.98 -3.77 -4.10	0.78 2.0 gms 70 % B .91 deg .50 deg TAO Rel. 0.59 2.71 7.57 9.26 7.95 5.68 3.94 2.56 0.51 0.86 2.0 gms .09 % B .02 deg .50 deg TAO Rel. 0.72 3.27 8.32 9.46 8.89 5.87 3.81	0.000 LC Cm 0.000	0.00 Disp. Coe 6.83 cm Density LK cm 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.0 eff. C @ Base 997 WSPH cm2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	2.631 DL 0 Line .885 kg CV 0.450 0.696 0.943 1.187 1.451 1.695 1.945 2.180 2.419 2.423 DL 0 Line .101 kg CV 0.473 0.728 0.977 1.230 1.475 1.757 1.966	0.00000 .2003 /m3 Ki: CT x10-3 0.00000	0.192 n. Visco RT/DIS 0.026 0.095 0.249 0.279 0.262 0.192 0.180 0.095 0.162 n. Visco RT/DIS 0.028 0.107 0.288 0.322 0.310 0.262 0.216 0.190	-0.127 h/BPX 0.010 0.018 0.007 -0.046 -0.113 -0.145 -0.156 -0.159 -0.096 -0.155 city H/BPX 0.008 0.016 0.004 -0.061 -0.142 -0.179 -0.195	0.9682E TAO Abs 7.50 9.62 14.48 16.17 14.86 12.59 10.85 9.47 7.42 7.77 0.9916E TAO Abs 8.74 11.29 16.34 17.48 16.91 13.89 11.83	0.000 -06 m2/s Cwsph 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 -06 m2/s Cwsph 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
	3.777 Displace VCG Pos Static Water T Vel m/s 0.646 0.999 1.354 1.703 2.083 2.432 2.791 3.129 3.472 3.478 Displace VCG Pos Static Water T Vel m/s 0.679 1.044 1.402 1.766 2.118 2.521 2.821 3.160	351.0 ement D ition trim TA emp. RT gms 63.7 230.1 604.5 679.2 638.3 533.2 467.0 439.0 229.9 394.8 ement D ition trim TA emp. RT gms 86.3 325.3 877.3 979.2 942.0 798.1 655.8 577.5	-2.67 IS 243. 29 00 6 21 H Cm 0.20 0.37 0.14 -0.98 -2.38 -3.04 -3.28 -3.33 -2.01 -3.26 IS 304: 30 00 8 20 H Cm 0.17 0.34 0.09 -1.29 -2.98 -3.77 -4.10 -4.19	0.78 2.0 gms .70 % B .91 deg .50 deg TAO Rel. 0.59 2.71 7.57 9.26 7.95 5.68 3.94 2.56 0.51 0.86 2.0 gms .09 % B .02 deg .50 deg TAO Rel. 0.72 3.27 8.32 9.46 8.89 5.87 3.81 1.99	0.000 IC cm 0.000	0.00 Disp. Coe 6.83 cm Density LK cm 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.0 eff. C @ Base 997 WSPH cm2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	2.631 DL 0 Line .885 kg CV 0.450 0.696 0.943 1.187 1.451 1.695 1.945 2.180 2.419 2.423 DL 0 Line .101 kg CV 0.473 0.728 0.977 1.230 1.475 1.757 1.966 2.201 2.446	0.00000 .2003 /m3 Ki: CT x10-3 0.00000	0.192 n. Visco RT/DIS 0.026 0.095 0.249 0.279 0.262 0.219 0.192 0.180 0.095 0.162 n. Visco RT/DIS 0.028 0.107 0.288 0.322 0.310 0.262 0.216 0.190 0.189	-0.127 Docity H/BPX 0.010 0.018 0.007 -0.046 -0.113 -0.156 -0.159 -0.096 -0.155 Docity H/BPX 0.008 0.016 0.004 -0.061 -0.142 -0.179 -0.195 -0.195 -0.199	0.9682E TAO Abs. 7.50 9.62 14.48 16.17 14.86 12.59 10.85 9.47 7.42 7.77 0.9916E TAO Abs. 8.74 11.29 16.34 17.48 16.91 13.89 11.83 10.01	0.000 -06 m2/s Cwsph 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000

<u>Table B.47</u> L/B = 3.0 ; β = 24° ; L_{cg} = 25% ; Thrust Line: Centre of Gravity

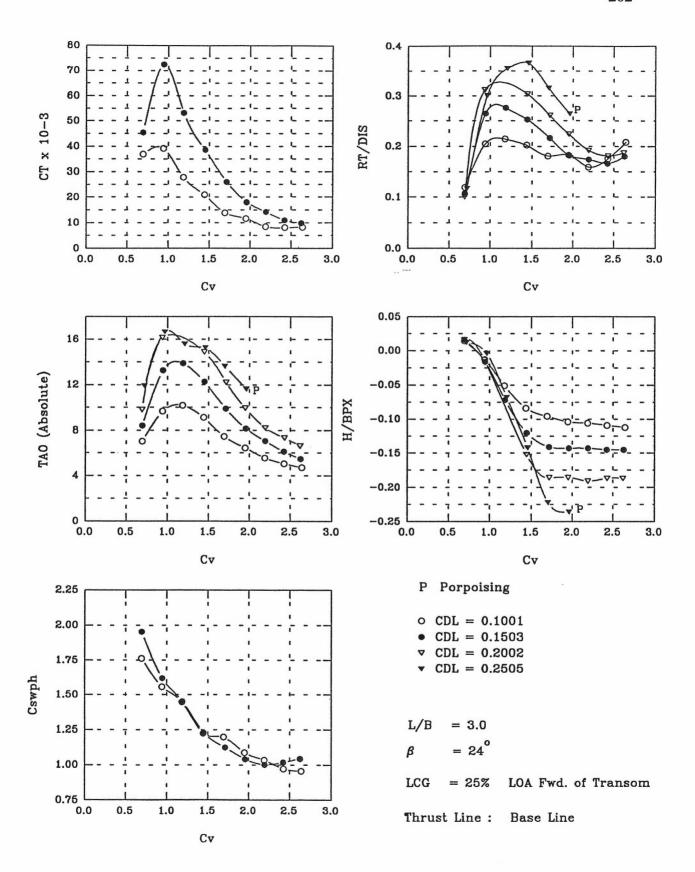


Figure B.48

1.697 260.1 -1.07 5.59 20.09 36.38 638.0 1.182 27.81772 0.214 -0.051 10.19 1.447 2.068 246.0 -1.76 4.52 16.76 31.05 540.3 1.441 20.91673 0.202 -0.084 9.12 1.225 2.426 219.8 -2.03 2.87 13.58 33.19 528.5 1.691 13.88484 0.181 -0.096 7.47 1.198 2.795 222.2 -2.19 1.84 9.66 32.78 479.5 1.947 11.66438 0.183 -0.104 6.44 1.087 3.146 193.9 -2.22 0.95 7.28 33.07 456.0 2.192 8.44230 0.159 -0.106 5.55 1.034						~							
Displacement DIS 116.0 gms Disp. Coeff. CDL 0.1001	Model	No. T-30	024										
Displacement DIS 116.0 gms Disp. Coeff. CDL 0.1001			3	.0		Length O	veral I	OA 69	.00 cm				
Displacement DIS 116.0 gms Disp. Coeff. CDL 0.1001	Deadri	se	24	.00 deg	ſ	Breath (Deck) E	3 23	3.00 cm			2	203
Displacement DIS 1216.0 gms 33.78 % Pare 7.77 cm % Base Line Pare	TCC Po	aition	25	00 9 7	0.3	Breath (Chine) E	3PX 21	.00 cm			-	-00
Water Temp. 20.00 deg C Density 998.206 kg/m3 Xin. Viscocity 0.1004E-05 m2/ m/s gms cm Rol. cm cm cm cm cm cm cm c	ICG PO	SICION	25	.00 % L	,OA	17.25 C	m e Tra	unsom					
Wester Temp. 20.00 deg C Density 998.206 kg/m3 Xin. Viscocity 0.1004E-05 m2/ M/s gms cm Rol. cm cm cm cm cm cm cm c	Displa	cement I	DIS 121	6.0 cm	ıs	Disp. Co	eff. (DT. O	.1001				
Wester Temp. 20.00 deg C Density 998.206 kg/m3 Xin. Viscocity 0.1004E-05 m2/ m/s gms cm Rel. cm cm cm cm2 x10-3 RT/DIS H/BPX TAO Cwsph Abs. Cwsph Cw	VCG Po	sition	33	.78 % B	3	7.77 cm	@ Base	Line					
Vel RT H TAO LC LK WSPH CV RT LS LS LS LS LS LS LS L	Static	trim TZ	A00 4	.60 deg	ſ								
Vel	Water	Temp.	20	.00 deg	C	Density	998	3.206 kg	r/m3 Ki	n. Visc	ocity	0.1004E	-05 m2/s
0.995		RT	н					CV		RT/DIS	H/BPX		Cwsph
0.995 144.6 0.29 2.44 26.45 42.36 777.6 0.693 36.90949 0.119 0.014 7.04 1.753 1.347 248.9 -0.28 5.06 22.43 38.30 686.1 0.192 7.81772 0.214 0.055 -0.013 9.66 1.753 1.697 260.1 -1.07 5.59 20.09 36.38 638.0 1.182 27.81772 0.214 -0.051 10.19 1.447 1.20 1673 0.002 -0.084 9.12 1.225 1.662 246.0 -1.75 4.52 16.07 31.05 540.3 1.414 12.0 1673 0.002 -0.084 9.12 1.225													
Displacement DIS 31.04 % B STATE CDL 0.1503 VCG Position Static trin TAOo E				2.44	26.45	42.36	777.6	0.693	36.90949	0.119	0.014	7.04	1.763
Displacement DIS 31.04 % B STATE CDL 0.1503 VCG Position Static trin TAOo E		248.9	-0.28	5.06	22.43	38.30	686.1	0.939	39.27244	0.205	-0.013	9.66	1.556
Displacement DIS 31.04 % B STATIC COLL 0.1503 VCG Postition STATIC COLL 0.1004E-05 m2/M Vel RT H TAO LC LK WSPH CV CT RT/DIS H/BPX TAO CWSph Abs. 0.995 196.9 0.33 2.75 31.12 45.06 860.3 0.693 45.40835 0.108 0.016 8.43 1.951 1.355 483.1 -0.33 7.56 25.88 37.26 713.4 0.944 72.47390 0.265 -0.016 13.26 1.618 1.705 503.3 -1.51 8.21 2.30.5 33.60 640.1 1.188 53.18699 0.265 -0.016 13.26 1.618 1.705 403.3 -1.51 8.21 2.30.5 33.60 640.1 1.188 53.18699 0.265 -0.016 13.26 1.618 1.705 503.3 -1.51 8.21 2.30.5 33.60 640.1 1.188 53.18699 0.265 -0.016 13.26 1.618 1.705 503.3 -1.51 8.21 2.30.5 33.60 440.1 1.188 53.18699 0.265 -0.016 13.26 1.618 1.705 503.3 -1.51 8.21 2.30.5 33.60 640.1 1.188 53.18699 0.265 -0.016 13.26 1.618 1.705 503.3 -1.51 8.21 2.30.5 33.60 640.1 1.188 53.18699 0.265 -0.016 13.26 1.618 1.705 503.3 -1.51 8.21 2.30.5 33.60 640.1 1.188 53.18699 0.265 -0.016 13.26 1.618 1.705 503.3 -1.51 8.21 2.30.5 33.60 640.1 1.188 53.18699 0.265 -0.016 13.26 1.618 1.705 503.3 -1.51 8.21 2.30.5 33.60 640.1 1.188 53.18699 0.265 -0.016 13.26 1.618 1.705 503.3 -1.51 8.21 2.30.5 33.60 640.1 1.188 52.518699 0.265 -0.016 13.26 1.618 1.705 503.3 -1.51 8.21 2.30.5 33.60 640.1 1.188 53.18699 0.265 -0.016 13.26 1.618 1.705 503.3 -1.51 8.21 2.30.5 33.60 640.1 1.188 53.18699 0.265 -0.016 13.26 1.618 1.705 503.3 -1.52 9.70 8 9.70 8 9.70 8 9.80 64.81 1.71 1.714 2.590840 0.216 -0.141 9.99 1.123 1.705 503.3 -1.51 6.00 1.37 11.88 20.04 442.1 2.195 14.19133 0.118 -0.147 6.13 7.05 1.002 1.707 503.1 -1.51 6.20 0.00 1.37 1.108 20.04 442.1 2.195 14.19133 0.118 -0.145 5.48 1.7044 1.707 503.1 -1.51 6.20 0.00 0.00 0.00 0.00 0.00 0.00 0.00	1.697	260.1	-1.07	5.59	20.09	36.38	638.0	1.182	27.81772	0.214	-0.051	10.19	1.447
Displacement DIS 31.04 % B STATE COLL 0.1503 VCG Position STATE TROPO Water Temp.		246.0	-1.76	4.52	16.76	31.05	540.3	1.441	20.91673	0.202	-0.084	9.12	1.225
Displacement DIS 1825, 0 gms VCG Position 31.04 % B Static trim TAOO			-2.03	2.87	13.58	33.19	528.5	1.691	13.88484	0.181	-0.096	7.47	1.198
Displacement DIS 1825, 0 gms VCG Position 31.04 % B Static trim TAOO	2.795	222.2	-2.19	1.84	9.66	32.78	479.5	1.947	11.66438	0.183	-0.104	6.44	1.087
Displacement DIS 1825, 0 gms VCG Position 31.04 % B Static trim TAOO			-2.22	0.95	7.28	33.07	456.0	2.192	8.44230	0.159	-0.106	5.55	1.034
Displacement DIS 1825.0 gms	3.485	212.4	-2.30	0.45	3.45	34.50	428.8	2.428	8.01594	0.175	-0.109	5.05	0.972
Vel	3.790	252.7	-2.36	0.09	1.75	35.52	421.1	2.640	8.21394	0.208	-0.112	4.69	0.955
Vel													
Vel	Displa	cement D	DIS 182	5.0 gm	.s	Disp. Coe	eff. C	DL 0	.1503				
Vel	VCG Po	sition	31	.04 % B		7.14 cm	<pre>@ Base</pre>	Line					
Vel	Static	_trim .TA	.00 5	.68 deg									
No.	water '	Temp.	20	.00 deg	C	Density	998	.206 kg	/m3 Ki	n. Visco	ocity	0.1004E-	-05 m2/s
0.995	TOT	D.M.	**	mao	т.а	T 7/	FIGDII	CIT	am.	DE /DIG	m/nnv	ma o	Creenh
0.995	w/c	RT	H	TAU						RT/DIS	H/BPX		Cwspn
0.995 196.9 0.33 2.75 31.12 45.06 860.3 0.693 45.40835 0.108 0.016 8.43 1.951 1.355 483.1 -0.33 7.58 25.88 37.26 71.34 0.944 72.47390 0.255 -0.016 13.26 1.618 1.705 503.3 -1.51 8.21 23.05 33.60 640.1 1.188 53.18699 0.276 -0.072 13.89 1.452 2.079 461.4 -2.51 6.60 18.63 29.33 541.9 1.448 38.72892 0.253 -0.120 12.28 1.229 2.460 395.1 -2.96 4.21 16.08 27.74 495.1 1.714 25.90840 0.216 -0.141 9.89 1.123 2.806 332.2 -3.00 2.49 13.39 27.20 458.6 1.955 18.08549 0.216 -0.143 8.17 1.040 3.479 302.5 -3.04 0.43 8.63 31.05 448.3 2.424 10.95631 0.166 -0.145 6.11 1.017 3.767 327.8 -3.04 -0.20 7.84 32.91 460.5 2.625 9.85811 0.180 -0.145 6.11 1.017 3.767 327.8 -3.04 0.20 0 deg C Density 998.206 kg/m3 Kin. Viscocity 0.1004E-05 m2/m/s m/s gms cm Rel. cm cm cm cm cm 2 x10-3													
1.705		196.9	0.33	2.75	31.12	45.06	860.3	0.693	45.40835				
1.705		483.1	-0.33	7.58	25.88	37.26	713.4	0.944	72.47390				
2.806 332.2 -3.00 2.49 13.39 28.00 442.1 2.195 14.19133 0.174 -0.143 7.05 1.002 3.479 302.5 -3.04 0.43 8.63 31.05 448.3 2.424 10.95631 0.166 -0.145 6.11 1.017 3.767 327.8 -3.04 -0.20 7.84 32.91 460.5 2.625 9.85811 0.180 -0.145 5.48 1.044 Displacement DIS 2432.0 gms VCG Position 29.70 % B 6.83 cm % Base Line Static trim TAOO 6.91 deg Water Temp. 20.00 deg C Density 998.206 kg/m3 Kin. Viscocity 0.1004E-05 m2/s m/s gms Cm Rel. cm Cm Cm Cm2 x10-3 RT/DIS H/BPX TAO Cwsph Abs. 0.990 246.4 0.33 2.89 0.00 0.00 0.0 0.690 0.0000 0.101 0.016 9.80 0.000 1.340 758.3 -0.26 9.21 0.00 0.00 0.0 0.934 0.00000 0.312 -0.013 16.12 0.000 2.462 634.2 -3.90 5.32 0.00 0.00 0.0 0.0 1.446 0.00000 0.304 -0.152 14.88 0.000 2.462 634.2 -3.90 5.32 0.00 0.00 0.0 1.948 0.00000 0.261 -0.186 12.23 0.000 2.796 544.3 -3.90 3.05 0.00 0.00 0.0 1.948 0.00000 0.192 -0.191 8.24 0.000 3.151 466.6 -4.01 1.33 0.00 0.00 0.0 2.195 0.00000 0.181 -0.187 7.34 0.000 3.753 455.2 -3.92 0.43 0.00 0.00 0.0 2.429 0.00000 0.181 -0.187 7.34 0.000 3.753 455.2 -3.92 0.43 0.00 0.00 0.0 2.461 0.0000 0.181 -0.187 7.34 0.000 3.753 455.2 -3.92 0.28 0.00 0.00 0.00 0.0 2.249 0.00000 0.181 -0.187 7.34 0.000 3.753 455.2 -3.92 0.02 0.00 0.00 0.00 0.00 0.00 0.01 1.948 0.00000 0.181 -0.187 7.34 0.000 3.753 455.2 -3.92 0.02 0.00 0.00 0.00 0.00 0.00 0.01 1.948 0.00000 0.181 -0.187 7.34 0.000 3.753 455.2 -3.92 0.03 0.00 0.00 0.00 0.00 0.00 0.00 0.0		503.3	-1.51	8.21	23.05	33.60	640.1	1.188	53.18699				
2.806 332.2 -3.00 1.37 11.08 28.04 442.1 2.195 18.08549 0.182 -0.143 8.17 1.040 3.150 316.8 -3.00 1.37 11.08 28.04 442.1 2.195 14.19133 0.174 -0.143 7.05 1.002 3.479 302.5 -3.04 0.43 8.63 31.05 448.3 2.424 10.95631 0.166 -0.145 6.11 1.017 3.767 327.8 -3.04 -0.20 7.84 32.91 460.5 2.625 9.85811 0.180 -0.145 5.48 1.044 0.040 0.0000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.000000			-2.51	6.60	18.63	29.33	541.9	1.448	38.72892				
2.806 332.2 -3.00 1.37 11.08 28.04 442.1 2.195 18.08549 0.182 -0.143 8.17 1.040 3.150 316.8 -3.00 1.37 11.08 28.04 442.1 2.195 14.19133 0.174 -0.143 7.05 1.002 3.479 302.5 -3.04 0.43 8.63 31.05 448.3 2.424 10.95631 0.166 -0.145 6.11 1.017 3.767 327.8 -3.04 -0.20 7.84 32.91 460.5 2.625 9.85811 0.180 -0.145 5.48 1.044 0.040 0.0000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.000000			-2.96	4.21	16.08	27.74	495.1	1.714	25.90840				
3.479 302.5 -3.04			-3.00	2.49	13.39	27.20	458.6	1.955	18.08549	0.182	-0.143	8.17	
3.479 302.5 -3.04	3.150	316.8	-3.00	1.37	11.08	28.04	442.1	2.195	14.19133	0.174	-0.143	7.05	1.002
3.767 327.8 -3.04 -0.20 7.84 32.91 460.5 2.625 9.85811 0.180 -0.145 5.48 1.044 Displacement DIS 2432.0 gms VCG Position 29.70 % B Coeff. CDL 0.2002 VCG Position 5.48 0.00 deg C Density 998.206 kg/m3 Kin. Viscocity 0.1004E-05 m2/m Vel RT H TAO LC LK WSPH CV CT RT/DIS H/BPX TAO Cwsph Abs. 0.990 246.4 0.33 2.89 0.00 0.00 0.00 0.0934 0.00000 0.101 0.016 9.80 0.000 1.340 758.3 -0.26 9.21 0.00 0.00 0.00 0.934 0.00000 0.312 -0.013 16.12 0.000 2.076 739.8 -3.20 7.97 0.00 0.00 0.0 1.446 0.00000 0.304 -0.152 14.88 0.000 2.076 739.8 3.90 3.05 0.00 0.00 0.0 1.715 0.00000 0.224 -0.186 9.96 0.000 3.151 466.6 -4.01 1.33 0.00 0.00 0.0 1.948 0.00000 0.224 -0.186 9.96 0.000 3.151 466.6 -4.01 1.33 0.00 0.00 0.0 1.948 0.00000 0.122 -0.191 8.24 0.000 3.487 440.5 -3.92 0.43 0.00 0.00 0.0 2.195 0.00000 0.187 -0.187 6.63 0.000 Displacement DIS 3042.0 gms VCG Position 30.09 % B Static trim TAOO 80.2 deg Water Temp. Disp. Coeff. CDL 0.2505 VCl RT H TAO LC LK WSPH CV CT RT/DIS H/BPX TAO Cwsph Abs. Disp. Coeff. CDL 0.2505 VCl RT H TAO LC LK WSPH CV CT RT/DIS H/BPX TAO Cwsph Abs. Displacement DIS 3042.0 gms VCG Position 30.09 % B Coeff. CDL 0.2505 VCl RT H TAO LC LK WSPH CV CT RT/DIS H/BPX TAO Cwsph Abs. 1.031 357.1 0.25 3.90 0.00 0.00 0.00 0.00 0.00 0.117 0.012 11.92 0.000 1.383 914.3 -0.08 8.63 0.00 0.00 0.00 0.00 0.1459 0.00000 0.316 -0.124 11.92 0.000 1.383 914.3 -0.08 8.63 0.00 0.00 0.00 0.00 0.00 0.366 -0.142 15.55 0.000 2.044 1114.7 -2.99 7.23 0.00 0.00 0.00 0.01 1.459 0.00000 0.366 -0.142 15.55 0.000 2.0439 961.7 -4.67 5.62 0.00 0.00 0.00 1.964 0.00000 0.366 -0.142 15.55 0.000 2.0439 961.7 -4.67 5.62 0.00 0.00 0.00 1.960 0.00000 0.366 -0.142 15.55 0.000 2.0439 961.7 -4.67 5.62 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	3.479	302.5	-3.04	0.43	8.63	31.05	448.3	2.424	10.95631	0.166	-0.145	6.11	1.017
Displacement DIS 2432.0 gms													
Water Temp. 20.00 deg C Density 998.206 kg/m3 Kin. Viscocity 0.1004E-05 m2/s Vel RT H TAO LC LK WSPH CV CT RT/DIS H/BPX TAO Cwsph m/s gms cm Rel. cm cm cm2 x10-3													
Water Temp. 20.00 deg C Density 998.206 kg/m3 Kin. Viscocity 0.1004E-05 m2/s Vel RT H TAO LC LK WSPH CV CT RT/DIS H/BPX TAO Cwsph m/s gms cm Rel. cm cm cm2 x10-3	Displac	cement D	IS 243	2.0 gm	s	Disp. Coe	eff. C	DL 0	.2002				
Water Temp. 20.00 deg C Density 998.206 kg/m3 Kin. Viscocity 0.1004E-05 m2/s Vel RT H TAO LC LK WSPH CV CT RT/DIS H/BPX TAO Cwsph m/s gms cm Rel. cm cm cm2 x10-3	VCG Pos	sition	29	.70 % B		6.83 cm	@ Base	Line					
Vel RT H TAO LC LK WSPH CV CT RT/DIS H/BPX TAO Cwsph 0.990 246.4 0.33 2.89 0.00 0.00 0.00 0.0000 0.101 0.016 9.80 0.000 1.340 758.3 -0.26 9.21 0.00 0.00 0.00 0.031 0.000 0.013 16.12 0.000 2.076 739.8 -3.20 7.97 0.00 0.00 0.011 0.000 0.304 -0.152 14.88 0.000 2.462 634.2 -3.90 5.32 0.00 0.00 0.01 1.715 0.0000 0.261 -0.186 12.23 0.00 2.796 544.3 -3.90 3.05 0.00 0.00 0.0 1.948 0.00000 0.224 -0.186 9.96 0.00 3.151 466.6 -4.01 1.33 0.00 0.00 0.0 2.429 0.00000 0.181	Static	trim TA	.00 6	.91 deg									
m/s gms cm Rel. cm cm cm2 x10-3 Abs. 0.990 246.4 0.33 2.89 0.00 0.00 0.00 0.00000 0.101 0.016 9.80 0.000 1.340 758.3 -0.26 9.21 0.00 0.00 0.00 0.00 0.312 -0.013 16.12 0.000 2.076 739.8 -3.20 7.97 0.00 0.00 0.01 1.446 0.00000 0.304 -0.152 14.88 0.000 2.462 634.2 -3.90 5.32 0.00 0.00 1.715 0.00000 0.244 -0.186 12.23 0.00 2.796 544.3 -3.90 3.05 0.00 0.00 0.0 1.948 0.00000 0.124 -0.186 9.96 0.000 3.151 466.6 -4.01 1.33 0.00 0.00 0.0 2.429 0.00000 0.187 -0.191 8.24 0.000	Water !	Temp.	20	.00 deg	C	Density	998	.206 kg	/m3 Ki	n. Visco	ocity	0.1004E-	-05 m2/s
m/s gms cm Rel. cm cm cm2 x10-3 Abs. 0.990 246.4 0.33 2.89 0.00 0.00 0.00 0.00000 0.101 0.016 9.80 0.000 1.340 758.3 -0.26 9.21 0.00 0.00 0.00 0.00 0.312 -0.013 16.12 0.000 2.076 739.8 -3.20 7.97 0.00 0.00 0.01 1.446 0.00000 0.304 -0.152 14.88 0.000 2.462 634.2 -3.90 5.32 0.00 0.00 1.715 0.00000 0.244 -0.186 12.23 0.00 2.796 544.3 -3.90 3.05 0.00 0.00 0.0 1.948 0.00000 0.224 -0.186 9.96 0.000 3.151 466.6 -4.01 1.33 0.00 0.00 0.0 2.429 0.00000 0.187 -0.187 6.63 0.000													
0.990 246.4 0.33 2.89 0.00 0.00 0.00 0.690 0.00000 0.101 0.016 9.80 0.000 1.340 758.3 -0.26 9.21 0.00 0.00 0.00 0.934 0.00000 0.312 -0.013 16.12 0.000 2.076 739.8 -3.20 7.97 0.00 0.00 0.00 1.446 0.00000 0.304 -0.152 14.88 0.000 2.462 634.2 -3.90 5.32 0.00 0.00 0.0 1.715 0.00000 0.261 -0.186 12.23 0.000 0.304 -0.152 14.88 0.000 2.462 634.3 -3.90 3.05 0.00 0.00 0.0 1.948 0.00000 0.224 -0.186 12.23 0.000 0.3151 466.6 -4.01 1.33 0.00 0.00 0.0 1.948 0.00000 0.224 -0.186 9.96 0.000 3.151 466.6 -4.01 1.33 0.00 0.00 0.00 0.0 2.195 0.00000 0.192 -0.191 8.24 0.000 3.487 440.5 -3.92 0.43 0.00 0.00 0.00 0.0 2.429 0.00000 0.181 -0.187 7.34 0.000 3.753 455.2 -3.92 -0.28 0.00 0.00 0.00 0.0 2.615 0.00000 0.187 -0.187 6.63 0.000 0.00 0.00 0.00 0.00 0.00 0.0													
3.487 440.5 -3.92 0.43 0.00 0.00 0.0 2.429 0.00000 0.181 -0.187 7.34 0.000 3.753 455.2 -3.92 -0.28 0.00 0.00 0.0 2.429 0.00000 0.187 -0.187 7.34 0.000 0.00 0.00 0.00 0.00 0.00 0.187 -0.187 7.34 0.000 0.00 0.00 0.00 0.00 0.00 0.187 -0.187 6.63 0.000 0.00 0.00 0.00 0.187 -0.187 6.63 0.000 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.1004 0.100						CM	cm2		x10-3			Abs.	
3.487 440.5 -3.92 0.43 0.00 0.00 0.0 2.429 0.00000 0.181 -0.187 7.34 0.000 3.753 455.2 -3.92 -0.28 0.00 0.00 0.0 2.615 0.00000 0.187 -0.187 6.63 0.000 0.00000 0.187 -0.187 6.63 0.000 0.000000 0.187 -0.187 6.63 0.000 0.00000 0.187 -0.187 6.63 0.000 0.0000000 0.187 -0.187 6.63 0.000 0.000000 0.187 -0.187 6.63 0.000 0.00000000000000000000000000											0 016		
3.487 440.5 -3.92 0.43 0.00 0.00 0.0 2.429 0.00000 0.181 -0.187 7.34 0.000 3.753 455.2 -3.92 -0.28 0.00 0.00 0.0 2.429 0.00000 0.187 -0.187 7.34 0.000 0.00 0.00 0.00 0.00 0.00 0.187 -0.187 7.34 0.000 0.00 0.00 0.00 0.00 0.00 0.187 -0.187 6.63 0.000 0.00 0.00 0.00 0.187 -0.187 6.63 0.000 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.1004 0.100						0.00	0.0	0.690	0.00000	0.101	0.016	9.80	0.000
3.487 440.5 -3.92 0.43 0.00 0.00 0.0 2.429 0.00000 0.181 -0.187 7.34 0.000 3.753 455.2 -3.92 -0.28 0.00 0.00 0.0 2.615 0.00000 0.187 -0.187 6.63 0.000 0.00000 0.187 -0.187 6.63 0.000 0.000000 0.187 -0.187 6.63 0.000 0.00000 0.187 -0.187 6.63 0.000 0.0000000 0.187 -0.187 6.63 0.000 0.000000 0.187 -0.187 6.63 0.000 0.00000000000000000000000000	1.340	758.3	-0.26	9.21		0.00	0.0	0.934	0.00000	0.312	-0.013	16.12	0.000
3.487 440.5 -3.92 0.43 0.00 0.00 0.0 2.429 0.00000 0.181 -0.187 7.34 0.000 3.753 455.2 -3.92 -0.28 0.00 0.00 0.0 2.429 0.00000 0.187 -0.187 7.34 0.000 0.00 0.00 0.00 0.00 0.00 0.187 -0.187 7.34 0.000 0.00 0.00 0.00 0.00 0.00 0.187 -0.187 6.63 0.000 0.00 0.00 0.00 0.187 -0.187 6.63 0.000 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.187 -0.187 6.63 0.000 0.000 0.1004 0.100			-3.20	7.97		0.00	0.0	1.446	0.00000	0.304	-0.152	14.88	0.000
3.487 440.5 -3.92 0.43 0.00 0.00 0.0 2.429 0.00000 0.181 -0.187 7.34 0.000 3.753 455.2 -3.92 -0.28 0.00 0.00 0.0 2.615 0.00000 0.187 -0.187 6.63 0.000 0.000 0.00000 0.187 -0.187 6.63 0.000 0.00000 0.187 -0.187 6.63 0.000 0.00000 0.187 -0.187 6.63 0.000 0.00000 0.187 -0.187 6.63 0.000 0.00000 0.187 -0.187 6.63 0.000 0.000000 0.187 -0.187 6.63 0.000 0.000000 0.187 -0.187 6.63 0.000 0.00000000000000000000000000						0.00	0.0	1./15	0.00000	0.261	-0.186	12.23	0.000
3.487 440.5 -3.92 0.43 0.00 0.00 0.0 2.429 0.00000 0.181 -0.187 7.34 0.000 3.753 455.2 -3.92 -0.28 0.00 0.00 0.0 2.429 0.00000 0.187 -0.187 7.34 0.000 0.00 0.00 0.00 0.00 0.00 0.187 -0.187 0.187 0.000 0.000 0.187 -0.187 0.000 0.000 0.187 -0.187 0.000 0.000 0.000 0.187 -0.187 0.000 0.000 0.000 0.187 -0.187 0.000 0.000 0.000 0.187 -0.187 0.000 0.000 0.000 0.187 -0.187 0.000 0.000 0.187 -0.187 0.000 0.000 0.000 0.187 -0.187 0.000 0.000 0.187 -0.187 0.000 0.000 0.000 0.187 -0.187 0.000 0.000 0.187 -0.187 0.000 0.000 0.000 0.187 -0.187 0.000 0.000 0.187 -0.187 0.000 0.000 0.187 -0.187 0.000 0.000 0.187 -0.187 0.000 0.000 0.187 -0.187 0.000 0.000 0.187 -0.187 0.000 0.000 0.187 -0.187 0.000 0.000 0.1004E-05 m2/s 0.000 0.000 0.000 0.000 0.000 0.187 -0.187 0.000 0.1004E-05 m2/s 0.0000 0.000 0.000 0.187 -0.187 0.000 0.1004E-05 m2/s 0.0000 0.000 0.000 0.187 -0.187 0.000 0.1004E-05 m2/s 0.0000 0.187 -0.187 0.000 0.1004E-05 m2/s 0.0000 0.187 -0.187 0.0000 0.1004E-05 m2/s 0.0000 0.1000 0.1000 0.1000 0.1004E-05 m2/s 0.0000 0.1000 0.1004E-05 m2/s 0.0000 0.10000 0.10000 0.10000 0.1004E-05 m2/s 0.0000 0.100000 0.10000 0.10000 0.10000 0.10000 0.10000 0.10000 0.100000 0.10000 0.100000 0.10000 0.10000 0.100000 0.10000 0.10000 0.100000 0.100000 0.100000 0.100000 0.100000 0.100000 0.100000 0.100000 0.100000 0.100000 0.100000 0.100000 0.100000 0.100000 0.1000000 0.100000 0.100000 0.1000000 0.100000 0.100000 0.100000 0.1000000 0.1000000 0.1000000 0.1000000 0.10000000 0.10000000 0.100000000						0.00	0.0	1.948	0.00000	0.224	-0.186	9.96	0.000
3.753 455.2 -3.92 -0.28 0.00 0.00 0.0 2.615 0.00000 0.187 -0.187 6.63 0.000 Displacement DIS 3042.0 gms Disp. Coeff. CDL 0.2505 VCG Position 30.09 % B 6.92 cm @ Base Line Static trim TAOO 8.02 deg Water Temp. 20.00 deg C Density 998.206 kg/m3 Kin. Viscocity 0.1004E-05 m2/s Vel RT H TAO LC LK WSPH CV CT RT/DIS H/BPX TAO Cwsph m/s gms cm Rel. cm cm cm2 x10-3 Abs. 1.031 357.1 0.25 3.90 0.00 0.00 0.0 0.718 0.00000 0.117 0.012 11.92 0.000 1.383 914.3 -0.08 8.63 0.00 0.00 0.0 0.964 0.00000 0.301 -0.004 16.65 0.000 1.733 1079.2 -1.43 7.57 0.00 0.00 0.00 0.0 1.207 0.00000 0.355 -0.068 15.59 0.000 1.733 1079.2 -1.43 7.57 0.00 0.00 0.00 0.0 1.207 0.00000 0.366 -0.142 15.25 0.000 2.094 1114.7 -2.99 7.23 0.00 0.00 0.00 1.700 0.00000 0.316 -0.222 13.64 0.000 2.439 961.7 -4.67 5.62 0.00 0.00 0.0 1.960 0.00000 0.264 -0.236 11.64 0.000					0.00			2.193	0.00000	0.192	-0.131	0.24	0.000
Displacement DIS 3042.0 gms VCG Position 30.09 % B 6.92 cm % Base Line Static trim TAOO 8.02 deg Water Temp. 20.00 deg C Density 998.206 kg/m3 Kin. Viscocity 0.1004E-05 m2/s VCG RT RT/DIS H/BPX TAO Cwsph m/s gms cm Rel. cm cm cm cm2 x10-3 Abs. 1.031 357.1 0.25 3.90 0.00 0.00 0.00 0.718 0.00000 0.117 0.012 11.92 0.000 1.383 914.3 -0.08 8.63 0.00 0.00 0.00 0.0 0.964 0.00000 0.301 -0.004 16.65 0.000 1.733 1079.2 -1.43 7.57 0.00 0.00 0.00 0.0 1.207 0.00000 0.355 -0.068 15.59 0.000 2.094 1114.7 -2.99 7.23 0.00 0.00 0.00 1.700 0.00000 0.366 -0.142 15.25 0.000 2.439 961.7 -4.67 5.62 0.00 0.00 0.00 1.700 0.00000 0.316 -0.222 13.64 0.000 2.813 804.0 -4.96 3.62 0.00 0.00 0.00 1.960 0.000000 0.264 -0.236 11.64 0.000					0.00	0.00	0.0	2.429	0.00000				
VCG Position 30.09 % B 6.92 cm (Base Line) Static trim TAOO 8.02 deg Water Temp. 20.00 deg C Density 998.206 kg/m3 Kin. Viscocity 0.1004E-05 m2/s Vel RT H TAO LC LK WSPH CV CT RT/DIS H/BPX TAO Cwsph m/s gms cm Rel. cm cm cm2 x10-3 Abs. 1.031 357.1 0.25 3.90 0.00 0.00 0.01 0.012 11.92 0.000 1.383 914.3 -0.08 8.63 0.00 0.00 0.00 0.964 0.00000 0.301 -0.004 16.65 0.000 1.733 1079.2 -1.43 7.57 0.00 0.00 0.01 1.207 0.00000 0.355 -0.068 15.59 0.000 2.094 1114.7 -2.99 7.23 0.00 0.00 0.01 1.459	3.753	455.2	-3.92	-0.28	0.00	0.00	0.0	2.615	0.00000	0.187	-0.187	6.63	0.000
VCG Position 30.09 % B 6.92 cm (Base Line Static trim TAOO 8.02 deg Water Temp. 8.02 deg 20.00 deg C Density 998.206 kg/m3 Kin. Viscocity 0.1004E-05 m2/s Vel RT H TAO LC LK WSPH CV CT RT/DIS H/BPX TAO Cwsph Abs. 1.031 357.1 0.25 3.90 0.00 0.00 0.00 0.718 0.00000 0.301 -0.012 11.92 0.000 1.733 1079.2 -1.43 7.57 0.00 0.00 0.0 1.207 0.00000 0.356 -0.068 15.59 0.000 2.094 1114.7 -2.99 7.23 0.00 0.00 1.700 0.00000 0.366 -0.142 15.25 0.000 2.439 961.7 -4.67 5.62 0.00 0.00 1.700 0.00000 0.264 -0.222 13.64 0.000 2.813 804.0 -4.96 3.62 0.00 0.00 0.00 1.960 0.00000 0.264	Diamla	B	TG 204		_	Di G		DT 0	2525				
Static trim TAOO 8.02 deg Water Temp. 20.00 deg C Density 998.206 kg/m3 Kin. Viscocity 0.1004E-05 m2/s Vel RT H TAO LC LK WSPH CV CT RT/DIS H/BPX TAO Cwsph m/s gms cm Rel. cm cm cm cm2 x10-3 hbs. 1.031 357.1 0.25 3.90 0.00 0.00 0.00 0.718 0.00000 0.117 0.012 11.92 0.000 1.383 914.3 -0.08 8.63 0.00 0.00 0.00 0.0 0.964 0.00000 0.301 -0.004 16.65 0.000 1.733 1079.2 -1.43 7.57 0.00 0.00 0.00 1.207 0.00000 0.355 -0.068 15.59 0.000 2.094 1114.7 -2.99 7.23 0.00 0.00 0.00 1.459 0.00000 0.366 -0.142 15.25 0.000 2.439 961.7 -4.67 5.62 0.00 0.00 0.00 1.700 0.00000 0.316 -0.222 13.64 0.000 2.813 804.0 -4.96 3.62 0.00 0.00 0.00 1.960 0.00000 0.264 -0.236 11.64 0.000									. 2505				
Water Temp. 20.00 deg C Density 998.206 kg/m3 Kin. Viscocity 0.1004E-05 m2/s Vel RT H TAO LC LK WSPH CV CT RT/DIS H/BPX TAO Cwsph m/s gms cm Rel. cm cm cm2 x10-3 RT/DIS H/BPX TAO Cwsph 1.031 357.1 0.25 3.90 0.00 0.00 0.718 0.00000 0.117 0.012 11.92 0.000 1.383 914.3 -0.08 8.63 0.00 0.00 0.0 0.964 0.00000 0.301 -0.004 16.65 0.000 1.733 1079.2 -1.43 7.57 0.00 0.00 0.0 1.207 0.00000 0.355 -0.068 15.59 0.000 2.094 1114.7 -2.99 7.23 0.00 0.00 1.459 0.00000 0.366 -0.142 15.25 0.000 2.439 961.7 <td></td> <td></td> <td></td> <td></td> <td></td> <td>6.92 Cm</td> <td>e Base</td> <td>Line</td> <td></td> <td></td> <td></td> <td></td> <td></td>						6.92 Cm	e Base	Line					
Vel RT H TAO LC LK WSPH CV CT RT/DIS H/BPX TAO Cwsph 1.031 357.1 0.25 3.90 0.00 0.00 0.01 0.0000 0.117 0.012 11.92 0.000 1.383 914.3 -0.08 8.63 0.00 0.00 0.00 0.964 0.00000 0.301 -0.004 16.65 0.000 1.733 1079.2 -1.43 7.57 0.00 0.00 0.0 1.207 0.00000 0.355 -0.068 15.59 0.000 2.094 1114.7 -2.99 7.23 0.00 0.00 1.459 0.00000 0.366 -0.142 15.25 0.000 2.439 961.7 -4.67 5.62 0.00 0.00 1.700 0.00000 0.316 -0.222 13.64 0.000 2.813 804.0 -4.96 3.62 0.00 0.00 0.00 0.00000 0.264 -0.236 <td></td> <td></td> <td></td> <td></td> <td></td> <td>Dongitu</td> <td>000</td> <td>206 4-</td> <td>/m3 v:</td> <td>n Wiss</td> <td>oitu</td> <td>0.10049</td> <td>_05 m2/~</td>						Dongitu	000	206 4-	/m3 v:	n Wiss	oitu	0.10049	_05 m2/~
m/s gms cm Rel. cm cm cm2 x10-3 Abs. 1.031 357.1 0.25 3.90 0.00 0.00 0.718 0.00000 0.117 0.012 11.92 0.000 1.383 914.3 -0.08 8.63 0.00 0.00 0.964 0.00000 0.301 -0.04 16.65 0.000 1.733 1079.2 -1.43 7.57 0.00 0.00 0.0 1.207 0.00000 0.355 -0.068 15.59 0.000 2.094 1114.7 -2.99 7.23 0.00 0.0 1.459 0.00000 0.366 -0.142 15.25 0.000 2.439 961.7 -4.67 5.62 0.00 0.00 1.700 0.00000 0.316 -0.222 13.64 0.000 2.813 804.0 -4.96 3.62 0.00 0.00 0.0 1.960 0.00000 0.264 -0.236 11.64 0.000	CL .	-cmp.	20	. Ju deg	-	Penatch	230	.200 kg	, MJ AL	". ATSC	CICY	O.TOOAU-	05 MZ/8
m/s gms cm Rel. cm cm cm2 x10-3 Abs. 1.031 357.1 0.25 3.90 0.00 0.00 0.718 0.00000 0.117 0.012 11.92 0.000 1.383 914.3 -0.08 8.63 0.00 0.00 0.964 0.00000 0.301 -0.04 16.65 0.000 1.733 1079.2 -1.43 7.57 0.00 0.00 0.0 1.207 0.00000 0.355 -0.068 15.59 0.000 2.094 1114.7 -2.99 7.23 0.00 0.0 1.459 0.00000 0.366 -0.142 15.25 0.000 2.439 961.7 -4.67 5.62 0.00 0.00 1.700 0.00000 0.316 -0.222 13.64 0.000 2.813 804.0 -4.96 3.62 0.00 0.00 0.0 1.960 0.00000 0.264 -0.236 11.64 0.000	Vel	RT	н	TAO	TC	T.K	WSPH	CV	CT	RT/DTS	H/RPY	TAO	Cwanh
1.031 357.1 0.25 3.90 0.00 0.00 0.0 0.718 0.00000 0.117 0.012 11.92 0.000 1.383 914.3 -0.08 8.63 0.00 0.00 0.0 0.964 0.00000 0.301 -0.004 16.65 0.000 1.733 1079.2 -1.43 7.57 0.00 0.00 0.0 1.207 0.00000 0.355 -0.068 15.59 0.000 2.094 1114.7 -2.99 7.23 0.00 0.00 0.0 1.459 0.00000 0.366 -0.142 15.25 0.000 2.439 961.7 -4.67 5.62 0.00 0.00 0.0 1.700 0.00000 0.316 -0.222 13.64 0.000 2.813 804.0 -4.96 3.62 0.00 0.00 0.00 1.960 0.00000 0.264 -0.236 11.64 0.000								٠.					Curbit
1.031 357.1 0.25 3.90 0.00 0.00 0.00 0.718 0.00000 0.117 0.012 11.92 0.000 1.383 914.3 -0.08 8.63 0.00 0.00 0.00 0.00 0.964 0.00000 0.301 -0.004 16.65 0.000 1.733 1079.2 -1.43 7.57 0.00 0.00 0.00 0.0 1.207 0.00000 0.355 -0.068 15.59 0.000 2.094 1114.7 -2.99 7.23 0.00 0.00 0.0 1.459 0.00000 0.366 -0.142 15.25 0.000 2.439 961.7 -4.67 5.62 0.00 0.00 0.0 1.700 0.00000 0.316 -0.222 13.64 0.000 2.813 804.0 -4.96 3.62 0.00 0.00 0.00 1.960 0.00000 0.264 -0.236 11.64 0.000 ** Porpoising													
1.383 914.3 -0.08 8.63 0.00 0.00 0.00 0.964 0.00000 0.301 -0.004 16.65 0.000 1.733 1079.2 -1.43 7.57 0.00 0.00 0.0 1.207 0.00000 0.355 -0.068 15.59 0.000 2.094 1114.7 -2.99 7.23 0.00 0.00 0.0 1.459 0.00000 0.366 -0.142 15.25 0.000 2.439 961.7 -4.67 5.62 0.00 0.00 0.0 1.700 0.00000 0.316 -0.222 13.64 0.000 2.813 804.0 -4.96 3.62 0.00 0.00 0.00 0.0 1.960 0.00000 0.264 -0.236 11.64 0.000 ** Porpoising	1.031	357.1	0.25	3.90	0.00	0.00	0.0	0.718	0.00000	0.117	0.012	11.92	0.000
1.733 1079.2 -1.43 7.57 0.00 0.00 0.0 1.207 0.00000 0.355 -0.068 15.59 0.000 2.094 1114.7 -2.99 7.23 0.00 0.00 0.0 1.459 0.00000 0.366 -0.142 15.25 0.000 2.439 961.7 -4.67 5.62 0.00 0.00 0.0 1.700 0.00000 0.316 -0.222 13.64 0.000 2.813 804.0 -4.96 3.62 0.00 0.00 0.00 0.0 1.960 0.00000 0.264 -0.236 11.64 0.000 ** Porpoising				8.63	0.00	0.00	0.0	0.964	0.00000	0.301	-0.004	16.65	0.000
2.094 1114.7 -2.99 7.23 0.00 0.00 0.0 1.459 0.00000 0.366 -0.142 15.25 0.000						0.00	0.0	1.207	0.00000	0.355	-0.068	15.59	0.000
2.439 961.7 -4.67 5.62 0.00 0.00 0.0 1.700 0.00000 0.316 -0.222 13.64 0.000 2.813 804.0 -4.96 3.62 0.00 0.00 0.0 1.960 0.00000 0.264 -0.236 11.64 0.000 ** Porpoising						0.00	0.0	1.459	. 0.00000	0.366	-0.142	15.25	0.000
2.813 804.0 -4.96 3.62 0.00 0.00 0.0 1.960 0.00000 0.264 -0.236 11.64 0.000 ** Porpoising						0.00	0.0	1.700	0.00000	0.316	-0.222	13.64	0.000
** Porpoising						0.00	0.0	1.960	0.00000	0.264	-0.236	11.64	0.000
						5,575	(8),21,6)			W. 100 - 0550 - 5			

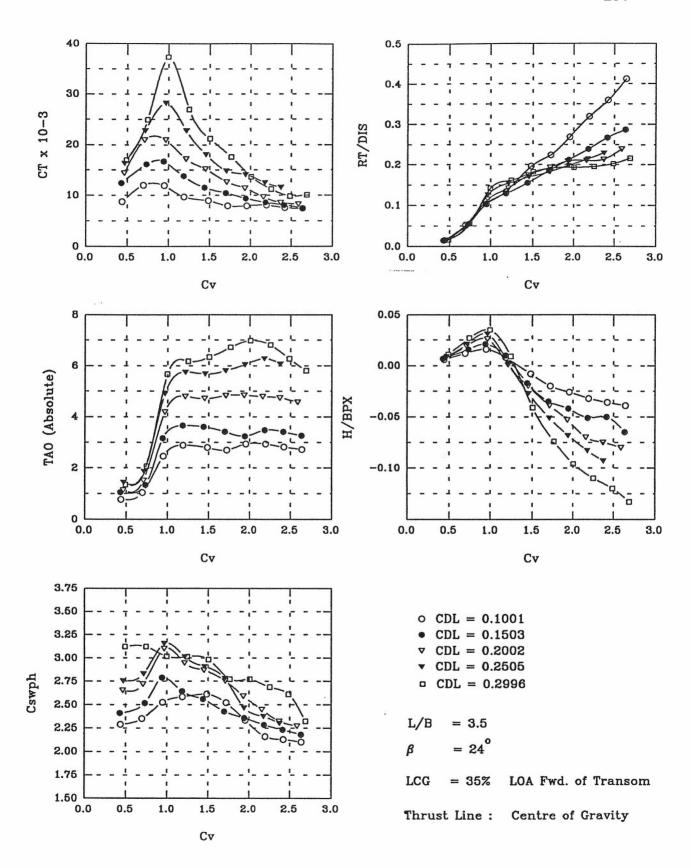


Figure B.49

L/B Ra Deadri LCG Po	se	24	3.5 1.00 deg		Length (Breath (Breath (Deck) E Chine) E	23 PX 21	.50 cm .00 cm				205
Displa VCG Po	cement I	DIS 121	6.00 % I 16.0 gm 0.65 % B	ıs	Disp. Co	m (Tra eff. (1 (Base	DL 0	.1001				
Static Water	trim TA Temp.		0.80 deg 0.50 deg		Density	998	.308 kg	/m3 Ki	n. Visc	ocity	0.1016E	-05 m2/s
Vel m/s	RT gms	H	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
0.626	17.7	0.13	-0.03	20.13	68.16	1008.7	0.436	8.77737	0.015	0.006	0.77	2.287
0.996	62.7	0.26	0.23	24.15	66.82	1036.0	0.694	12.00399	0.052	0.012	1.03	2.349
1.359	124.8	0.34	1.66	32.20	65.85	1114.0	0.947	11.93112	0.103	0.016	2.46	2.526
1.701 2.130	163.3 237.8	0.16 -0.16	2.09 1.99	36.22 37.84	64.40	1139.0 1151.5	1.185	9.73574 8.94125	0.134	0.008	2.89 2.79	2.583 2.611
2.467	272.6	-0.43	1.90	34.62	63.60	1111.8	1.719	7.91915		-0.020	2.70	2.521
2.801	327.3	-0.54	2.14	28.18	62.70	1029.1	1.952	7.96532		-0.026	2.94	2.334
3.154	388.3	-0.68	2.13	22.14	61.99	952.6	2.197	8.05294		-0.032	2.93	2.160
3.479	436.3	-0.75	2.02	20.93	61.86	937.5	2.424	7.55605	0.359	-0.036	2.82	2.126
3.789	501.0	-0.81	1.92	20.13	61.58	925.1	2.640	7.41187	0.412	-0.039	2.72	2.098
VCG Po		28	5.0 gm		Disp. Co			.1503				
Water '	trim TA Temp.		.97 deg		Density	998	.308 kg	/m3 Ki	n. Visc	ocity	0.1016E	-05 m2/s
- 1	200	•••	#1 O		*	Tranti	CTT.		Dm /DTG	** /ppv	m. 0	G
Vel m/s	RT gms	H	TAO Rel.	LC cm	LK cm	WSPH cm2	CV	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
0.614 1.051	25.3 100.7	0.15	0.07 0.37	26.16 32.20	67.06 65.61	1062.0 1110.7	0.428	12.41989 16.13845	0.014	0.007	1.04	2.408 2.519
1.347	189.4	0.44	2.19	44.28	64.80	1229.4	0.732	16.68354	0.104	0.021	3.16	2.788
1.698	235.6	0.21	2.68	40.25	62.79	1165.1	1.183	13.78160	0.129	0.010	3.65	2.642
2.065	282.0	-0.35	2.64	36.87	62.87	1128.3	1.439	11.51509		-0.017	3.61	2.559
2.432	337.7	-0.74	2.45	32.20	62.39	1071.0	1.695	10.47553		-0.035	3.42	2.428
2.785	386.5	-0.87	2.27	30.19	61.66	1039.8	1.940	9.41682	0.212	-0.042	3.24	2.358
3.138	435.8	-1.07	2.51	27.77	61.26	1007.8	2.186	8,62906		-0.051	3.48	2.285
3.470	487.6	-1.04	2.44	25.92	61.02	984.1	2.417	8.08905		-0.050	3.41	2.231
3.780	523.9	-1.36	2.29	24.15	60.78	961.2	2.634	7.49642	0.287	-0.065	3.26	2.180
Di												
	cement D		2.0 gm		Disp. Co			.2002				
VCG Pos	sition	27	.65 % B		Disp. Co 6.36 cm			.2002				
VCG Pos	sition trim TA	.0o 0					Line		n. Visco	ocity	0.1004E	-05 m2/s
VCG Pos Static Water	sition trim TA Temp.	.00 0 20	.65 % B .97 deg .00 deg	С	6.36 cm Density	998	Line	/m3 Ki		5. 6		
VCG Pos Static Water !	sition trim TA Temp. RT	27 .00 0 20	.65 % B .97 deg .00 deg	c	6.36 cm Density	998 WSPH	Line	/m3 Ki:		ocity H/BPX	0.1004E	-05 m2/s Cwsph
VCG Pos Static Water	sition trim TA Temp.	.00 0 20	.65 % B .97 deg .00 deg	С	6.36 cm Density	998	Line	/m3 Ki		5. 6	TAO	
VCG Pos Static Water S Vel m/s	sition trim TA Temp. RT gms 	27 00 0 20 H cm	.65 % B .97 deg .00 deg TAO Rel.	C LC cm	Density LK cm	998 WSPH cm2	Line .206 kg	/m3 Kin	RT/DIS 0.015	H/BPX 0.008	TAO Abs.	Cwsph 2.654
VCG Pos Static Water S Vel m/s 	sition trim TA Temp. RT gms 37.6 132.4	27 00 0 20 H cm 0.16 0.40	TAO Rel. 0.16 0.54	C LC cm 32.20 36.22	Density LK cm 70.04 68.83	998 WSPH cm2 1170.3 1198.5	Line .206 kg CV 0.463 0.708	/m3 Kin CT x10-3 	0.015 0.054	H/BPX 0.008 0.019	TAO Abs. 1.13 1.51	Cwsph 2.654 2.718
VCG Pos Static Water 'S Vel m/s 	sition trim TA Temp. RT gms 37.6 132.4 280.0	27 00 0 20 H cm 0.16 0.40 0.54	TAO Rel. 0.16 0.54 3.22	C LC cm 32.20 36.22 56.35	Density LK cm 70.04 68.83 66.82	998 WSPH Cm2	Line .206 kg. CV 0.463 0.708 0.965	/m3 Kir CT x10-3 	0.015 0.054 0.115	H/BPX 0.008 0.019 0.026	TAO Abs. 1.13 1.51 4.19	Cwsph 2.654 2.718 3.101
VCG Pos Static Water : Vel m/s 	sition trim TA Temp. RT gms 37.6 132.4 280.0 344.9	27 00 20 H Cm 0.16 0.40 0.54 0.03	.65 % B .97 deg .00 deg TAO Rel. 0.16 0.54 3.22 3.82	C LC cm 32.20 36.22 56.35 51.12	Density LK cm 70.04 68.83 66.82 65.21	998 WSPH Cm2 1170.3 1198.5 1367.6 1299.8	CV 0.463 0.708 0.965 1.212	/m3 Kir CT x10-3 	0.015 0.054 0.115 0.142	0.008 0.019 0.026 0.001	TAO Abs. 1.13 1.51 4.19 4.79	2.654 2.718 3.101 2.947
VCG Pos Static Water ! Vel m/s 	RT gms 37.6 132.4 280.0 344.9 422.6	27 00 20 H cm 0.16 0.40 0.54 0.03 -0.43	.65 % B .97 deg .00 deg TAO Rel. 0.16 0.54 3.22 3.82 3.74	C LC cm 32.20 36.22 56.35 51.12 48.30	0.36 cm Density LK cm 70.04 68.83 66.82 65.21 64.40	998 WSPH Cm2	Line .206 kg. CV 0.463 0.708 0.965 1.212 1.449	/m3 Kin CT x10-3 	0.015 0.054 0.115 0.142 0.174	H/BPX 0.008 0.019 0.026 0.001 -0.020	TAO Abs. 1.13 1.51 4.19 4.79 4.71	Cwsph 2.654 2.718 3.101 2.947 2.870
VCG Pos Static Water : Vel m/s 	RT gms 37.6 132.4 280.0 344.9 422.6 468.9	27 00 20 H Cm 0.16 0.40 0.54 0.03 -0.43 -0.82	.65 % B .97 deg .00 deg TAO Rel. 0.16 0.54 3.22 3.82 3.74 3.86	C LC cm 32.20 36.22 56.35 51.12 48.30 44.28	6.36 cm Density LK cm 70.04 68.83 66.82 65.21 64.40 63.60	998 WSPH cm2 1170.3 1198.5 1367.6 1299.8 1265.8 1214.9	Line .206 kg. CV 0.463 0.708 0.965 1.212 1.449 1.708	/m3 Kin CT x10-3 	0.015 0.054 0.115 0.142 0.174 0.193	H/BPX 0.008 0.019 0.026 0.001 -0.020 -0.039	TAO Abs. 1.13 1.51 4.19 4.79 4.71 4.83	Cwsph 2.654 2.718 3.101 2.947 2.870 2.755
VCG Pos Static Water ! Vel m/s 	RT gms 37.6 132.4 280.0 344.9 422.6 468.9	27 00 20 H cm 0.16 0.40 0.54 0.03 -0.43	.65 % B .97 deg .00 deg TAO Rel. 0.16 0.54 3.22 3.82 3.74	C LC cm 32.20 36.22 56.35 51.12 48.30 44.28	0.36 cm Density LK cm 70.04 68.83 66.82 65.21 64.40	WSPH cm2	Line .206 kg. CV 0.463 0.708 0.965 1.212 1.449 1.708 1.929 2.160	/m3 Kin CT x10-3 14.34343 21.00297 20.98461 17.22077 15.17398 12.62950 11.42113 9.69361	0.015 0.054 0.115 0.142 0.174 0.193 0.209 0.210	H/BPX 0.008 0.019 0.026 0.001 -0.020 -0.039	TAO Abs. 1.13 1.51 4.19 4.79 4.71 4.83 4.84	Cwsph 2.654 2.718 3.101 2.947 2.870
VCG Postatic Water 'S Vel m/s	RT gms	27 00 20 H cm 0.16 0.40 0.54 0.03 -0.43 -0.43 -1.11	.65 % B .97 deg .00 deg TAO Rel. 0.54 3.22 3.82 3.74 3.86 3.87	C LC cm 32.20 36.22 56.35 51.12 48.30 44.28 38.64 34.21	Density LK cm 70.04 68.83 66.82 65.21 64.40 63.60 62.39	WSPH cm2	Line .206 kg. CV 0.463 0.708 0.965 1.212 1.449 1.708 1.929 2.160	/m3 Kin CT x10-3 14.34343 21.00297 20.98461 17.22077 15.17398 12.62950 11.42113 9.69361	0.015 0.054 0.115 0.142 0.174 0.193 0.209 0.210	H/BPX 0.008 0.019 0.026 0.001 -0.020 -0.039 -0.053	TAO Abs. 1.13 1.51 4.19 4.79 4.71 4.83 4.84 4.79	Cwsph 2.654 2.718 3.101 2.947 2.870 2.755 2.591
VCG Postatic Water 'S Vel m/s	RT gms	27 00 20 H Cm 0.16 0.40 0.54 0.03 -0.43 -0.82 -1.11 -1.47	.65 % B .97 deg .00 deg TAO Rel. 	C LC cm 32.20 36.22 56.35 51.12 48.30 44.28 38.64 21 30.19	LK cm 70.04 68.83 66.82 65.21 64.40 63.60 62.39 61.18	WSPH cm2 1170.3 1198.5 1367.6 1299.8 1265.8 1214.9 1142.4 1079.2	Line .206 kg. CV 0.463 0.708 0.965 1.212 1.449 1.708 1.929 2.160 2.372	/m3 Kin CT x10-3 	0.015 0.054 0.115 0.142 0.174 0.193 0.209 0.210 0.213	H/BPX 0.008 0.019 0.026 0.001 -0.020 -0.039 -0.053 -0.070 -0.075	TAO Abs. 1.13 1.51 4.19 4.79 4.71 4.83 4.84 4.79 4.74	Cwsph 2.654 2.718 3.101 2.947 2.870 2.755 2.591 2.447
VCG Pos Static Water ' Vel m/s 0.664 1.017 1.385 1.740 2.080 2.451 2.769 3.101 3.404 3.712	RT gms	27 00 20 H cm 0.16 0.40 0.54 0.03 -0.43 -0.82 -1.11 -1.47 -1.57 -1.67	*** TAO Rel.	C LC cm 32.20 36.22 56.35 51.12 48.30 44.28 38.64 34.21 30.19 28.18	Density LK cm 70.04 68.83 66.82 65.21 64.40 63.60 62.39 61.18 60.38 60.38	WSPH cm2	Line .206 kg CV 0.463 0.708 0.965 1.212 1.449 1.708 1.929 2.160 2.372 2.586	/m3 Kin CT x10-3 14.34343 21.00297 20.98461 17.22077 15.17398 12.62950 11.42113 9.69361 8.58825	0.015 0.054 0.115 0.142 0.174 0.193 0.209 0.210 0.213	H/BPX 0.008 0.019 0.026 0.001 -0.020 -0.039 -0.053 -0.070 -0.075	TAO Abs. 1.13 1.51 4.19 4.79 4.71 4.83 4.84 4.79 4.74	Cwsph 2.654 2.718 3.101 2.947 2.870 2.755 2.591 2.447 2.324
VCG Pos Static Water ' Vel m/s 0.664 1.017 1.385 1.740 2.080 2.451 2.769 3.101 3.404 3.712	RT gms	27 00 20 H Cm 0.16 0.40 0.54 0.03 -0.43 -0.82 -1.11 -1.47 -1.57 -1.67	*** TAO Rel.	C LC CM 36.22 56.35 51.12 48.30 44.28 38.64 34.21 30.19 28.18	LK cm 70.04 68.83 66.82 65.21 64.40 62.39 61.18 60.38	WSPH CM2	Line .206 kg. CV 0.463 0.708 0.965 1.212 1.449 1.708 1.929 2.160 2.372 2.586 DL 0	/m3 Kin CT x10-3 14.34343 21.00297 20.98461 17.22077 15.17398 12.62950 11.42113 9.69361 8.58825 8.29033	0.015 0.054 0.115 0.142 0.174 0.193 0.209 0.210 0.213	H/BPX 0.008 0.019 0.026 0.001 -0.020 -0.039 -0.053 -0.070 -0.075	TAO Abs. 1.13 1.51 4.19 4.79 4.71 4.83 4.84 4.79 4.74	Cwsph 2.654 2.718 3.101 2.947 2.870 2.755 2.591 2.447 2.324
VCG Pos Static Water : Vel m/s 	RT gms	27 00 20 H Cm 	.65 % B .97 deg .00 deg TAO Rel. 	C LC cm 32.20 36.22 56.35 51.12 48.30 44.28 38.64 34.21 30.19 28.18	LK cm 70.04 68.83 66.82 65.21 64.40 63.60 62.39 61.18 60.38 60.38 Disp. Co	WSPH Cm2	Line .206 kg. CV 0.463 0.708 0.965 1.212 1.449 1.708 1.929 2.160 2.372 2.586 DL 0 Line	/m3 Kin CT x10-3 14.34343 21.00297 20.98461 17.22077 15.17398 12.62950 11.42113 9.69361 8.58825 8.29033	0.015 0.054 0.115 0.142 0.174 0.193 0.209 0.210 0.213	H/BPX 0.008 0.019 0.026 0.001 -0.020 -0.039 -0.053 -0.070 -0.075 -0.080	TAO Abs. 1.13 1.51 4.19 4.79 4.71 4.83 4.84 4.79 4.74	2.654 2.718 3.101 2.947 2.870 2.755 2.591 2.447 2.324 2.272
VCG Pos Static Water ' Vel m/s 	RT gms	27 00 20 H Cm 	.65 % B .97 deg .00 deg TAO Rel. 	C LC cm 32.20 36.22 56.35 51.12 48.30 44.28 38.64 34.21 30.19 28.18	LK cm 70.04 68.83 66.82 65.21 64.40 63.60 62.39 61.18 60.38 60.38 Disp. Co	WSPH cm2	CV 0.463 0.708 0.965 1.212 1.449 1.708 1.929 2.160 2.372 2.586 DL 0 Line .206 kg	/m3 Kin CT x10-3 14.34343 21.00297 20.98461 17.22077 15.17398 12.62950 11.42113 9.69361 8.58825 8.29033 .2505 /m3 Kin	0.015 0.054 0.115 0.142 0.174 0.193 0.209 0.210 0.213 0.239	H/BPX 0.008 0.019 0.026 0.001 -0.020 -0.039 -0.053 -0.070 -0.075 -0.080	TAO Abs. 1.13 1.51 4.19 4.79 4.71 4.83 4.84 4.79 4.74 4.57	Cwsph 2.654 2.718 3.101 2.947 2.870 2.755 2.591 2.447 2.324 2.272
VCG Postatic Water Static Water Water Static Water Static Water W	sition trim TA Temp. RT gms 	27 00 20 H Cm 0.16 0.40 0.54 0.03 -0.43 -0.43 -1.11 -1.47 -1.57 -1.67 US 304 28 00 1 20	.65 % B .97 deg .00 deg TAO Rel. 	C LC cm 32.20 36.22 56.35 51.12 48.30 44.28 38.64 34.21 30.19 28.18 S C LC	0.36 cm LK cm 70.04 68.83 66.82 65.21 64.40 63.60 62.39 61.18 60.38 60.38 Disp. Co 6.55 cm Density LK	WSPH CM2	Line .206 kg. CV 0.463 0.708 0.965 1.212 1.449 1.708 1.929 2.160 2.372 2.586 DL 0 Line	/m3 Kir CT x10-3 	0.015 0.054 0.115 0.142 0.174 0.193 0.209 0.210 0.213 0.239	H/BPX 0.008 0.019 0.026 0.001 -0.020 -0.039 -0.053 -0.070 -0.075 -0.080	TAO Abs. 1.13 1.51 4.19 4.79 4.71 4.83 4.84 4.79 4.74 4.57	2.654 2.718 3.101 2.947 2.870 2.755 2.591 2.447 2.324 2.272
VCG Pos Static Water ' Vel m/s 	sition trim TA Temp. RT gms 37.6 132.4 280.0 344.9 508.8 511.7 518.9 582.4 cement D sition trim TA Temp.	27 00 20 H Cm 	.65 % B .97 deg .00 deg TAO Rel 0.16 0.54 3.22 3.74 3.86 3.87 3.82 3.77 3.60 2.0 gm .48 % B .31 deg .00 deg TAO Rel.	C LC cm 32.20 36.22 56.35 51.12 48.30 44.28 38.64 34.21 30.19 28.18 S C LC cm	Density LK cm 70.04 68.83 66.82 65.21 64.40 63.60 62.39 61.18 60.38 60.38 Disp. Co 6.55 cm Density LK cm	WSPH CM2 1170.3 1198.5 1367.6 1299.8 1214.9 1142.4 1079.2 1024.8 1002.0 eff. C Base 998	Line .206 kg. CV 0.463 0.708 0.965 1.212 1.449 1.708 1.929 2.160 2.372 2.586 DL 0 Line .206 kg.	/m3 Kin CT x10-3 14.34343 21.00297 20.98461 17.22077 15.17398 12.62950 11.42113 9.69361 8.58825 8.29033 .2505 /m3 Kin CT x10-3	0.015 0.054 0.115 0.142 0.174 0.193 0.209 0.210 0.239	H/BPX 0.008 0.019 0.026 0.001 -0.020 -0.039 -0.053 -0.070 -0.075 -0.080	TAO Abs. 1.13 1.51 4.19 4.79 4.71 4.83 4.84 4.79 4.74 4.57	2.654 2.718 3.101 2.947 2.870 2.755 2.591 2.447 2.324 2.272
VCG Pos Static Water ' Vel m/s 	sition trim TA Temp. RT gms 37.6 132.4 280.0 344.9 422.6 468.9 508.8 511.7 518.9 582.4 cement D sition trim TA Temp.	27 00 20 H Cm 0.16 0.40 0.54 0.03 -0.43 -0.82 -1.11 -1.47 -1.57 -1.67 US 304 28 00 1 20 H Cm	.65 % B .97 deg .00 deg TAO Rel 0.16 0.54 3.22 3.74 3.86 3.87 3.82 3.77 3.60 2.0 gm .48 % B .31 deg .00 deg TAO Rel 0.13	C LC cm 32.20 36.22 56.35 51.12 48.30 44.28 38.64 34.21 30.19 28.18 S C LC cm 36.22	0.36 cm Density LK cm 70.04 68.83 66.82 65.21 64.40 63.60 62.39 61.18 60.38 60.38 Disp. Co 6.55 cm Density LK cm	WSPH Cm2	Line .206 kg CV 0.463 0.708 0.965 1.212 1.449 1.708 1.929 2.160 2.372 2.586 DL 0 Line .206 kg	/m3 Kin CT x10-3	0.015 0.054 0.115 0.142 0.174 0.193 0.209 0.210 0.213 0.239	H/BPX 0.008 0.019 0.026 0.001 -0.020 -0.039 -0.053 -0.075 -0.075 -0.080	TAO Abs. 1.13 1.51 4.19 4.79 4.71 4.83 4.84 4.79 4.74 4.57 0.1004E- TAO Abs.	Cwsph 2.654 2.718 3.101 2.947 2.870 2.755 2.591 2.447 2.324 2.272 -05 m2/s Cwsph
VCG Postatic Water 'Vel m/s	sition trim TA Temp. RT gms 	27 00 20 H CM 	.65 % B .97 deg .00 deg TAO Rel 0.16 0.54 3.22 3.74 3.86 3.87 3.82 3.77 3.60 2.0 gm .48 % B .31 deg .00 deg TAO Rel 0.13 0.55	C LC cm 32.20 36.22 56.35 51.12 48.30 44.28 38.64 34.21 30.19 28.18 S C LC cm 36.22 40.25	1 LK cm 70.04 68.83 66.82 65.21 64.40 63.60 62.39 61.18 60.38 Disp. Co 6.55 cm LK cm 70.04 69.23	WSPH CM2	Line .206 kg. CV 0.463 0.708 0.965 1.212 1.449 1.708 1.929 2.160 2.372 2.586 DL 0 Line .206 kg. CV	/m3 Kin CT x10-3 14.34343 21.00297 20.98461 17.22077 15.17398 12.62950 11.42113 9.69361 8.58825 8.29033 .2505 /m3 Kin CT x10-3	0.015 0.054 0.115 0.142 0.174 0.193 0.209 0.210 0.213 0.239	H/BPX 0.008 0.019 0.026 0.001 -0.020 -0.039 -0.075 -0.075 -0.080 DCity H/BPX	TAO Abs. 1.13 1.51 4.19 4.79 4.71 4.83 4.84 4.79 4.74 4.57 0.1004E- TAO Abs. 1.44 1.86	Cwsph 2.654 2.718 3.101 2.947 2.870 2.755 2.591 2.447 2.324 2.272 -05 m2/s Cwsph 2.755 2.831
VCG Postatic Water 'Vel m/s	sition trim TA Temp. RT gms 37.6 132.4 280.0 344.9 422.6 468.9 508.8 511.7 518.9 582.4 cement D sition trim TA Temp. RT gms 45.5 152.8 383.0	27 00 20 H Cm 0.16 0.40 0.54 0.03 -0.43 -0.43 -1.11 -1.47 -1.57 -1.67 IS 304 28 00 1 20 H Cm	.65 % B .97 deg .00 deg TAO Rel 0.16 0.54 3.22 3.82 3.74 3.86 3.87 3.82 3.77 3.60 2.0 gm .48 % B .31 deg .00 deg TAO Rel 0.13 0.55 3.59	C LC cm 32.20 36.22 56.35 51.12 48.30 44.28 38.64 34.21 30.19 28.18 S C LC cm 36.22 40.25 60.38	6.36 cm Density LK cm 70.04 68.83 66.82 65.21 64.40 63.60 62.39 61.18 60.38 60.38 Disp. Co 6.55 cm Density LK cm 70.04 69.23 67.62	WSPH Cm2 1170.3 1198.5 1367.6 1299.8 1214.9 1142.4 1079.2 1024.8 1002.0 eff. C & Base 998 WSPH Cm2 1214.7 1248.5 1392.1	Line .206 kg. CV 0.463 0.708 0.965 1.212 1.449 1.708 1.929 2.160 2.372 2.586 DL 0 Line .206 kg. CV	/m3 Kir CT x10-3 	0.015 0.054 0.115 0.142 0.174 0.193 0.209 0.210 0.213 0.239	H/BPX 0.008 0.019 0.026 0.001 -0.020 -0.053 -0.075 -0.080 0.011 0.020	TAO Abs. 1.13 1.51 4.19 4.71 4.83 4.84 4.79 4.74 4.57 0.1004E- TAO Abs. 1.44 1.86 4.90	Cwsph 2.654 2.718 3.101 2.947 2.870 2.755 2.591 2.447 2.324 2.272 Cwsph 2.755 2.831 3.157
VCG Postatic Water Static Water Water Static Water Static Water Water Static Water	sition trim TA Temp. RT gms	27 00 20 H Cm 	.65 % B .97 deg .00 deg TAO Rel 0.16 0.54 3.22 3.82 3.74 3.86 3.87 3.60 2.0 gm .48 % B .31 deg .00 deg TAO Rel 0.13 0.55 3.59 4.44	C LC cm 32.20 36.22 56.35 51.12 48.30 44.28 38.64 34.21 30.19 28.18 S C LC cm 36.22 40.25 60.38 54.34	6.36 cm Density LK cm 70.04 68.83 66.82 65.21 64.40 63.60 62.39 61.18 60.38 60.38 Disp. Co 6.55 cm Density LK cm 70.04 69.23 67.62 65.21	WSPH Cm2	Line .206 kg. CV 0.463 0.708 0.965 1.212 1.449 1.708 1.929 2.160 2.372 2.586 DL 0 Line .206 kg. CV	/m3 Kirx10-3	0.015 0.054 0.115 0.142 0.174 0.193 0.209 0.210 0.239 0.239 a. Visco RT/DIS 0.015 0.050 0.126 0.154	H/BPX 0.008 0.019 0.026 0.001 -0.020 -0.039 -0.053 -0.070 -0.075 -0.080 Decity H/BPX 0.009 0.021 0.031 0.003	TAO Abs. 1.13 1.51 4.19 4.79 4.71 4.83 4.84 4.79 4.74 4.57 0.1004E TAO Abs. 1.44 1.86 4.90 5.75	Cwsph 2.654 2.718 3.101 2.947 2.870 2.755 2.591 2.447 2.324 2.272 -05 m2/s Cwsph 2.755 2.831 3.157 3.014
VCG Postatic Water Static Water Water Static Water Water Static Water W	sition trim TA Temp. RT gms 37.6 132.4 280.0 344.9 508.8 511.7 518.9 582.4 cement D sition trim TA Temp. RT gms 	27 00 20 H Cm 0.16 0.40 0.54 0.03 -0.82 -1.11 -1.47 -1.57 -1.67 IS 304 28 00 10 10 10 10 10 10 10 10 10 10 10 10	.65 % B .97 deg .00 deg TAO Rel 0.16 0.54 3.22 3.74 3.86 3.87 3.82 3.77 3.60 2.0 gm .48 % B .31 deg .00 deg TAO Rel 0.13 0.55 3.59 4.44 4.37	C LC cm 32.20 36.22 56.35 51.12 48.30 44.28 38.64 34.21 30.19 28.18 S C LC cm 36.22 40.25 60.38 50.31	6.36 cm Density LK cm 70.04 68.83 66.82 65.21 64.40 63.60 62.39 61.18 60.38 60.38 Disp. Co 6.55 cm Density LK cm 70.04 69.23 67.62 65.21 64.40	WSPH CM2	Line .206 kg. CV 0.463 0.708 0.965 1.212 1.449 1.708 1.929 2.160 2.372 2.586 DL 0 Line .206 kg. CV 0.467 0.715 0.965 1.214 1.455	/m3 Kin CT x10-3 14.34343 21.00297 20.98461 17.22077 15.17378 12.62950 11.42113 9.69361 8.58825 8.29033 .2505 /m3 Kin CT x10-3	0.015 0.054 0.115 0.142 0.174 0.193 0.209 0.210 0.239 0.239 n. Visco RT/DIS 0.015 0.050 0.126 0.154 0.169	H/BPX 0.008 0.019 0.026 0.001 -0.020 -0.039 -0.075 -0.080 0.019 H/BPX 0.009 0.021 0.031 0.003 -0.027	TAO Abs. 1.13 1.51 4.19 4.71 4.83 4.84 4.79 4.74 4.57 0.1004E- TAO Abs. 1.44 1.86 4.90	Cwsph 2.654 2.718 3.101 2.947 2.870 2.755 2.591 2.447 2.324 2.272 -05 m2/s Cwsph 2.755 2.831 3.157 3.014 2.909
VCG Postatic Water Static Water Water Static Water Static Water Water Static Water	sition trim TA Temp. RT gms -37.6 132.4 280.0 344.9 422.6 468.9 508.8 511.7 518.9 582.4 cement D sition trim TA Temp. RT gms -45.5 152.8 383.0 469.0 514.8 552.2	27 00 20 H Cm 	.65 % B .97 deg .00 deg TAO Rel 0.16 0.54 3.22 3.74 3.86 3.87 3.82 3.77 3.60 2.0 gm .48 % B .31 deg .00 deg TAO Rel 0.13 0.55 3.59 4.44 4.37 4.50	C LC cm 32.20 36.22 56.35 51.12 48.30 44.28 38.64 34.21 30.19 28.18 S C LC cm 36.22 40.25 60.38 54.34 50.31 46.29	6.36 cm Density LK cm 70.04 68.83 66.82 65.21 64.40 63.60 62.39 61.18 60.38 60.38 Disp. Co 6.55 cm Density LK cm 70.04 69.23 67.62 65.21	WSPH Cm2	Line .206 kg. CV 0.463 0.708 0.965 1.212 1.449 1.708 1.929 2.160 2.372 2.586 DL 0 Line .206 kg. CV	/m3 Kirx10-3	0.015 0.054 0.115 0.142 0.174 0.193 0.209 0.213 0.239 n. Visco RT/DIS 0.015 0.050 0.126 0.154 0.169 0.182	H/BPX 0.008 0.019 0.026 0.001 -0.020 -0.039 -0.075 -0.080 0.01 H/BPX 0.009 0.021 0.003 0.003 -0.027 -0.051	TAO Abs. 1.13 1.51 4.19 4.79 4.71 4.83 4.84 4.79 4.74 4.57 0.1004E TAO Abs. 1.44 1.86 4.90 5.75 5.68 5.81	Cwsph 2.654 2.718 3.101 2.947 2.870 2.755 2.591 2.447 2.324 2.272 -05 m2/s Cwsph 2.755 2.831 3.157 3.014
VCG Postatic Water Static Water Water Static Water Static Water Water Static Water	sition trim TA Temp. RT gms 37.6 132.4 280.0 344.9 422.6 468.9 508.8 511.7 518.9 582.4 cement D sition trim TA Temp. RT gms 45.5 152.8 383.0 469.0 514.8 552.2 623.8	27 00 20 H Cm 0.16 0.40 0.54 0.03 -0.43 -0.82 -1.11 -1.47 -1.57 -1.67 IS 304 28 00 1 20 H Cm 	.65 % B .97 deg .00 deg TAO Rel 0.16 0.54 3.22 3.74 3.86 3.87 3.82 3.77 3.60 2.0 gm .48 % B .31 deg .00 deg TAO Rel 0.13 0.55 3.59 4.44 4.37 4.50 16.36	C LC cm 32.20 36.22 56.35 51.12 48.30 44.28 38.64 34.21 30.19 28.18 S C LC cm 36.22 40.25 60.38 54.34 50.31 46.29 42.26	6.36 cm LK cm 70.04 68.83 66.82 65.21 64.40 63.60 62.39 61.18 60.38 Disp. Co 6.55 cm Density LK cm 70.04 69.23 67.62 65.21 64.40 62.79	WSPH Cm2	Line .206 kg CV 0.463 0.708 0.965 1.212 1.449 1.708 1.929 2.160 2.372 2.586 DL 0 Line .206 kg CV 0.467 0.715 0.965 1.214 1.455 1.704	/m3 Kir CT x10-3 	0.015 0.054 0.115 0.142 0.174 0.193 0.209 0.210 0.239 0.239 a. Visco RT/DIS 0.050 0.154 0.169 0.182 0.205 0.182	H/BPX 0.008 0.019 0.026 0.001 -0.020 -0.039 -0.053 -0.075 -0.080 0.01 H/BPX 0.009 0.021 0.031 0.003 -0.027 -0.051 -0.067 -0.068	TAO Abs. 1.13 1.51 4.19 4.79 4.71 4.83 4.84 4.79 4.74 4.57 0.1004E TAO Abs. 1.44 1.86 4.90 5.75 5.68 5.81 17.67 6.05	Cwsph 2.654 2.718 3.101 2.947 2.870 2.755 2.591 2.447 2.324 2.272 -05 m2/s Cwsph 2.755 2.831 3.157 3.014 2.909 2.781 2.656 2.466
VCG Postatic Water 'Vel m/s	sition trim TA Temp. RT gms -37.6 132.4 280.0 3442.6 468.9 508.8 511.7 518.9 582.4 cement D sition trim TA Temp. RT gms -45.5 152.8 383.0 469.0 514.8 552.2 623.8 601.6 649.6	27 00 20 H Cm 0.16 0.40 0.54 0.03 -0.43 -0.43 -1.11 -1.47 -1.57 -1.67 IS 304 28 00 1 20 H Cm 0.18 0.45 0.05 	.65 % B .97 deg .00 deg TAO Rel 0.16 0.54 3.22 3.74 3.86 3.87 3.82 3.77 3.60 2.0 gm .48 % B .31 deg .00 deg TAO Rel 0.13 0.55 3.59 4.44 4.37 4.50 16.36	C LC CM 32.20 36.22 56.35 51.12 48.30 44.28 38.64 34.21 30.19 28.18 S C LC CM 36.22 40.25 60.38 54.34 50.31 46.29 42.26 36.22 33.41	6.36 cm Density LK cm 70.04 68.83 66.82 65.21 64.40 63.60 62.39 61.18 60.38 60.38 Disp. Co 6.55 cm Density LK cm 70.04 69.23 67.62 65.21 64.40 62.79 61.58 59.97	WSPH Cm2	Line .206 kg. CV 0.463 0.708 0.965 1.212 1.449 1.708 1.929 2.160 2.372 2.586 DL 0 Line .206 kg. CV 0.467 0.715 0.965 1.214 1.455 1.704 1.935 1.937 2.180	/m3 Kin CT x10-3 14.34343 21.00297 20.98461 17.22077 15.17398 12.62950 11.42113 9.69361 8.58825 8.29033 .2505 /m3 Kin CT x10-3	0.015 0.054 0.115 0.142 0.174 0.193 0.209 0.210 0.239 0.239 0.050 0.156 0.156 0.154 0.169 0.182 0.205 0.198 0.214	H/BPX 0.008 0.019 0.020 -0.039 -0.053 -0.070 -0.080 0.011 0.003 -0.007 -0.080 0.001 -0.003 -0.003 -0.003 -0.003 -0.003 -0.003 -0.003 -0.003 -0.003	TAO Abs. 1.13 1.51 4.19 4.79 4.71 4.83 4.84 4.79 4.74 4.57 0.1004E- TAO Abs. 1.44 1.86 4.90 5.75 5.68 5.81 17.67 6.05 6.28	Cwsph 2.654 2.718 3.101 2.947 2.870 2.755 2.591 2.447 2.324 2.272 -05 m2/s Cwsph 2.755 2.831 3.157 3.014 2.909 2.781 2.656

Table B.49 L/B = 3.5; β = 24°; L_{cg} = 35%; Thrust Line: Centre of Gravity (1/2)

Vel m/s	RT gms	H	TAO Rel.	LC cm	LK cm	WSPH cm2	CA	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
0.703	58.6	0.24	0.09	53.13	70.04	1377.5	0.490	16.93609	0.016	0.011	1.35	3.123
1.070	200.2	0.57	0.80	56.35	67.62	1377.2	0.745	24.96702	0.055	0.027	2.06	3.123
1.070	200.2	0.57	0.80	56.35	67.62	1377.2	0.745	24.96702	0.055	0.027	2.06	3.123
1.429	516.3	0.73	4.41	55.55	64.40	1330.8	0.996	37.32730	0.142	0.035	5.67	3.018
1.792	585.1	0.19	4.91	54.34	65.21	1329.0	1.248	26.95408	0.161	0.009	6.17	3.014
2.161	664.0	-0.85	5.08	54.42	64.08	1316.5	1.505	21.22892	0.182	-0.041	6.34	2.985
2.531	699.7	-1.54	5.46	46.29	62.39	1221.9	1.763	17.56678	0.192	-0.074	6.72	2.771
2.879	702.1	-2.01	5.72	46.13	62.55	1222.1	2.006	13.62294	0.193	-0.096	6.98	2.771
3.240	709.4	-2.32	5.55	42.50	62.55	1184.8	2.257	11.20996	0.195	-0.110	6.81	2.687
3.570	736.1	-2.53	5.01	38.88	62.95	1151.7	2.487	9.85430	0.202	-0.120	6.27	2.612
3.859	784.8	-2.80	4.55	32.20	58.36	1024.1	2.689	10.11395	0.216	-0.133	5.81	2.322

<u>Table B.49</u> L/B = 3.5 ; β = 24° ; L_{cg} = 35% ; Thrust Line: Centre of Gravity (2/2)

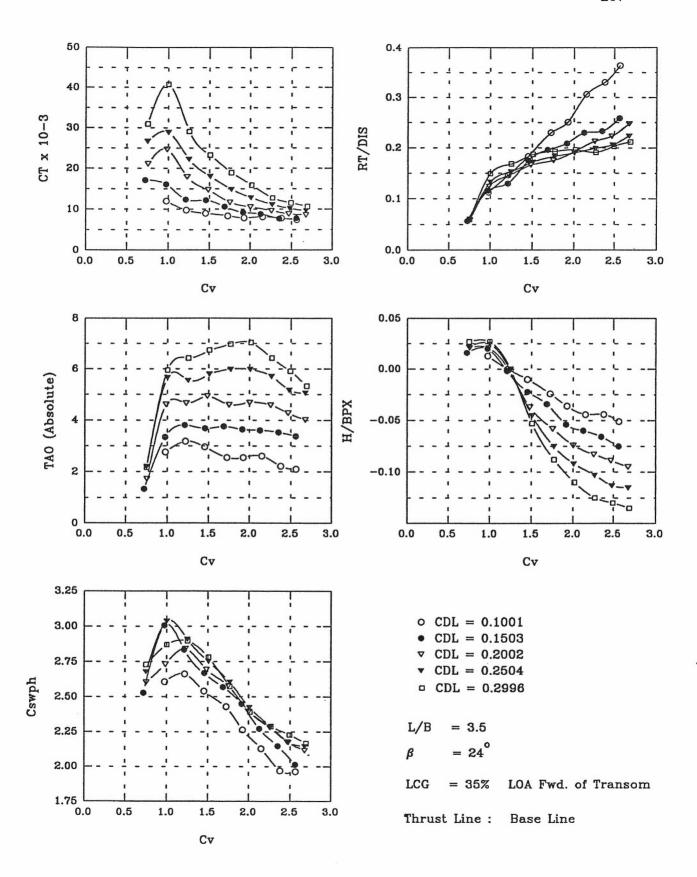


Figure B.50

3.5 Length Overal LOA Breath (Deck) B Breath (Chine) BPX Deadrise 24.00 deg

LCG Position 35.00 % LOA 28.18 cm @ Transom

CDT.

Displacement DIS 1216.0 gms VCG Position 29.65 % B Disp. Coeff. 0.1001 6.82 cm @ Base Line Static trim TAOo 0.80 deg Water Temp. 20.00 deg C Density 998.206 kg/m3 Kin. Viscocity 0.1004E-05 m2/s

Vel RT H TAO LC T.K WSPH CT RT/DIS H/BPX TAO Cwsph m/s x10-3 Rel. Abs. oms Cm Cm CM cm2 1.399 137.3 0.27 1149.8 0.975 11.99190 0.113 2.76 36.22 65.21 0.013 2.607 1.96 1.746 177.9 0.01 2.38 40.25 63.60 1174.4 1.217 9.76524 0.146 0.000 3.18 2.663 1.454 2.087 222.5 -0.212.16 36.22 62.79 1120.3 8.95752 0.183 -0.010 2.96 2.540 2.473 279.5 -0.50 1.75 32.20 62.39 1071.0 1.723 8.38565 0.230 -0.024 2.55 2.428 2.761 305.6 -0.75 1.75 998.0 1.924 7.89501 0.251 -0.036 2.55 26.16 61.99 2.263 0.306 -0.044 3.090 371.7 -0.92 60.78 2.153 8-15324 2.61 1.81 22.14 938.5 2.128 3.418 400.7 -0.93 1.41 16.10 60.62 868.4 2.381 7.76394 0.330 -0.044 2.21 1.969 3.681 442.3 -1.08 1.30 16.10 60.38 865.6 2.565 7.41335 0.364 -0.051 2.10 1.963

80.50 cm

21.00 cm

23.00 cm

Displacement DIS 1825.0 gms Disp. Coeff. CDL 0.1503 28.30 % B 1.97 deg 6.51 cm @ Base Line VCG Position Static trim TAOo

Water Temp. 20.00 deg C 998.206 kg/m3 Kin. Viscocity 0.1004E-05 m2/s Density

WSPH Vel H TAO T.C T.K CT RT/DIS H/BPX Cwsph m/s Rel. x10-3 Abs. oms cm CM CM cm2 1.033 1115.1 0.720 103.5 0.35 0.36 30.19 67.62 17.09595 0.057 0.016 2.33 2.528 1.395 210.9 0.42 2.37 52.33 66.41 1325.5 0.972 16.07434 0.116 0.020 4.34 3.006 1.740 237.8 -0.05 2.84 46.29 64.80 1250.0 1.212 12.35340 0.130 -0.002 4.81 2.834 2.090 319.3 -0.46 2.71 41.46 62.79 1177.1 1.456 12.20712 0.175 -0.022 4.68 2.669 2.416 357.9 -0.72 2.78 37.84 1133.5 1.684 10.62884 0.196 -0.034 4.75 2.570 62.39 9.19975 0.209 -0.054 381.0 -1.13 1.913 2.746 4.64 2.448 2.67 33.41 61.99 1079.6 3.053 420.6 -1.252.64 28.18 60.38 1002.0 2.127 8.85490 0.230 -0.060 4.61 2.272 3.375 425.6 -1.38 2.56 24.15 59.57 947.2 2.351 7.75612 0.233 -0.066 4.53 2.148 887.6 2.560 -1.58 2.41 20.13 58.36 7.76584 0.259 -0.075 4.38 2.013

Displacement DIS 2432.0 gms VCG Position 27.65 % B Disp. Coeff. CDL 0.2002 6.36 cm @ Base Line Static trim TAOo 0.97 deg

19.00 deg C 998.407 kg/m3 Kin. Viscocity 0.1028E-05 m2/s Water Temp. Density

Vel CT RT H TAO LC LK WSPH CV RT/DTS H/RPX TAO Cwsph gms cm m/s CM Rel. CM cm2 x10-3Ahs. 1.080 144.0 0.45 0.76 32.20 68.43 1148.6 0.752 21.12130 0.059 0.021 1.73 2.605 1.410 301.0 0.45 3.64 40.25 66.01 1205.3 0.982 24.68370 0.124 0.021 4.61 2.733 1.760 0.00 1253.1 1.226 0.000 2.841 354.0 3.69 47.09 17.92198 0.146 4.66 64.40 4.94 404.0 14.72096 1188.7 0.166 -0.037 2.695 2.130 -0.773.97 43.07 62.39 1.484 0.175 -0.058 2.510 425.0 -1.223.63 39.04 61.58 1137.6 1.749 11.65331 4.60 2.580 1056.2 2.000 2.870 -1.55 3.72 10.54866 0.192 -0.074 4.69 2.395 467.0 33.41 59.97 0.213 -0.083 4.59 3.240 518.0 -1.743.62 30.19 58.77 1006.0 2.257 9.63893 2.281 3.540 542.0 -1.87 3.31 26.57 58.36 960.4 2.466 8.84989 0.223 -0.089 4.28 2.178 8.61231 0.248 -0.095 4.02 3.840 603.0 -2.00 3.05 24.15 58.36 933.1 2.675 2.116

Displacement DIS 3042.0 qms Disp. Coeff. 28.48 % B 6.55 cm @ Base Line VCG Position Static trim TAOo 1.31 deg Water Temp. 19.00 deg C

0.2504 CDL

Density 998.407 kg/m3 Kin. Viscocity 0.1028E-05 m2/s

Vel WSPH CT RT/DIS H/BPX TAO RT TAO LC LK CV Cwsph H x10-3Abs. m/s ams CI Rel. CM CM cm2 1.073 185.0 0.46 0.89 34.21 1181.7 0.748 26.69648 0.061 0.022 2.20 2.680 69.23 28.95325 1.434 405.5 0.52 4.35 54.34 66.01 1338.8 0.999 0.133 0.025 5.66 3.036 0.153 -0.001 1.792 466.5 -0.01 4.34 50.31 64.40 1282.7 1.248 22.26358 5.65 2.909 0.172 -0.045 2.164 522.1 -0.95 45.48 62.39 1213.5 1.508 18.04793 5.80 2.752 4.49 0.183 -0.075 5.94 2.606 2.535 557.7 -1.574.63 41.46 60.38 1149.2 1.766 14.84313 2.880 577.8 -1.93 4.67 36.22 1068.8 2.006 12.81182 0.190 -0.092 5.98 2.424 58.36 2.290 3.252 604.5 -2.16 4.40 32.20 57.16 1010.0 2.266 11.12202 0.199 -0.103 5.71 2.479 3.559 627.5 3.87 56.75 959.8 10.14504 0.206 -0.113 5.18 2.176 -2.37 28.18 5.06 9.58652 0.224 -0.115 2.145 3.839 680.1 -2.42 3.75 27.37 56.35 946.0 2.675

Water	Temp.		.00 deg		Density	998	.407 kg	g/m3 Ki	n. Visco	city	0.1028E	-05 m2/s
Vel m/s	RT gms	H Cm	TAO Rel.	LC cm	LK cm	WSPH cm2	CA	CT x10-3	RT/DIS	н/врх	TAO Abs.	Cwsph
1.075	219.4	0.57	0.91	36.22	69.23	1203.9	0.749	30.96654	0.060	0.027	2.17	2.730
1.436	541.9	0.58	4.69	46.29	66.01	1265.8	1.000	40.82234	0.149	0.027	5.95	2.870
1.800	613.3	-0.00	5.17	50.72	63.60	1277.3	1.254	29.11623	0.168	-0.000	6.43	2.896
2.166	679.7	-1.11	5.48	47.09	61.99	1225.8	1.509	23.22467	0.187	-0.053	6.74	2.780
2.538	704.3	-1.85	5.72	41.46	59.17	1135.3	1.768	18.93408	0.193	-0.088	6.98	2.574
2.896	712.6	-2.31	5.78	37.03	56.35	1054.4	2.017	15.84048	0.196	-0.110	7.04	2.391
3.261	695.5	-2.63	5.16	34.21	55.14	1009.3	2.272	12.73355	0.191	-0.125	6.42	2.289
3.579	738.8	-2.73	4.65	32.20	54.74	982.4	2.493	11.53869	0.203	-0.130	5.91	2.228
3.864	771.6	-2.84	4.07	30.19		955.1	2.692	10.63325	0.212	-0.135	5.33	2.166

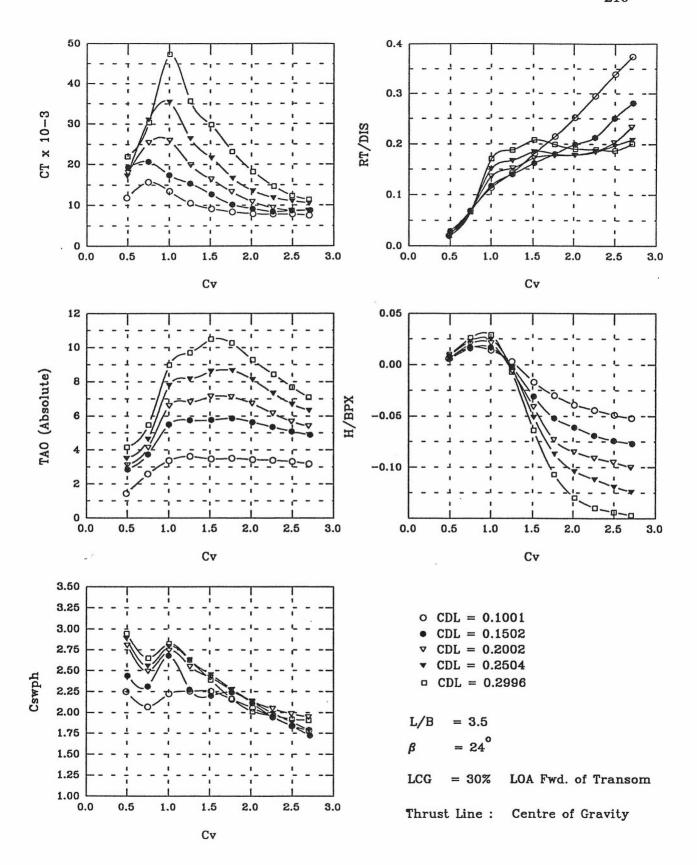


Figure B.51

<u>Table B.51</u> L/B = 3.5; β = 24°; L_{cg} = 30%; Thrust Line: Centre of Gravity (1/2)

Static Water	trim TA Temp.		.87 deg		Density	998	.407 kg	/m3 Ki	n. Visco	ocity	0.1028E	-05 m2/s
Vel m/s	RT gms	H	TAO Rel.	LC cm	LK cm	WSPH cm2	CA	CT x10-3	RT/DIS	н/врх	TAO Abs.	Cwsph
0.710 1.080 1.441 1.801 2.172 2.535 2.899 3.266 3.584 3.879	73.3 244.3 623.1 683.7 756.6 725.1 691.0 686.8 682.4	0.20 0.55 0.60 -0.14 -1.35 -2.26 -2.73 -2.94 -3.03	0.28 1.59 5.11 5.83 6.61 6.39 5.40 4.56 3.81	47.50 54.34 49.11 44.28 39.04 34.62 30.59 28.18 26.16 25.36	67.62 67.22 61.99 58.77 54.34 49.91 47.90 48.30 48.70 49.11	1299.3 1353.5 1245.5 1159.7 1054.2 954.8 886.9 864.2 846.0 841.4	0.494 0.753 1.004 1.255 1.513 1.766 2.020 2.276 2.497 2.702	22.01005 30.38737 47.32197 35.69779 29.89476 23.21724 18.21353 14.64112 12.34362 11.36307	0.067 0.171 0.188 0.208 0.199 0.190 0.189 0.187	0.010 0.026 0.029 -0.007 -0.107 -0.130 -0.140 -0.144	4.15 5.46 8.98 9.70 10.48 10.26 9.27 8.43 7.68	2.946 3.069 2.824 2.630 2.390 2.165 2.011 1.960 1.918

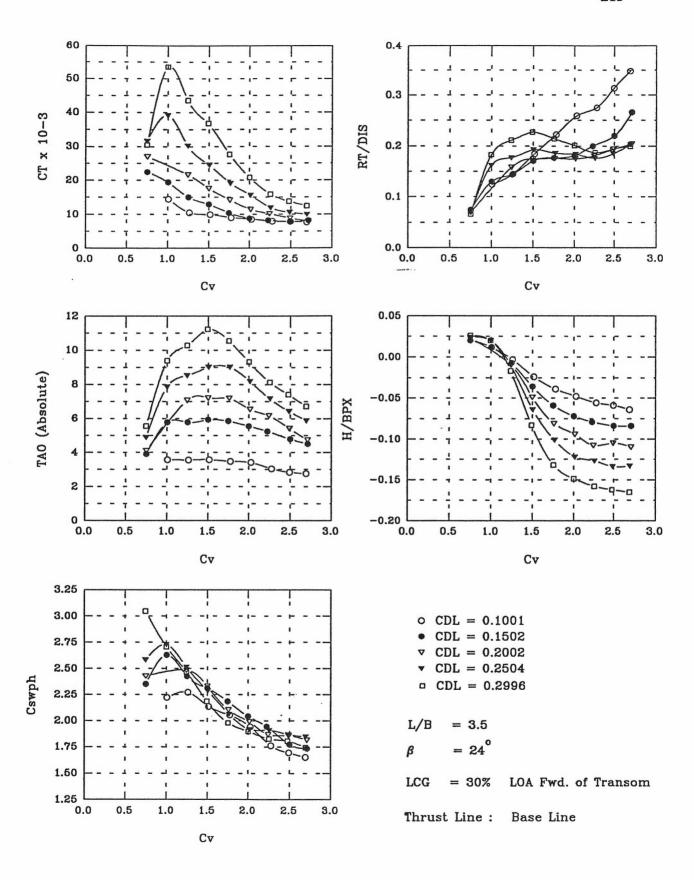


Figure B.52

Model No. T-3524 3.5 T./B Ratio Length Overal LOA 80.50 cm 24.00 deg Deadrise Breath (Deck) В 23.00 cm 214 Breath (Chine) BPX 21.00 cm LCG Position 30.00 % LOA 24.15 cm @ Transom Disp. Coeff. CDL 6.31 cm @ Base Line Displacement DIS 1216.0 gms 0.1001 27.43 % B VCG Position Static trim TAOo 1.41 deg Water Temp. 19.00 deg C 998.407 kg/m3 Kin. Viscocity 0.1028E-05 m2/s Density VAT RT H TAO LC T.K WSPH CV CT RT/DIS H/BPX TAO Cwsph m/s ams CI Rel. CM x10-3 Abs. 1.445 150.7 0.24 2.18 24.15 62.39 980.0 1.007 14.46113 0.124 0.012 3.58 2.222 1.809 176.0 -0.07 2.15 28.18 60.38 1002.0 1.261 10.54362 0.145 -0.003 3.56 2.272 1.517 2.178 225.3 -0.51 942.5 9.90600 0.185 -0.024 2.17 24.15 59.17 3.58 2.137 1.776 9.01861 2.549 270.0 905.8 -0.82 2.08 21.73 58.36 0.222 -0.039 3.48 2.054 2.911 314.8 -1.01 2.00 18.11 57.56 855.5 2.028 8.53447 0.259 -0.048 3.41 1.940 3.268 334.8 -1.191.63 12.07 56.67 776.9 2.277 7.93048 0.275 -0.056 3.04 1.762 3.579 380.8 -1.23 1.43 10.06 55.97 746.1 2.493 7.83209 0.313 -0.059 2.84 1.692 3.865 422.9 -1.35 1.34 8.05 56.35 727.7 2.693 7.64477 0.348 -0.064 2.75 1.650 Displacement DIS 1825.0 gms 0.1502 Disp. Coeff. CDT. VCG Position 26.83 % B 6.17 cm @ Base Line Static trim TAOo 2.69 deg Water Temp. 19.00 deg C Density 998.407 kg/m3 Kin. Viscocity 0.1028E-05 m2/s Vel WSPH CT RT H TAO LC T.K CV RT/DIS H/BPX TAO Cwsph CM x10-3 m/s ams Rel. CM CM cm2 Abs. 1.076 137.4 0.43 1.23 26.16 65.21 1037.0 0.750 22.48853 0.075 0.020 3.92 2.352 0.26 40.25 1.003 19.42919 1.440 237.9 3.10 62.39 1160.4 0.130 0.012 5.79 2.631 3.09 1.793 -0.15 34.21 1.249 15,02084 0.144 -0.007 5.78 263.0 60.38 1069.8 2.426 2.156 311.6 -0.76 3.24 31.80 58.36 1019.5 1.502 12.92092 0.171 -0.036 5.93 2.312 0.177 -0.059 2.187 2.509 322.3 -1.23 3.16 28.18 57.16 964.5 1.748 10.43008 5.85 2.869 331.0 -1.51 2.87 24.15 55.55 900.6 1.999 8.77392 0.181 -0.072 5.56 2.042 3.197 365.5 -1.65 2.57 22.14 53.73 857.3 2.228 8.19401 0.200 -0.079 5.26 1.944 3.588 401.6 -1.77 18.11 782.3 2.500 7.83464 0.220 -0.084 4.80 1.774 2.11 51.12 3.894 485.9 16.10 2.713 8-24152 0-266 -0-084 -1.771.83 51.52 764.1 4.52 1.733 Displacement DIS 2432.0 gms Disp. Coeff. CDL 0.2002 26.52 % B VCG Position 6.10 cm @ Base Line Static trim TAOo 2.85 deg Water Temp. 19.00 deg C 998.407 kg/m3 Kin. Viscocity 0.1028E-05 m2/s Density Vel RT H TAO LC LK WSPH CV CT RT/DIS H/BPX TAO Cwsph m/s x10-3 ams CM Rel. CM CM cm2 Abs. 1070.6 1.076 170.7 0.48 0.750 1.26 28.18 66.01 27.04952 0.070 0.023 4.11 2.428 1.784 384.0 -0.21 4.22 38.24 58.77 1095.9 1.243 21.62796 0.158 -0.010 7.07 2.485 2.151 426.2 -1.02 4.35 34.62 56.35 1027.5 1.499 17.61033 0.175 -0.049 7.20 2.330 2.523 427.2 -1.70 4.34 29.78 52.33 927.8 1.758 14.21521 0.176 -0.081 7.19 2.104 2.889 -1.96 3.69 26.57 51.12 877.8 2.013 11.43231 0.175 -0.094 426.3 6.54 1.991 3.216 10.29242 0.183 -0.100 6.01 445.8 -2.103.16 23.75 49.11 2.240 823.2 1.867 0.181 -0.108 3.219 441.3 -2.273.32 23.75 49.11 823.2 2.243 10.16768 6.17 1.867 2.491 3.575 471.3 -2.20 2.58 24.15 818.7 8.85227 0.194 -0.105 1.856 48.30 5.43 1.89 22.14 8.03695 0.204 -0.110 3.890 495.3 -2.3048.70 800.5 2.710 4.74 1.815 Displacement DIS 3042.0 gms Disp. Coeff. CDL 6.34 cm @ Base Line 0.2504 27.57 % B VCG Position Static trim TAOo 3.38 deg Water Temp. 19.00 deg C 998.407 kg/m3 Kin. Viscocity 0.1028E-05 m2/s Density Vel RT H TAO TC WSPH CT RT/DIS H/BPX TAO T.K CV Cwsph m/s ams CM Rel. Cm CM cm2 x10-3 Abs. 1.071 210.4 0.50 1.52 33.81 66.41 1139.3 0.746 31.63442 0.069 0.024 4.90 2.583 1.431 4.49 1204.0 39.16269 491.6 0.42 45.89 0.997 0.020 7.87 2.730 61.18 0.162 1109.0 1.779 539.7 -0.21 5.15 40.25 57.96 1.240 30.21460 0.177 - 0.0108.53 2.515 2.158 588.4 -1.345.64 36.22 53.13 1009.1 1.504 24.59578 0.193 -0.064 9.02 2.288 567.2 19.10753 0.186 -0.101 2.532 -2.12 5.63 31.80 48.70 909.6 1.764 9.01 2.063 2.888 560.5 -2.56 4.81 28.18 46.69 846.0 2.012 15.61279 0.184 -0.122 8.19 1.918 3.238 535.7 3.78 0.176 -0.127 1.908 -2.68 26.16 48.30 841.4 2.256 11.93193 7.16 3.567 562.5 -2.82 3.04 23.75 49.11 823.2 2.485 10.55121 0.185 -0.134 6.42 1.867 -2.79 3.867 617.5 2.50 22.14 49.91 814.1 2.694 9.96924 0.203 -0.133 5.88 1.846

215

Water	Temp.		.00 deg		Density	998	.407 kg	/m3 Ki	n. Visco	ocity	0.1028E	-05 m2/s
Vel m/s	RT gms	H	TAO Rel.	LC	LK cm	WSPH cm2	CV	CT x10-3	RT/DIS	H/BPX	TAO Abs.	Cwsph
1.074 1.431 1.780 2.141 2.518 2.873 3.235 3.556	240.5 666.6 766.3 827.5 780.2 730.5 681.4 705.9	0.55 0.43 -0.35 -1.74 -2.78 -3.13 -3.31 -3.40	1.69 5.52 6.41 7.36 6.68 5.44 4.26 3.54	54.34 45.89 41.06 36.22 31.80 29.38 26.97 25.76	60.38 55.55 49.11 45.48 44.68 44.28	1343.7 1194.9 1089.6 963.7 873.3 836.9 805.0 795.9	0.748 0.997 1.240 1.492 1.754 2.001 2.254	30.49803 53.55519 43.60048 36.81119 27.69542 20.78874 15.89098 13.78337	0.183 0.211 0.227 0.214 0.201 0.187		5.56 9.39 10.28 11.23 10.55 9.31 8.13	3.047 2.709 2.471 2.185 1.980 1.898 1.825 1.805
3.864	727.3	-3.47	2.84	22.94		768.7	2.692	12.45625		-0.165	6.71	1.743

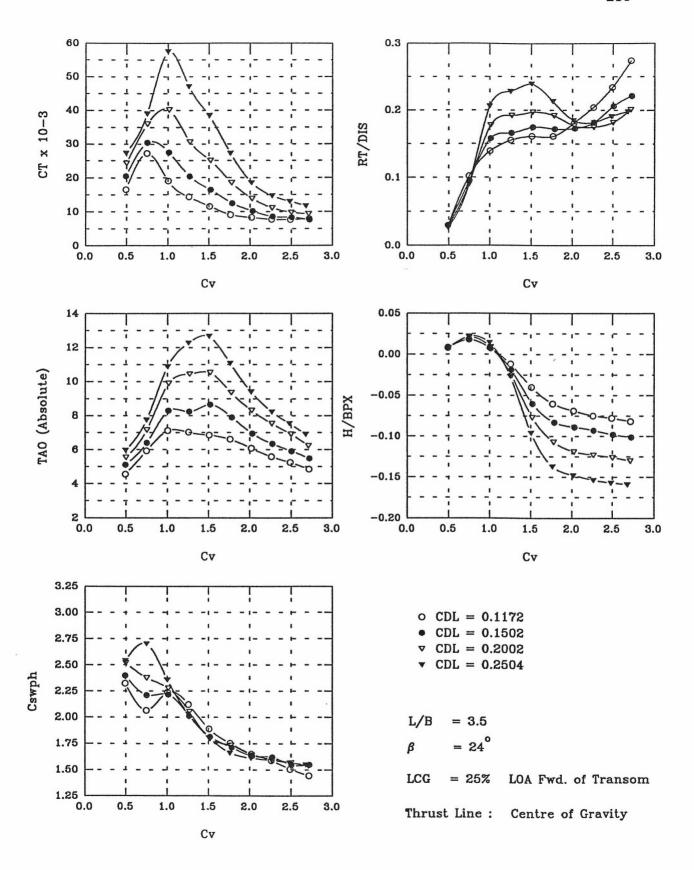


Figure B.53

	Model N												
	L/B Rat			.5		Length C			.50 cm				
	Deadris	e	24	.00 deg	1	Breath (.00 cm				217
	LCG Pos	LCG Position 25.00 % LOA			Breath (Chine) BPX 21.00 cm 20.13 cm @ Transom							217	
							2001 H 2003 H						
	Displac	ement I	IS 142	4.0 qm	ıs	Disp. Co	eff. C	DL 0	.1172				
	VCG Pos			.89 % E		6.88 cm @ Base Line							
	Static trim TAOo 4.16 deg					NACHMON COUNTY COTO SCHOOLS CONTOURS							
	Water T			.00 deg		Dengity	998	2.407 kg	/m3 Ki	n. Visc	ocity	0.1028E	-05 m2/s
		· Cinp		.oo acg	•	Demorel	,,,,	resor kg	, 20	4150	00103	0.10201	05 ML, 0
	Vel	RT	н	TAO	LC	LK	WSPH	CV	CT	DM/DTC	H/BPX	TAO	Cwsph
								CV		KI/DIS	II/ DE K		Cwspn
	m/s	gms	cm	Rel.	Cm	cm	cm2		x10-3			Abs.	
_													
	0.705	42.9	0.16	0.39	28.18	62.39	1025.5	0.491	16.51581			4.55	2.325
	1.072	144.8	0.38	1.77	20.13	60.38	911.1	0.747	27.18948			5.93	2.066
	1.438	198.5	0.16	2.96	30.19	57.16	987.3	1.002	19.11033			7.12	2.239
	1.798	220.5	-0.26	2.86	29.22	53.53	935.1	1.253	14.33551		-0.012	7.02	2.120
	2.166	229.8	-0.85	2.70	23.35		832.3	1.509	11.56063		-0.040		1.887
	2.534	229.3	-1.26	2.45	20.13	48.30	773.2	1.765	9.07797	0.161	-0.060	6.61	1.753
	2.898	257.5	-1.45	1.92	17.31	47.09	727.7	2.019	8.28058	0.181	-0.069	6.08	1.650
	3.247	290.4	-1.57	1.43	13.28	48.70	700.4	2.262	7.73149	0.204	-0.075	5.59	1.588
	3.576	332.7	-1.64	1.08	10.06	48.70	664.0	2.491	7.69940	0.234	-0.078	5.24	1.506
	3.900	389.8	-1.73	0.69	8.05	48.30	636.7	2.717	7.90872	0.274	-0.082	4.85	1.444
	Displacement DIS 1825.0 gms Disp. Coeff. CDL 0.1502												
	VCG Position 29.22 % B 6.72 cm @ Base Line												
	Static			.49 deg									
	Water T			.00 deg		Density	998	.407 kg	m3 Ki	n. Visco	ocity	0.1028E	-05 m2/s
	Water 1	emp.	17	.ou deg		Density	,,,,	. To r kg	ALS ILL	n. VISC	ocicy	0.10201	-05 M2/5
	Vel	RT	н	TAO	LC	LK	WSPH	CV	CT	DM/DTC	H/BPX	TAO	Cwsph
	m/s			-				CV	x10-3	KI/DIS	II/ DE X	Abs.	Caspii
	MI/S	gms	cm	Rel.	cm	cm	cm2		X10-2			ADS.	
_			0 10		30 50	62.70	1057 5		20 52522		~ ~~~	F 12	2 300
	0.707	55.2	0.18	0.63	30.59	62.79	1057.5	0.492	20.53533	0.030		5.12	2.398
	1.078	175.3	0.38	1.91	25.36	60.78	974.9	0.751	30.41719	0.096		6.40	2.211
	1.449	287.8	0.15	3.80	32.20	54.34	977.9	1.010	27.54258	0.158	0.007	8.29	2.217
	1.813	302.4	-0.41	3.74	28.18	50.31	886.9	1.263	20.39045		-0.019	8.23	2.011
	2.183	318.7	-1.26	4.17	24.95	45.89	800.5	1.521	16.42321		-0.060	8.66	1.815
	2.562	314.7	-1.74	3.41	21.73	45.08	755.0	1.785	12.48342	0.172	-0.083	7.90	1.712
	2.913	316.6	-1.87	2.47	19.32	44.28	718.6	2.030	10.20047	0.173	-0.089	6.96	1.630
	3.263	331.9	-1.96	1.85	16.90	46.29	714.1	2.273	8.57809	0.182	-0.093	6.34	1.619
	3.597	375.6	-2.05	1.43	14.09	46.29	682.2	2.506	8.36175	0.206	-0.098	5.92	1.547
	3.597	375.6 404.2	-2.05 -2.13	1.43			682.2 682.2	2.506 2.721	8.36175 7.63201		-0.098 -0.101	5.92 5.49	1.547 1.547
		375.6 404.2	-2.05 -2.13	1.43	14.09 12.07	46.29 48.30		2.506 2.721	8.36175 7.63201				
	3.906	404.2	-2.13	1.00	12.07	48.30	682.2	2.721	7.63201				
	3.906 Displac	404.2 ement D	-2.13 IS 243	1.00 2.0 gm	12.07	48.30 Disp. Co	682.2 eff. C	2.721 DL 0					
	3.906 Displac VCG Pos	404.2 ement D ition	-2.13 IS 243: 29	1.00 2.0 gm .35 % B	12.07 s	48.30	682.2 eff. C	2.721 DL 0	7.63201				
	3.906 Displac VCG Pos Static	404.2 ement D ition trim TA	-2.13 IS 2433 29 00 5	1.00 2.0 gm .35 % B .03 deg	12.07 s	48.30 Disp. Co 6.75 cm	682.2 eff. C	2.721 DL 0	7.63201 .2002	0.221	-0.101	5.49	1.547
	3.906 Displac VCG Pos	404.2 ement D ition trim TA	-2.13 IS 2433 29 00 5	1.00 2.0 gm .35 % B	12.07 s	48.30 Disp. Co	682.2 eff. C	2.721 DL 0	7.63201 .2002	0.221	-0.101	5.49	
	Jisplac VCG Pos Static Water T	404.2 ement D ition trim TA emp.	-2.13 PIS 2433 29 .00 5	1.00 2.0 gm .35 % B .03 deg .00 deg	12.07 s C	48.30 Disp. Co 6.75 cm Density	682.2 eff. C	2.721 DL 0 Line	7.63201 .2002 /m3 Kir	0.221	-0.101	5.49 0.1028E	1.547 -05 m2/s
	3.906 Displace VCG Pos Static Water T	404.2 ement D ition trim TA emp. RT	-2.13 FIS 2433 29 .00 5 19	1.00 2.0 gm .35 % B .03 deg .00 deg	12.07 s C LC	48.30 Disp. Co 6.75 cm Density	682.2 eff. C Base 998 WSPH	2.721 DL 0	7.63201 .2002 /m3 Kir	0.221	-0.101	5.49 0.1028E TAO	1.547
	Jisplac VCG Pos Static Water T	404.2 ement D ition trim TA emp.	-2.13 PIS 2433 29 .00 5	1.00 2.0 gm .35 % B .03 deg .00 deg	12.07 s C	48.30 Disp. Co 6.75 cm Density	682.2 eff. C	2.721 DL 0 Line	7.63201 .2002 /m3 Kir	0.221	-0.101	5.49 0.1028E	1.547 -05 m2/s
_	J.906 Displac VCG Pos Static Water T Vel m/s	ement Dition trim TA emp. RT gms	-2.13 IS 2433 29 Oo 5 19 H cm	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel.	12.07 s C LC cm	48.30 Disp. Co 6.75 cm Density LK cm	682.2 eff. C Base 998 WSPH cm2	2.721 DL 0. Line .407 kg	7.63201 .2002 /m3 Kin	0.221	-0.101 Deity H/BPX	5.49 0.1028E TAO Abs.	1.547 -05 m2/s Cwsph
	3.906 Displac VCG Pos Static Water T Vel m/s	ement Dition trim TA emp. RT gms70.2	-2.13 IS 243: 29 00 5 19 H cm	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel.	12.07 s C LC cm 35.02	48.30 Disp. Co 6.75 cm Density LK cm	682.2 eff. C Base 998 WSPH Cm2	2.721 DL 0. Line CV CV	7.63201 .2002 /m3 Kin CT x10-3 24.25626	0.221 n. Visco RT/DIS 0.029	-0.101 Decity H/BPX 0.008	5.49 0.1028E TAO Abs.	1.547 -05 m2/s Cwsph 2.520
_	3.906 Displac VCG Pos Static Water T Vel m/s 0.715 1.078	ement Dition trim TA emp. RT gms	-2.13 IS 243: 29 Oo 5 19 H cm 0.17 0.45	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel. 0.52 2.13	12.07 s C LC cm 35.02 31.40	48.30 Disp. Co 6.75 cm Density LK cm	682.2 eff. C Base 998 WSPH cm2 1111.5 1047.8	2.721 CDL 0. Line CV CV 0.498 0.751	7.63201 .2002 /m3 Kir cT x10-3	0.221 n. Visco RT/DIS 0.029 0.092	-0.101 ocity H/BPX 0.008 0.021	5.49 0.1028E TAO Abs. 5.55 7.16	1.547 -05 m2/s Cwsph 2.520 2.376
	3.906 Displace VCG Pos Static Water T Vel m/s 0.715 1.078 1.452	404.2 ement D ition trim TA emp. RT gms 70.2 222.8 433.2	-2.13 IS 243: 29 00 5 19 H cm 0.17 0.45 0.18	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel. 0.52 2.13 4.87	12.07 s C LC cm 35.02 31.40 36.22	48.30 Disp. Co 6.75 cm Density LK cm 63.19 61.18 52.73	682.2 eff. C Base 998 WSPH cm2 1111.5 1047.8 1004.5	2.721 DL 0. Line 2.407 kg. CV 0.498 0.751 1.012	7.63201 .2002 /m3 Kir x10-3 24.25626 35.98697 40.17177	0.221 n. Visco RT/DIS 0.029 0.092 0.178	-0.101 ocity H/BPX 0.008 0.021 0.009	5.49 0.1028E TAO Abs. 5.55 7.16 9.90	1.547 -05 m2/s Cwsph 2.520 2.376 2.278
_	3.906 Displace VCG Pos Static Water T Vel m/s 0.715 1.078 1.452 1.816	404.2 ement D ition trim TA emp. RT gms 70.2 222.8 433.2 465.7	-2.13 IS 243: 29 00 5 19 H cm 0.17 0.45 0.18 -0.56	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel. 0.52 2.13 4.87 5.41	12.07 s C LC cm 35.02 31.40 36.22 31.80	48.30 Disp. Co 6.75 cm Density LK cm 63.19 61.18 52.73 48.30	682.2 eff. C eff. C 998 WSPH cm2 1111.5 1047.8 1004.5 905.1	2.721 EDL 0. Line 2.407 kg. CV 0.498 0.751 1.012 1.265	7.63201 .2002 /m3 Kin CT x10-3 -24.25626 35.98697 40.17177 30.66359	0.221 n. Visco RT/DIS 0.029 0.092 0.178 0.192	-0.101 Decity H/BPX 0.008 0.021 0.009 -0.026	5.49 0.1028E TAO Abs. 5.55 7.16 9.90 10.44	1.547 -05 m2/s Cwsph 2.520 2.376 2.278 2.052
_	3.906 Displace VCG Pos Static Water T Vel m/s 0.715 1.078 1.452 1.816 2.181	404.2 ement D ition trim TA emp. RT gms 70.2 222.8 433.2 465.7 480.0	-2.13 IS 243: 29 Oo 5 19 H cm 0.17 0.45 0.18 -0.56 -1.63	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel. 0.52 2.13 4.87 5.41 5.49	12.07 s C LC cm 35.02 31.40 36.22 31.80 27.37	48.30 Disp. Co 6.75 cm Density LK cm 63.19 61.18 52.73 48.30 42.67	682.2 eff. C eff. C 998 WSPH Cm2 1111.5 1047.8 1004.5 905.1 791.4	2.721 EDL 0. Line 2.407 kg. CV 0.498 0.751 1.012 1.265 1.519	7.63201 .2002 /m3 Kin CT x10-3 24.25626 35.98697 40.17177 30.66359 25.06054	0.221 n. Visco RT/DIS 0.029 0.092 0.178 0.192 0.197	-0.101 Decity H/BPX 0.008 0.021 0.009 -0.026 -0.077	5.49 0.1028E TAO Abs. 5.55 7.16 9.90 10.44 10.52	1.547 -05 m2/s -05 m2/s 2.520 2.376 2.278 2.052 1.795
	3.906 Displac VCG Pos Static Water T Vel m/s 0.715 1.078 1.452 1.816 2.181 2.548	404.2 ement D ition trim TA emp. RT gms 70.2 222.8 433.2 465.7 480.0 468.1	-2.13 IS 243: 29 Oo 5 19 H Cm 0.17 0.45 0.18 -0.56 -1.63 -2.25	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel. 0.52 2.13 4.87 5.41 5.49 4.33	12.07 s C LC cm 35.02 31.40 36.22 31.80 27.37 25.36	48.30 Disp. Co 6.75 cm Density LK cm 63.19 61.18 52.73 48.30 42.67 42.26	682.2 eff. C 998 WSPH Cm2 1111.5 1047.8 1004.5 905.1 791.4 764.1	2.721 EDL 0. Line CV 0.498 0.751 1.012 1.265 1.519 1.775	7.63201 .2002 /m3 Kin	0.221 n. Visco RT/DIS 0.029 0.092 0.178 0.192 0.197	-0.101 Decity H/BPX 0.008 0.021 0.009 -0.026 -0.077 -0.107	5.49 0.1028E TAO Abs. 5.55 7.16 9.90 10.44 10.52 9.36	1.547 -05 m2/s -05 m2/s 2.520 2.376 2.278 2.052 1.795 1.733
	3.906 Displace VCG Pos Static Water T Vel m/s 0.715 1.078 1.452 1.816 2.181 2.548 2.901	404.2 ement D ition trim TA emp. RT gms 70.2 222.8 433.2 465.7 480.0 468.1	-2.13 IS 243: 29 Oo 5 19 H cm 0.17 0.45 0.18 -0.56 -1.63	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel. 0.52 2.13 4.87 5.41 5.49 4.33 3.28	12.07 s C LC cm 35.02 31.40 36.22 31.80 27.37 25.36 22.14	48.30 Disp. Co 6.75 cm Density LK cm 	682.2 eff. C 998 WSPH Cm2 1111.5 1047.8 1004.5 905.1 791.4 764.1 723.2	2.721 DL 0. Line 2.407 kg. CV 0.498 0.751 1.012 1.265 1.519 1.775 2.022	7.63201 .2002 /m3 Kin CT x10-3 24.25626 35.98697 40.17177 30.66359 25.06054	0.221 n. Visco RT/DIS 0.029 0.092 0.178 0.192 0.197	-0.101 Decity H/BPX -0.008 0.021 0.009 -0.026 -0.077 -0.119	5.49 0.1028E TAO Abs. 5.55 7.16 9.90 10.44 10.52 9.36 8.31	1.547 -05 m2/s -08 m2/s
_	3.906 Displac VCG Pos Static Water T Vel m/s 0.715 1.078 1.452 1.816 2.181 2.548	404.2 ement D ition trim TA emp. RT gms 70.2 222.8 433.2 465.7 480.0 468.1 430.3	-2.13 IS 243: 29 Oo 5 19 H Cm 0.17 0.45 0.18 -0.56 -1.63 -2.25	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel. 0.52 2.13 4.87 5.41 5.49 4.33 3.28	12.07 s C LC cm 35.02 31.40 36.22 31.80 27.37 25.36 22.14	48.30 Disp. Co 6.75 cm Density LK cm 63.19 61.18 52.73 48.30 42.67 42.26	682.2 eff. C 998 WSPH Cm2 1111.5 1047.8 1004.5 905.1 791.4 764.1 723.2	2.721 EDL 0. Line CV 0.498 0.751 1.012 1.265 1.519 1.775	7.63201 .2002 /m3 Kin	0.221 n. Visco RT/DIS 0.029 0.092 0.178 0.192 0.197	-0.101 Decity H/BPX 0.008 0.021 0.009 -0.026 -0.077 -0.107	5.49 0.1028E TAO Abs. 5.55 7.16 9.90 10.44 10.52 9.36 8.31	1.547 -05 m2/s -05 m2/s 2.520 2.376 2.278 2.052 1.795 1.733
_	3.906 Displace VCG Pos Static Water T Vel m/s 0.715 1.078 1.452 1.816 2.181 2.548 2.901	404.2 ement D ition trim TA emp. RT gms 70.2 222.8 433.2 465.7 480.0 468.1 430.3 424.6	-2.13 IS 243: 29 Oo 5 19 H Cm 0.17 0.45 0.18 -0.56 -1.63 -2.25 -2.49 -2.58	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel. 0.52 2.13 4.87 5.41 5.49 4.33 3.28 2.50	12.07 s C LC cm 35.02 31.40 36.22 31.80 27.37 25.36 22.14 19.88	48.30 Disp. Co 6.75 cm Density LK cm 	682.2 eff. C eff. C 98 WSPH Cm2 1111.5 1047.8 1004.5 905.1 791.4 764.1 723.2 706.8	2.721 EDL 0. Line .407 kg. CV 0.498 0.751 1.012 1.265 1.519 1.775 2.022 2.267	7.63201 .2002 /m3 Kin	0.221 n. Visco RT/DIS 0.029 0.078 0.192 0.197 0.192 0.177	-0.101 h/BPX 0.008 0.021 0.009 -0.026 -0.077 -0.119 -0.123	5.49 0.1028E TAO Abs. 5.55 7.16 9.90 10.44 10.52 9.36 8.31 7.53	1.547 -05 m2/s -08 m2/s
	3.906 Displace VCG Pos Static Water T Vel m/s 0.715 1.078 1.452 1.816 2.181 2.548 2.901 3.254	404.2 ement D ition trim TA emp. RT gms 70.2 222.8 433.2 465.7 480.0 468.1 430.3 424.6 443.2	-2.13 IS 243: 29 Oo 5 19 H cm 0.17 0.45 0.18 -0.56 -1.63 -2.25 -2.49 -2.58 -2.64	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel. 0.52 2.13 4.87 5.41 5.49 4.33 3.28 2.50 1.88	12.07 s C LC cm 35.02 31.40 36.22 31.80 27.37 25.36 22.14 19.88 17.63	48.30 Disp. Co 6.75 cm Density LK cm 63.19 61.18 52.73 48.30 42.67 42.26 41.86 42.67 43.47	682.2 eff. C eff. C 98 WSPH Cm2 1111.5 1047.8 1004.5 905.1 791.4 764.1 723.2 706.8 690.4	2.721 EDL 0. Line 2.407 kg. CV 0.498 0.751 1.012 1.265 1.519 1.775 2.022 2.267 2.500	7.63201 .2002 /m3 Kin CT x10-3 24.25626 35.98697 40.17177 30.66359 25.06054 18.53755 13.89000 11.14799 9.79692	0.221 n. Visco RT/DIS 0.029 0.092 0.178 0.192 0.197 0.192 0.177 0.175 0.182	-0.101 Decity H/BPX 0.008 0.021 0.009 -0.026 -0.077 -0.107 -0.119 -0.123 -0.126	5.49 0.1028E TAO Abs. 5.55 7.16 9.90 10.44 10.52 9.36 8.31 7.53 6.91	1.547 -05 m2/s Cwsph
	3.906 Displace VCG Pos Static Water T Vel m/s 0.715 1.078 1.452 1.816 2.181 2.548 2.901 3.254 3.588	404.2 ement D ition trim TA emp. RT gms 70.2 222.8 433.2 465.7 480.0 468.1 430.3 424.6 443.2	-2.13 IS 243: 29 Oo 5 19 H Cm 0.17 0.45 0.18 -0.56 -1.63 -2.25 -2.49 -2.58	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel. 0.52 2.13 4.87 5.41 5.49 4.33 3.28 2.50 1.88	12.07 s C LC cm 35.02 31.40 36.22 31.80 27.37 25.36 22.14 19.88	48.30 Disp. Co 6.75 cm Density LK cm 	682.2 eff. C eff. C 98 WSPH Cm2 1111.5 1047.8 1004.5 905.1 791.4 764.1 723.2 706.8 690.4	2.721 EDL 0. Line .407 kg. CV 0.498 0.751 1.012 1.265 1.519 1.775 2.022 2.267	7.63201 .2002 /m3 Kin CT x10-3	0.221 n. Visco RT/DIS 0.029 0.092 0.178 0.192 0.197 0.192 0.177 0.175 0.182	-0.101 Decity H/BPX 0.008 0.021 0.009 -0.026 -0.077 -0.107 -0.119 -0.123 -0.126	5.49 0.1028E TAO Abs. 5.55 7.16 9.90 10.44 10.52 9.36 8.31 7.53 6.91	-05 m2/s Cwsph 2.520 2.376 2.278 2.052 1.795 1.733 1.640 1.603 1.566
	3.906 Displace VCG Pos Static Water T Vel m/s 0.715 1.078 1.452 1.816 2.181 2.548 2.901 3.254 3.588 3.890	404.2 ement D ition trim TA emp. RT gms 70.2 222.8 433.2 465.7 480.0 468.1 430.3 424.6 443.2 489.3	-2.13 IS 243: 29 Oo 5 19 H Cm 0.17 0.45 0.18 -0.56 -1.63 -2.25 -2.49 -2.58 -2.64 -2.72	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel. 0.52 2.13 4.87 5.41 5.49 4.33 3.28 2.50 1.88 1.20	12.07 s C LC cm 35.02 31.40 36.22 31.80 27.37 25.36 22.14 19.88 17.63 15.29	48.30 Disp. Co 6.75 cm Density LK cm 63.19 61.18 52.73 48.30 42.67 42.26 41.86 42.67 43.47 44.68	682.2 eff. C 998 WSPH Cm2 1111.5 1047.8 1004.5 905.1 791.4 764.1 723.2 706.8 690.4 677.7	2.721 EDL 0. Line 3.407 kg. CV 0.498 0.751 1.012 1.265 1.519 1.775 2.022 2.267 2.500 2.710	7.63201 .2002 /m3 Kin CT x10-3 24.25626 35.98697 40.17177 30.66359 25.06054 18.53755 13.89000 11.14799 9.79692	0.221 n. Visco RT/DIS 0.029 0.092 0.178 0.192 0.197 0.192 0.177 0.175 0.182	-0.101 Decity H/BPX 0.008 0.021 0.009 -0.026 -0.077 -0.107 -0.119 -0.123 -0.126	5.49 0.1028E TAO Abs. 5.55 7.16 9.90 10.44 10.52 9.36 8.31 7.53 6.91	-05 m2/s Cwsph 2.520 2.376 2.278 2.052 1.795 1.733 1.640 1.603 1.566
	3.906 Displace VCG Pos Static Water T Vel m/s 0.715 1.078 1.452 1.816 2.181 2.548 2.901 3.254 3.588 3.890 Displace	404.2 ement D ition trim TA emp. RT gms 70.2 222.8 433.2 465.7 480.0 468.1 430.3 424.6 443.2 489.3 ement D	-2.13 IS 243: 29 00 5 19 H Cm 0.17 0.45 0.18 -0.56 -1.63 -2.25 -2.49 -2.58 -2.64 -2.72 IS 304:	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel 0.52 2.13 4.87 5.41 5.49 4.33 3.28 2.50 1.88 1.20 2.0 gm	12.07 s C LC cm 35.02 31.40 36.22 31.80 27.37 25.36 22.14 19.88 17.63 15.29 s	48.30 Disp. Co 6.75 cm Density LK cm 63.19 61.18 52.73 48.30 42.67 42.26 41.86 42.67 43.47 44.68 Disp. Co	682.2 eff. C 998 WSPH Cm2 1111.5 1047.8 1004.5 905.1 791.4 764.1 723.2 706.8 690.4 677.7	2.721 DL 0. Line 2.407 kg. CV 0.498 0.751 1.012 1.265 1.519 1.775 2.022 2.267 2.500 2.710 DL 0.	7.63201 .2002 /m3 Kin	0.221 n. Visco RT/DIS 0.029 0.092 0.178 0.192 0.197 0.192 0.177 0.175 0.182	-0.101 Decity H/BPX 0.008 0.021 0.009 -0.026 -0.077 -0.107 -0.119 -0.123 -0.126	5.49 0.1028E TAO Abs. 5.55 7.16 9.90 10.44 10.52 9.36 8.31 7.53 6.91	-05 m2/s Cwsph 2.520 2.376 2.278 2.052 1.795 1.733 1.640 1.603 1.566
_	3.906 Displace VCG Pos Static Water T Vel m/s	404.2 ement D ition trim TA emp. RT gms 70.2 222.8 433.2 465.7 480.0 468.1 430.3 424.6 443.2 489.3 ement D ition	-2.13 IS 243: 29 Oo 5 19 H cm 0.17 0.45 0.18 -0.56 -1.63 -2.25 -2.49 -2.58 -2.64 -2.72 IS 304: 29	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel 0.52 2.13 4.87 5.41 5.49 4.33 3.28 2.50 1.88 1.20 2.0 gm .39 % B	12.07 s C LC cm 35.02 31.40 36.22 31.80 27.37 25.36 22.14 19.88 17.63 15.29	48.30 Disp. Co 6.75 cm Density LK cm 63.19 61.18 52.73 48.30 42.67 42.26 41.86 42.67 43.47 44.68	682.2 eff. C 998 WSPH Cm2 1111.5 1047.8 1004.5 905.1 791.4 764.1 723.2 706.8 690.4 677.7	2.721 DL 0. Line 2.407 kg. CV 0.498 0.751 1.012 1.265 1.519 1.775 2.022 2.267 2.500 2.710 DL 0.	7.63201 .2002 /m3 Kin	0.221 n. Visco RT/DIS 0.029 0.092 0.178 0.192 0.197 0.192 0.177 0.175 0.182	-0.101 Decity H/BPX 0.008 0.021 0.009 -0.026 -0.077 -0.107 -0.119 -0.123 -0.126	5.49 0.1028E TAO Abs. 5.55 7.16 9.90 10.44 10.52 9.36 8.31 7.53 6.91	-05 m2/s Cwsph 2.520 2.376 2.278 2.052 1.795 1.733 1.640 1.603 1.566
_	3.906 Displace VCG Pos Static Water T Vel m/s	404.2 ement D ition trim TA emp. RT gms 70.2 222.8 433.2 465.7 480.0 468.1 430.3 424.6 443.2 489.3 ement D ition trim TA	-2.13 IS 243: 29 OO 5 19 H cm 0.17 0.45 0.18 -0.56 -1.63 -2.25 -2.49 -2.58 -2.64 -2.72 IS 3042 29 OO 5	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel 0.52 2.13 4.87 5.49 4.33 3.28 2.50 1.88 1.20 2.0 gm .39 % B .43 deg	12.07 S C LC cm 35.02 31.40 36.22 31.80 27.37 25.36 22.14 19.88 17.63 15.29	48.30 Disp. Co 6.75 cm Density LK cm 63.19 61.18 52.73 48.30 42.67 42.26 41.86 42.67 44.68 Disp. Co 6.76 cm	682.2 eff. C 98 WSPH Cm2 1111.5 1047.8 1004.5 791.4 764.1 723.2 706.8 690.4 677.7 eff. C	2.721 DL 0. Line 2.407 kg. CV 0.498 0.751 1.012 1.265 1.519 1.775 2.022 2.267 2.500 2.710 DL 0. Line	7.63201 .2002 /m3 Kin CT x10-3 24.25626 35.98697 40.17177 30.66359 25.06054 18.53755 13.89000 11.14799 9.79692 9.37851	0.221 n. Visco RT/DIS 0.029 0.092 0.178 0.192 0.197 0.192 0.177 0.175 0.182 0.201	-0.101 Decity H/BPX 0.008 0.021 0.009 -0.026 -0.077 -0.119 -0.123 -0.126 -0.130	5.49 0.1028E TAO Abs. 5.55 7.16 9.90 10.44 10.52 9.36 8.31 7.53 6.91 6.23	-05 m2/s Cwsph 2.520 2.376 2.278 2.052 1.795 1.733 1.640 1.603 1.566 1.537
	3.906 Displace VCG Pos Static Water T Vel m/s	404.2 ement D ition trim TA emp. RT gms 70.2 222.8 433.2 465.7 480.0 468.1 430.3 424.6 443.2 489.3 ement D ition trim TA	-2.13 IS 243: 29 OO 5 19 H cm 0.17 0.45 0.18 -0.56 -1.63 -2.25 -2.49 -2.58 -2.64 -2.72 IS 3042 29 OO 5	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel 0.52 2.13 4.87 5.41 5.49 4.33 3.28 2.50 1.88 1.20 2.0 gm .39 % B	12.07 S C LC cm 35.02 31.40 36.22 31.80 27.37 25.36 22.14 19.88 17.63 15.29	48.30 Disp. Co 6.75 cm Density LK cm 63.19 61.18 52.73 48.30 42.67 42.26 41.86 42.67 43.47 44.68 Disp. Co	682.2 eff. C 98 WSPH Cm2 1111.5 1047.8 1004.5 791.4 764.1 723.2 706.8 690.4 677.7 eff. C	2.721 DL 0. Line 2.407 kg. CV 0.498 0.751 1.012 1.265 1.519 1.775 2.022 2.267 2.500 2.710 DL 0. Line	7.63201 .2002 /m3 Kin	0.221 n. Visco RT/DIS 0.029 0.092 0.178 0.192 0.197 0.192 0.177 0.175 0.182 0.201	-0.101 Decity H/BPX 0.008 0.021 0.009 -0.026 -0.077 -0.119 -0.123 -0.126 -0.130	5.49 0.1028E TAO Abs. 5.55 7.16 9.90 10.44 10.52 9.36 8.31 7.53 6.91 6.23	-05 m2/s Cwsph 2.520 2.376 2.278 2.052 1.795 1.733 1.640 1.603 1.566 1.537
_	J.906 Displace VCG Pos Static Water T Vel m/s 0.715 1.078 1.452 1.816 2.181 2.548 2.901 3.254 3.588 3.890 Displace VCG Pos Static Water T	404.2 ement D ition trim TA emp. RT gms	-2.13 IS 243: 29 Oo 5 19 H Cm 0.17 0.45 0.18 -0.56 -1.63 -2.25 -2.49 -2.58 -2.64 -2.72 IS 304: 29 Oo 59	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel 0.52 2.13 4.87 5.41 5.49 4.33 3.28 2.50 1.88 1.20 2.0 gm .39 % B .43 deg .00 deg	12.07 s C LC cm 35.02 31.40 36.22 31.80 27.37 25.36 22.14 19.88 17.63 15.29 s	48.30 Disp. Co 6.75 cm Density LK cm 63.19 61.18 52.73 48.30 42.67 42.26 41.86 42.67 43.47 44.68 Disp. Co 6.76 cm Density	682.2 eff. C 998 WSPH Cm2 1111.5 1047.8 1004.5 905.1 791.4 764.1 723.2 706.8 690.4 677.7 eff. C 8 Base	2.721 DL 0. Line 3.407 kg. CV 0.498 0.751 1.012 1.265 1.519 1.775 2.022 2.267 2.500 2.710 DL 0. Line 3.407 kg.	7.63201 .2002 /m3 Kin	0.221 n. Visco RT/DIS 0.029 0.078 0.192 0.197 0.192 0.177 0.175 0.182 0.201	-0.101 Decity H/BPX 0.008 0.021 0.009 -0.026 -0.077 -0.119 -0.123 -0.126 -0.130	5.49 0.1028E TAO Abs. 5.55 7.16 9.90 10.44 10.52 9.36 8.31 7.53 6.91 6.23	-05 m2/s Cwsph 2.520 2.376 2.278 2.052 1.795 1.733 1.640 1.566 1.537
_	3.906 Displace VCG Pos Static Water T Vel m/s 0.715 1.078 1.452 1.816 2.181 2.548 2.901 3.254 3.588 3.890 Displace VCG Pos Static Water T	404.2 ement D ition trim TA emp. RT gms 70.2 222.8 433.2 465.7 480.0 468.1 430.3 424.6 443.2 489.3 ement D ition trim TA emp. RT	-2.13 IS 243: 29 00 5 19 H cm 0.17 0.45 0.18 -0.56 -1.63 -2.25 -2.49 -2.58 -2.64 -2.72 IS 304: 29 00 5.	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel 0.52 2.13 4.87 5.41 5.49 4.33 3.28 2.50 1.88 1.20 2.0 gm .39 % B .43 deg .00 deg	12.07 s C LC cm 35.02 31.40 36.22 31.80 27.37 25.36 22.14 19.88 17.63 15.29 s	48.30 Disp. Co 6.75 cm Density LK cm 63.19 61.18 52.73 48.30 42.67 42.26 41.86 42.67 43.47 44.68 Disp. Co 6.76 cm Density	682.2 eff. C eff. C 98 WSPH Cm2 1111.5 1047.8 1004.5 905.1 791.4 764.1 723.2 706.8 690.4 677.7 eff. C Base 998 WSPH	2.721 DL 0. Line 2.407 kg. CV 0.498 0.751 1.012 1.265 1.519 1.775 2.022 2.267 2.500 2.710 DL 0. Line	7.63201 .2002 /m3 Kin CT x10-3 -24.25626 35.98697 40.17177 30.66359 25.06054 18.53755 13.89000 11.14799 9.79692 9.37851 .2504 /m3 Kin	0.221 n. Visco RT/DIS 0.029 0.078 0.192 0.197 0.192 0.177 0.175 0.182 0.201	-0.101 Decity H/BPX 0.008 0.021 0.009 -0.026 -0.077 -0.119 -0.123 -0.126 -0.130	5.49 0.1028E TAO Abs. 5.55 7.16 9.90 10.44 10.52 9.36 8.31 7.53 6.91 6.23	-05 m2/s Cwsph 2.520 2.376 2.278 2.052 1.795 1.733 1.640 1.603 1.566 1.537
	3.906 Displace VCG Pos Static Water T Vel m/s 0.715 1.078 1.452 1.816 2.181 2.548 2.901 3.254 3.588 3.890 Displace VCG Pos Static Water T	404.2 ement D ition trim TA emp. RT gms 70.2 222.8 465.7 480.0 468.1 430.3 424.6 443.2 489.3 ement D ition trim TA emp. RT gms	-2.13 IS 243: 29 OO 5 19 H Cm 0.17 0.45 0.18 -0.56 -1.63 -2.25 -2.49 -2.58 -2.64 -2.72 IS 304: 29 OO 5 19 H Cm	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel 0.52 2.13 4.87 5.41 5.49 4.33 3.28 2.50 1.88 1.20 2.0 gm .39 % B .43 deg .00 deg TAO Rel.	12.07 S C LC cm 35.02 31.40 36.22 31.80 27.37 25.36 22.14 19.88 17.63 15.29 S C LC cm	48.30 Disp. Co 6.75 cm Density LK cm 63.19 61.18 52.73 48.30 42.67 42.26 41.86 42.67 43.47 44.68 Disp. Co 6.76 cm Density LK cm	682.2 eff. C eff. C eff. Base 998 WSPH cm2 1111.5 1047.8 1004.5 905.1 791.4 764.1 723.2 706.8 690.4 677.7 eff. C eff. C Base 998 WSPH cm2	2.721 CDL 0. Line 2.407 kg. CV 0.498 0.751 1.012 1.265 1.519 1.775 2.022 2.267 2.500 2.710 CDL 0. Line 2.407 kg.	7.63201 .2002 /m3 Kin CT x10-3 24.25626 35.98697 40.17177 30.66359 25.06054 18.53755 13.89000 11.14799 9.79692 9.37851 .2504 /m3 Kin CT x10-3	0.221 n. Visco RT/DIS 0.029 0.092 0.178 0.192 0.197 0.192 0.175 0.182 0.201	-0.101 Decity H/BPX 0.008 0.021 0.009 -0.026 -0.077 -0.119 -0.123 -0.126 -0.130	5.49 0.1028E TAO Abs. 5.55 7.16 9.90 10.44 10.52 9.36 8.31 7.53 6.91 6.23	1.547 -05 m2/s Cwsph 2.520 2.376 2.278 2.052 1.795 1.733 1.640 1.566 1.537 -05 m2/s Cwsph
_	3.906 Displace VCG Pos Static Water T Vel m/s 0.715 1.078 1.452 1.816 2.181 2.548 2.901 3.254 3.588 3.890 Displace VCG Pos Static Water T	404.2 ement D ition trim TA emp. RT gms 70.2 222.8 433.2 465.7 480.0 468.1 430.3 424.6 443.2 489.3 ement D ition trim TA emp. RT gms	-2.13 IS 243: 29 00 5 19 H cm 0.17 0.45 0.18 -0.56 -1.63 -2.25 -2.49 -2.58 -2.64 -2.72 IS 3042 29 00 5 19 H cm	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel 0.52 2.13 4.87 5.49 4.33 3.28 2.50 1.88 1.20 2.0 gm .39 % B .43 deg .00 deg TAO Rel.	12.07 S C LC cm 35.02 31.40 36.22 31.80 27.37 25.36 22.14 19.88 17.63 15.29 S C LC cm	48.30 Disp. Co 6.75 cm Density LK cm 63.19 61.18 52.73 48.30 42.67 42.26 41.86 42.67 44.68 Disp. Co 6.76 cm Density LK cm	682.2 eff. C 98 WSPH Cm2 1111.5 1047.8 1004.5 905.1 791.4 764.1 723.2 706.8 690.4 677.7 eff. C 98 WSPH Cm2	2.721 DL 0. Line 2.407 kg. CV 0.498 0.751 1.012 1.265 1.519 1.775 2.022 2.267 2.500 2.710 DL 0. Line 3.407 kg. CV	7.63201 .2002 /m3 Kin CT x10-3 24.25626 35.98697 40.17177 30.66359 25.06054 18.53755 13.89000 11.14799 9.79692 9.37851 .2504 /m3 Kin CT x10-3	0.221 n. Visco RT/DIS 0.029 0.092 0.178 0.192 0.197 0.192 0.175 0.182 0.201	-0.101 Decity H/BPX 0.008 0.021 0.009 -0.077 -0.107 -0.119 -0.123 -0.126 -0.130 Decity H/BPX	5.49 0.1028E TAO Abs. 5.55 7.16 9.90 10.44 10.52 9.36 8.31 7.53 6.91 6.23 0.1028E TAO Abs.	1.547 -05 m2/s Cwsph 2.520 2.376 2.278 2.052 1.795 1.733 1.640 1.603 1.566 1.537
	3.906 Displace VCG Pos Static Water T Vel m/s 0.715 1.078 1.452 1.816 2.181 2.548 2.901 3.2548 3.588 3.890 Displace VCG Pos Static Water T Vel m/s	404.2 ement D ition trim TA emp. RT gms 70.2 222.8 433.2 465.7 480.0 468.1 430.3 424.6 443.2 489.3 ement D ition trim TA emp. RT gms 78.3	-2.13 IS 243: 29 00 5 19 H Cm 0.17 0.45 0.18 -0.56 -1.63 -2.25 -2.49 -2.58 -2.64 -2.72 IS 304: 29 00 5 19 H Cm 0.18	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel 0.52 2.13 4.87 5.41 5.49 4.33 3.28 2.50 1.88 1.20 2.0 gm .39 % B .43 deg .00 deg TAO Rel 0.53	12.07 S C LC cm 35.02 31.40 36.22 31.80 27.37 25.36 22.14 19.88 17.63 15.29 S C LC cm 35.42	48.30 Disp. Co 6.75 cm Density LK cm 63.19 61.18 52.73 48.30 42.67 42.26 41.86 42.67 43.47 44.68 Disp. Co 6.76 cm Density LK cm	682.2 eff. C 98 WSPH Cm2 1111.5 1047.8 1004.5 905.1 791.4 764.1 723.2 706.8 690.4 677.7 eff. C 8 Base 998 WSPH Cm2 1120.7	2.721 DL 0. Line 3.407 kg. CV 0.498 0.751 1.012 1.265 1.519 1.775 2.022 2.267 2.500 2.710 DL 0. Line 3.407 kg. CV	7.63201 .2002 /m3 Kin	0.221 n. Visco RT/DIS 0.029 0.092 0.178 0.192 0.197 0.195 0.182 0.201 n. Visco RT/DIS	-0.101 Docity H/BPX 0.008 0.021 0.009 -0.077 -0.107 -0.119 -0.123 -0.126 -0.130 Docity H/BPX 0.008	5.49 0.1028E TAO Abs. 5.55 7.16 9.90 10.44 10.52 9.36 8.31 7.53 6.91 6.23 0.1028E TAO Abs. 5.96	1.547 -05 m2/s Cwsph 2.520 2.376 2.278 2.052 1.795 1.733 1.640 1.603 1.566 1.537 -05 m2/s Cwsph 2.541
	3.906 Displace VCG Pos Static Water T Vel m/s 0.715 1.078 1.452 1.816 2.181 2.548 2.901 3.254 3.588 3.890 Displace VCG Pos Static Water T Vel m/s 0.709 1.074	404.2 ement D ition trim TA emp. RT gms 70.2 222.8 433.2 465.7 480.0 468.1 430.3 424.6 443.2 489.3 ement D ition trim TA emp. RT gms 78.3 273.2	-2.13 IS 243: 29 00 5 19 H Cm 0.17 0.45 0.18 -0.56 -1.63 -2.25 -2.49 -2.58 -2.64 -2.72 IS 304: 29 00 5 19 H Cm 0.18 0.18	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel 0.52 2.13 4.87 5.41 5.49 4.33 3.28 2.50 1.88 1.20 2.0 gm .39 % B .43 deg .00 deg TAO Rel 0.53 2.32	12.07 s C LC cm 35.02 31.40 36.22 31.80 27.37 25.36 17.63 15.29 s C LC cm 35.42 44.28	48.30 Disp. Co 6.75 cm Density LK cm 63.19 61.18 52.73 48.30 42.67 42.26 41.86 42.67 43.47 44.68 Disp. Co 6.76 cm Density LK cm	682.2 eff. C eff. C eff. C eff. C eff. C maximum and a c yes wsph cm2 1111.5 1047.8 1004.5 905.1 791.4 764.1 723.2 706.8 690.4 677.7 eff. C eff. C eff. C wsph cm2 1120.7 1191.9	2.721 DL 0. Line .407 kg. CV 0.498 0.751 1.012 1.265 1.519 1.775 2.022 2.267 2.500 2.710 DL 0. Line .407 kg. CV	7.63201 .2002 /m3 Kin CT x10-3 -24.25626 35.98697 40.17177 30.66359 25.06054 18.53755 13.89000 11.14799 9.79692 9.37851 .2504 /m3 Kin CT x10-3 -27.33915 39.03788	0.221 n. Visco RT/DIS 0.029 0.178 0.192 0.177 0.175 0.182 0.201 n. Visco RT/DIS	-0.101 Decity H/BPX -0.008 0.021 0.009 -0.026 -0.077 -0.119 -0.123 -0.126 -0.130 Decity H/BPX 0.008 0.022	0.1028E TAO Abs. 5.55 7.16 9.90 10.44 10.52 9.36 8.31 7.53 6.91 6.23 0.1028E TAO Abs. 5.96 7.75	-05 m2/s Cwsph2.520 2.376 2.278 2.052 1.795 1.733 1.640 1.603 1.566 1.537 -05 m2/s Cwsph2.541 2.703
_	3.906 Displace VCG Pos Static Water T Vel m/s	404.2 ement D ition trim TA emp. RT gms 70.2 222.8 433.2 465.7 480.0 468.1 430.3 424.6 443.2 489.3 ement D ition trim TA emp. RT gms 78.3 273.2 625.5	-2.13 IS 243: 29 00 5 19 H cm 0.17 0.45 0.18 -0.56 -1.63 -2.25 -2.49 -2.58 -2.64 -2.72 IS 304: 29 00 5 19 H cm 0.18 0.45 0.29	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel 0.52 2.13 4.87 5.41 5.49 4.33 3.28 2.50 1.88 1.20 2.0 gm .39 % B .43 deg .00 deg TAO Rel 0.53 2.32 5.46	12.07 s C LC cm 35.02 31.40 36.22 31.80 27.37 25.36 22.14 19.88 17.63 15.29 s C LC cm 35.42 44.28 38.64	48.30 Disp. Co 6.75 cm Density LK cm 63.19 61.18 52.73 48.30 42.67 42.26 41.86 42.67 43.47 44.68 Disp. Co 6.76 cm Density LK cm 63.60 61.58 53.53	682.2 eff. C eff. C eff. Base 998 WSPH Cm2 1111.5 1047.8 1004.5 905.1 791.4 764.1 723.2 706.8 690.4 677.7 eff. C Base 998 WSPH Cm2 1120.7 1191.9 1040.6	2.721 CDL 0. Line 2.407 kg. CV 0.498 0.751 1.012 1.265 1.519 1.775 2.022 2.267 2.500 2.710 CDL 0. Line 4.407 kg. CV	7.63201 .2002 /m3 Kin CT x10-3 24.25626 35.98697 40.17177 30.66359 25.06054 18.53755 13.89000 11.14799 9.79692 9.37851 .2504 /m3 Kin CT x10-3 27.33915 39.03788 57.55421	0.221 n. Visco RT/DIS 0.029 0.178 0.192 0.177 0.175 0.182 0.201 n. Visco RT/DIS 0.026 0.090 0.206	-0.101 Decity H/BPX 0.008 0.021 0.009 -0.026 -0.077 -0.119 -0.123 -0.126 -0.130 Decity H/BPX	5.49 0.1028E TAO Abs. 5.55 7.16 9.90 10.44 10.52 9.36 8.31 7.53 6.91 6.23 0.1028E TAO Abs. 5.96 7.75 10.89	-05 m2/s Cwsph 2.520 2.376 2.278 2.052 1.795 1.733 1.640 1.603 1.566 1.537 -05 m2/s Cwsph 2.541 2.703 2.360
_	3.906 Displace VCG Pos Static Water T Vel m/s	404.2 ement D ition trim TA emp. RT gms 70.2 222.8 433.2 465.7 480.0 468.1 430.3 424.6 443.2 489.3 ement D ition trim TA emp. RT gms 78.3 273.2 625.5 692.2	-2.13 IS 243: 29 00 5 19 H cm 0.17 0.45 0.18 -0.56 -1.63 -2.25 -2.49 -2.58 -2.64 -2.72 IS 304: 29 00 5 19 H cm 0.18 0.45 0.29 -0.56	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel 0.52 2.13 4.87 5.41 5.49 4.33 3.28 2.50 1.88 1.20 2.0 gm .39 % B .43 deg .00 deg TAO Rel 0.53 2.32 5.46 6.84	12.07 s C LC cm 35.02 31.40 36.22 31.80 27.37 25.36 22.14 19.88 17.63 15.29 s C LC cm 35.42 44.28 38.64 33.41	48.30 Disp. Co 6.75 cm Density LK cm 63.19 61.18 52.73 48.30 42.67 42.26 41.86 42.67 44.68 Disp. Co 6.76 cm Density LK cm 63.60 61.58 53.53 45.89	682.2 eff. C eff. C eff. Base 998 WSPH cm2 1111.5 1047.8 1004.5 905.1 791.4 764.1 723.2 706.8 690.4 677.7 eff. C eff. C eff. C T 120.7 1191.9 1040.6 895.9	2.721 CDL 0. Line 2.407 kg. CV 0.498 0.751 1.012 1.265 1.519 1.775 2.022 2.267 2.500 2.710 CDL 0. Line 2.407 kg. CV CV 0.494 0.748 0.998 1.251	7.63201 .2002 /m3 Kin	0.221 n. Visco RT/DIS 0.029 0.092 0.178 0.192 0.177 0.175 0.182 0.201 n. Visco RT/DIS 0.026 0.090 0.228	-0.101 Decity H/BPX -0.008 0.021 0.009 -0.026 -0.077 -0.119 -0.123 -0.126 -0.130 Decity H/BPX 0.008 0.002 0.008 0.002 0.014 -0.027	0.1028E TAO Abs. 5.55 7.16 9.90 10.44 10.52 9.36 8.31 7.53 6.91 6.23 0.1028E TAO Abs. 5.96 7.75 10.89 12.27	-05 m2/s Cwsph 2.520 2.376 2.278 2.052 1.795 1.733 1.640 1.566 1.537 -05 m2/s Cwsph 2.541 2.703 2.360 2.031
	3.906 Displace VCG Pos Static Water T Vel m/s	404.2 ement D ition trim TA emp. RT gms 70.2 222.8 433.2 445.7 480.0 468.1 430.3 424.6 443.2 489.3 ement D ition trim TA emp. RT gms 78.3 273.2 625.5 692.2 727.3	-2.13 IS 243: 29 00 5 19 H cm 0.17 0.45 0.18 -0.56 -1.63 -2.25 -2.49 -2.72 IS 304: 29 00 5 19 H cm 0.18 0.45 0.29 -0.56 -2.01	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel 0.52 2.13 4.87 5.41 5.49 4.33 3.28 2.50 1.88 1.20 2.0 gm .39 % B .43 deg .00 deg TAO Rel 0.53 2.32 5.46 6.84 7.22	12.07 s C LC cm 35.02 31.40 36.22 31.80 27.37 25.36 22.14 19.88 17.63 15.29 s C LC cm 35.42 44.28 38.64 33.41 29.38	48.30 Disp. Co 6.75 cm Density LK cm 63.19 61.18 52.73 48.30 42.67 42.26 41.86 42.67 44.68 Disp. Co 6.76 cm Density LK cm 63.60 61.58 53.53 45.89 41.06	682.2 eff. C 6 Base 998 WSPH Cm2 1111.5 1047.8 1004.5 905.1 791.4 764.1 723.2 706.8 690.4 677.7 eff. C 6 Base 998 WSPH Cm2 1120.7 1191.9 1040.6 895.9 795.9	2.721 DL 0. Line 2.407 kg. CV 0.498 0.751 1.012 1.265 1.519 1.775 2.022 2.267 2.500 2.710 DL 0. Line 3.407 kg. CV CV 0.494 0.748 0.998 1.251 1.504	7.63201 .2002 /m3 Kinc	0.221 n. Visco RT/DIS 0.029 0.092 0.178 0.192 0.197 0.175 0.182 0.201 n. Visco RT/DIS 0.026 0.090 0.206 0.228 0.239	-0.101 Decity H/BPX 0.008 0.021 0.009 -0.077 -0.107 -0.119 -0.126 -0.130 Decity H/BPX 0.008 0.022 0.014 -0.027 -0.096	5.49 0.1028E TAO Abs. 5.55 7.16 9.90 10.44 10.52 9.36 8.31 7.53 6.91 6.23 0.1028E TAO Abs. 5.96 7.75 10.89 12.27 12.65	-05 m2/s Cwsph 2.520 2.376 2.278 2.052 1.795 1.733 1.640 1.566 1.537 -05 m2/s Cwsph 2.541 2.703 2.360 2.031 1.805
_	3.906 Displace VCG Pos Static Water T Vel m/s 0.715 1.078 1.452 1.816 2.181 2.548 2.901 3.254 3.588 3.890 Displace VCG Pos Static Water T Vel m/s 0.709 1.074 1.433 1.796 2.159 2.528	404.2 ement D ition trim TA emp. RT gms 70.2 222.8 433.2 465.7 480.0 468.1 430.3 424.6 443.2 489.3 ement D ition trim TA emp. RT gms 78.3 273.2 625.5 692.2	-2.13 IS 243: 29 00 5 19 H cm 0.17 0.45 0.18 -0.56 -1.63 -2.25 -2.49 -2.58 -2.64 -2.72 IS 304: 29 00 5 19 H cm 0.18 0.45 0.29 -0.56	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel 0.52 2.13 4.87 5.41 5.49 4.33 3.28 2.50 1.88 1.20 2.0 gm .39 % B .43 deg .00 deg TAO Rel 0.53 2.32 5.46 6.84	12.07 s C LC cm 35.02 31.40 36.22 31.80 27.37 25.36 22.14 19.88 17.63 15.29 s C LC cm 35.42 44.28 38.64 33.41	48.30 Disp. Co 6.75 cm Density LK cm 63.19 61.18 52.73 48.30 42.67 42.26 41.86 42.67 44.68 Disp. Co 6.76 cm Density LK cm 63.60 61.58 53.53 45.89 41.06	682.2 eff. C eff. C eff. C eff. C R 998 WSPH Cm2 1111.5 1047.8 1004.5 905.1 791.4 764.1 723.2 706.8 690.4 677.7 eff. C eff. C eff. C market 998 WSPH Cm2 1120.7 1191.9 1040.6 895.9 795.9 732.3	2.721 DL 0. Line 2.407 kg. CV 0.498 0.751 1.012 1.265 1.519 1.775 2.022 2.267 2.500 2.710 DL 0. Line 2.407 kg. CV	7.63201 .2002 /m3 Kin	0.221 n. Visco RT/DIS 0.029 0.078 0.192 0.177 0.175 0.182 0.201 n. Visco RT/DIS	-0.101 Decity H/BPX -0.008 0.021 0.009 -0.026 -0.077 -0.119 -0.123 -0.126 -0.130 Decity H/BPX -0.008 0.022 0.014 -0.027 -0.096 -0.137	0.1028E TAO Abs 5.55 7.16 9.90 10.44 10.52 9.36 8.31 7.53 6.91 6.23 0.1028E TAO Abs 5.96 7.75 10.89 12.27 12.65 11.08	-05 m2/s Cwsph 2.520 2.376 2.278 2.052 1.795 1.733 1.640 1.566 1.537 -05 m2/s Cwsph 2.541 2.703 2.360 2.031 1.805 1.660
	3.906 Displace VCG Pos Static Water T Vel m/s 0.715 1.078 1.452 1.816 2.181 2.548 2.901 3.254 3.588 3.890 Displace VCG Pos Static Water T Vel m/s 0.709 1.074 1.433 1.796 2.159 2.528 2.892	404.2 ement D ition trim TA emp. RT gms 70.2 222.8 433.2 465.7 480.0 468.1 430.3 424.6 443.2 489.3 ement D ition trim TA emp. RT gms 78.3 273.2 625.5 692.2 727.3 648.9	-2.13 IS 243: 29 00 5 19 H cm 0.17 0.45 0.18 -0.56 -1.63 -2.25 -2.49 -2.72 IS 304: 29 00 5 19 H cm 0.18 0.45 0.29 -0.56 -2.01	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel 0.52 2.13 4.87 5.41 5.49 4.33 3.28 2.50 1.88 1.20 2.0 gm .39 % B .43 deg .00 deg TAO Rel 0.53 2.32 5.46 6.84 7.22	12.07 S C LC cm 35.02 31.40 36.22 31.80 27.37 25.36 22.14 19.88 17.63 15.29 S C LC cm 35.42 44.28 38.64 33.41 29.38 26.16	48.30 Disp. Co 6.75 cm Density LK cm 63.19 61.18 52.73 48.30 42.67 42.26 41.86 42.67 44.68 Disp. Co 6.76 cm Density LK cm 63.60 61.58 53.53 45.89 41.06	682.2 eff. C eff. C eff. C eff. C R 998 WSPH Cm2 1111.5 1047.8 1004.5 905.1 791.4 764.1 723.2 706.8 690.4 677.7 eff. C eff. C eff. C market 998 WSPH Cm2 1120.7 1191.9 1040.6 895.9 795.9 732.3	2.721 DL 0. Line 2.407 kg. CV 0.498 0.751 1.012 1.265 1.519 1.775 2.022 2.267 2.500 2.710 DL 0. Line 3.407 kg. CV CV 0.494 0.748 0.998 1.251 1.504	7.63201 .2002 /m3 Kinc	0.221 n. Visco RT/DIS 0.029 0.078 0.192 0.177 0.175 0.182 0.201 n. Visco RT/DIS	-0.101 Decity H/BPX -0.008 0.021 0.009 -0.026 -0.077 -0.119 -0.123 -0.126 -0.130 Decity H/BPX -0.008 0.022 0.014 -0.027 -0.096 -0.137	5.49 0.1028E TAO Abs. 5.55 7.16 9.90 10.44 10.52 9.36 8.31 7.53 6.91 6.23 0.1028E TAO Abs. 5.96 7.75 10.89 12.27 12.65	-05 m2/s Cwsph
_	3.906 Displace VCG Pos Static Water T Vel m/s 0.715 1.078 1.452 1.816 2.181 2.548 2.901 3.254 3.588 3.890 Displace VCG Pos Static Water T Vel m/s 0.709 1.074 1.433 1.796 2.159 2.528	404.2 ement D ition trim TA emp. RT gms 70.2 222.8 433.2 465.7 480.0 468.1 430.3 424.6 443.2 489.3 ement D ition trim TA emp. RT gms 78.3 273.2 625.5 692.2 727.3 648.9 561.4	-2.13 IS 243: 29 00 5 19 H Cm 0.17 0.45 0.18 -0.56 -1.63 -2.25 -2.49 -2.58 -2.64 -2.72 IS 304: 29 00 59 H Cm 0.18 0.45 0.29 -0.56 -2.01 -2.89	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel 0.52 2.13 4.87 5.41 5.49 4.33 3.28 2.50 1.88 1.20 2.0 gm .39 % B .43 deg .00 deg TAO Rel 0.53 2.32 5.46 6.84 7.22 5.65	12.07 s C LC Cm 35.02 31.40 36.22 31.80 27.37 25.36 22.14 19.88 17.63 15.29 s C LC Cm 35.42 44.28 38.64 33.41 29.38 26.16 23.35	48.30 Disp. Co 6.75 cm Density LK cm 63.19 61.18 52.73 48.30 42.67 42.26 41.86 42.67 43.47 44.68 Disp. Co 6.76 cm Density LK cm 63.60 61.58 53.53 45.89 41.06 38.64	682.2 eff. C eff. C eff. Base 998 WSPH Cm2 1111.5 1047.8 1004.5 905.1 791.4 764.1 723.2 706.8 690.4 677.7 eff. C eff. C Base 998 WSPH Cm2 1120.7 1191.9 1040.6 895.9 795.9 795.9 795.9 795.9 795.9	2.721 DL 0. Line 2.407 kg. CV 0.498 0.751 1.012 1.265 1.519 1.775 2.022 2.267 2.500 2.710 DL 0. Line 2.407 kg. CV	7.63201 .2002 /m3 Kin	0.221 n. Visco RT/DIS 0.029 0.178 0.192 0.197 0.175 0.182 0.201 n. Visco RT/DIS	-0.101 Decity H/BPX -0.008 0.021 0.009 -0.026 -0.077 -0.119 -0.123 -0.126 -0.130 Decity H/BPX 0.008 0.022 0.014 -0.027 -0.096 -0.137 -0.148	0.1028E TAO Abs 5.55 7.16 9.90 10.44 10.52 9.36 8.31 7.53 6.91 6.23 0.1028E TAO Abs 5.96 7.75 10.89 12.27 12.65 11.08	-05 m2/s Cwsph 2.520 2.376 2.278 2.052 1.795 1.733 1.640 1.566 1.537 -05 m2/s Cwsph 2.541 2.703 2.360 2.031 1.805 1.660
	3.906 Displace VCG Pos Static Water T Vel m/s 0.715 1.078 1.452 1.816 2.181 2.548 2.901 3.254 3.588 3.890 Displace VCG Pos Static Water T Vel m/s 0.709 1.074 1.433 1.796 2.159 2.528 2.892	404.2 ement D ition trim TA emp. RT gms 70.2 222.8 433.2 465.7 480.0 468.1 430.3 424.6 443.2 489.3 ement D ition trim TA emp. RT gms 78.3 2625.5 692.2 727.3 648.9 561.4 555.0	-2.13 IS 243: 29 Oo 5 19 H Cm 0.17 0.45 0.18 -0.56 -1.63 -2.25 -2.49 -2.58 -2.64 -2.72 IS 304: 29 Oo 5 19 H Cm 0.18 0.45 0.29 -0.56 -2.01 -2.89 -3.11 -3.23	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel 0.52 2.13 4.87 5.41 5.49 4.33 3.28 2.50 1.88 1.20 2.0 gm .39 % B .43 deg .00 deg TAO Rel 0.53 2.32 5.46 6.84 7.22 5.65 3.98 2.80	12.07 s C LC cm 35.02 31.40 36.22 31.80 27.37 25.36 22.14 19.88 17.63 15.29 s C LC cm 35.42 44.28 38.64 33.41 29.38 26.16 23.35 21.73	48.30 Disp. Co 6.75 cm Density LK cm 63.19 61.18 52.73 48.30 42.67 42.26 41.86 42.67 43.47 44.68 Disp. Co 6.76 cm Density LK cm 63.60 61.58 53.53 45.89 41.06 38.64 39.45 40.25	682.2 eff. C eff. C eff. Base 998 WSPH cm2 1111.5 1047.8 1004.5 905.1 791.4 764.1 723.2 706.8 690.4 677.7 eff. C eff. C	2.721 2DL 0. Line 3.407 kg. CV 0.498 0.751 1.012 1.265 1.519 1.775 2.022 2.267 2.500 2.710 DL 0. Line 4.407 kg. CV 0.494 0.748 0.998 1.251 1.504 1.761 2.015 2.267	7.63201 .2002 /m3 Kin CT x10-3 24.25626 35.98697 40.17177 30.66359 25.06054 18.53755 13.89000 11.14799 9.79692 9.37851 .2504 /m3 Kin CT x10-3 27.33915 39.03788 57.55421 47.09596 38.53076 27.24461 18.58807 14.70575	0.221 n. Visco RT/DIS 0.029 0.092 0.178 0.192 0.177 0.175 0.182 0.201 n. Visco RT/DIS 0.026 0.028 0.239 0.213 0.185 0.182	-0.101 Decity H/BPX 0.008 0.021 0.009 -0.026 -0.077 -0.119 -0.123 -0.126 -0.130 Decity H/BPX 0.008 0.022 0.014 -0.027 -0.096 -0.137 -0.148 -0.154	0.1028E TAO Abs. 5.55 7.16 9.90 10.44 10.52 9.36 8.31 7.53 6.91 6.23 0.1028E TAO Abs. 5.96 7.75 10.89 12.27 12.65 11.08 9.41	-05 m2/s Cwsph
	3.906 Displace VCG Pos Static Water T Vel m/s	404.2 ement D ition trim TA emp. RT gms 70.2 222.8 433.2 465.7 480.0 468.1 430.3 424.6 443.2 489.3 ement D ition trim TA emp. RT gms 78.3 2625.5 692.2 727.3 648.9 561.4 555.0	-2.13 IS 243: 29 OO 5 19 H Cm 0.17 0.45 0.18 -0.56 -1.63 -2.25 -2.49 -2.58 -2.64 -2.72 IS 304: 29 OO 5 19 H Cm 0.18 0.45 0.29 -0.56 -2.01 -2.89 -3.11 -3.23 -3.30	1.00 2.0 gm .35 % B .03 deg .00 deg TAO Rel 0.52 2.13 4.87 5.41 5.49 4.33 3.28 2.50 1.88 1.20 2.0 gm .39 % B .43 deg .00 deg TAO Rel 0.53 2.32 5.46 6.84 7.22 5.65 3.98	12.07 s C LC cm 35.02 31.40 36.22 31.80 27.37 25.36 22.14 19.88 17.63 15.29 s C LC cm 35.42 44.28 33.41 29.38 26.16 23.35 21.73 19.72	48.30 Disp. Co 6.75 cm Density LK cm 63.19 61.18 52.73 48.30 42.67 42.26 41.86 42.67 43.47 44.68 Disp. Co 6.76 cm Density LK cm 63.60 61.58 53.53 45.89 41.06 38.64 39.45	682.2 eff. C	2.721 DL 0. Line 1.407 kg. CV 0.498 0.751 1.012 1.265 1.519 1.775 2.022 2.267 2.500 2.710 DL 0. Line 1.407 kg. CV 0.494 0.748 0.998 1.251 1.504 1.761 2.015	7.63201 .2002 /m3 Kin CT x10-3 -24.25626 35.98697 40.17177 30.66359 25.06054 18.53755 13.89000 11.14799 9.79692 9.37851 .2504 /m3 Kin CT x10-3 -27.33915 39.03788 57.55421 47.09596 38.53076 18.58807	0.221 n. Visco RT/DIS 0.029 0.092 0.178 0.192 0.177 0.175 0.182 0.201 n. Visco RT/DIS 0.026 0.090 0.206 0.228 0.239 0.213 0.185 0.182 0.191	-0.101 Decity H/BPX -0.008 0.021 0.009 -0.026 -0.077 -0.119 -0.123 -0.126 -0.130 Decity H/BPX 0.008 0.022 0.014 -0.027 -0.096 -0.137 -0.148	0.1028E TAO Abs. 5.55 7.16 9.90 10.44 10.52 9.36 8.31 7.53 6.91 6.23 0.1028E TAO Abs. 5.96 7.75 10.89 12.27 12.65 11.08 9.41 8.23	-05 m2/s Cwsph 2.520 2.376 2.278 2.052 1.795 1.733 1.640 1.566 1.537 -05 m2/s Cwsph 2.541 2.703 2.360 2.031 1.805 1.660 1.588

<u>Table B.53</u> L/B = 3.5 ; β = 24° ; L_{ca} = 25% ; Thrust Line: Centre of Gravity

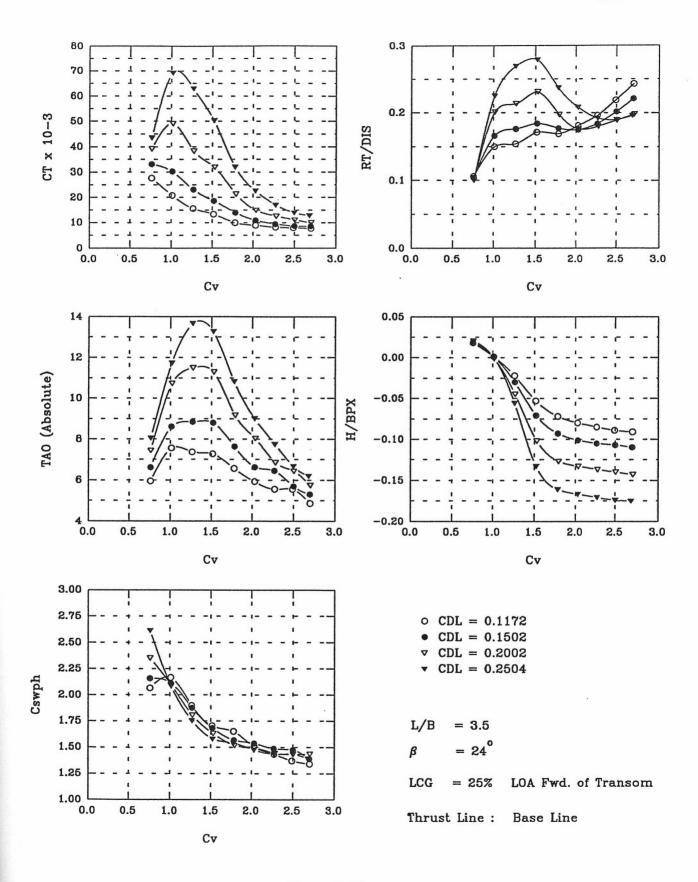


Figure B.54

Model No. T-3524 Length Overal LOA Breath (Deck) B L/B Ratio 3.5 80.50 cm Deadrise 24.00 deg 23.00 cm 219 Breath (Chine) BPX 21.00 cm LCG Position 25.00 % LOA 20.13 cm @ Transom Displacement DIS 1424.0 gms Disp. Coeff. CDL 0.1172 VCG Position 29.89 % B 6.88 cm @ Base Line Static trim TAOo 4.16 deg 998.407 kg/m3 Kin. Viscocity 0.1028E-05 m2/s Water Temp. 19.00 deg C Density Vel TC WSPH CV CT RT/DIS H/BPX TAO RT T.K H TAO Cwsph gms x10-3 m/s Cm Rel. cm CIR cm2 Abs. 911.1 0.757 955.1 1.012 836.9 1.266 151.1 27.61724 0.106 0.018 20.77753 0.150 0.001 1.086 0.38 1.79 20.13 60.38 5.95 2.066 1.452 213.0 0.03 3.39 30.19 54.34 7.55 2.166 1.817 219.0 -0.45 3.21 24.95 49.11 15.57690 0.154 -0.022 7.37 1.898 2.178 3.12 21.73 750.5 1.518 727.7 1.779 13.40007 0.171 -0.053 242.8 -1.1144.68 7.28 1.702 2.554 0.169 -0.072 -1.50 9.95878 240.5 2.40 20.13 44.28 6.56 1.650 2.912 664.0 2.029 257.2 -1.67 1.77 14.89 43.87 8.97619 0.181 -0.080 5.93 1.506 3.261 278.7 -1.78 1.39 11.27 44.68 632.2 2.272 8.14619 0.196 -0.085 5.55 1.434 3.573 -1.88 1.39 8.05 604.9 2.490 7.95100 0.219 -0.089 312.5 45.48 5.55 1.372 3.876 346.0 -1.91 0.71 6.04 46.29 591.3 2.701 7.65358 0.243 -0.091 4.87 1.341 Displacement DIS 1825.0 gms Disp. Coeff. CDT. 0.1502 29.22 % B VCG Position 6.72 cm @ Base Line Static trim TAOo 4.49 deg Water Temp. 19.00 deg C Density 998.407 kg/m3 Kin. Viscocity 0.1028E-05 m2/s WSPH Vel PT H TAO LC T.K CV CT RT/DIS H/BPX TAO Cwsph x10-3 m/s qms Cm Rel. CM cm cm2 Abs. 1.087 189.6 0.39 2.12 24.15 59.97 951.9 0.757 33.13325 0.104 0.019 6.61 2.158 1.453 302.4 0.02 4.12 30.99 51.52 932.4 1.012 30.19005 0.166 0.001 8.61 2.114 1.822 4.36 827.8 1.269 741.4 1.522 0.176 -0.030 8.85 321.7 -0.62 27.37 45.89 23.01712 1.877 -1.492.184 0.184 - 0.0718.81 335.9 4.32 23.75 41.86 18,65801 1.681 2.558 323.8 -1.96 3.15 18.92 42.26 691.3 1.782 14.06073 0.177 -0.093 7.64 1.568 2.915 320.2 -2.11 2.14 17.71 42.26 677.7 2.031 10.92725 0.175 -0.101 6.63 1.537 3.258 335.8 -2.21 1.96 14.89 43.07 654.9 2.270 9.48987 0.184 -0.105 6.45 1.485 3.588 369.4 -2.26 650.4 2.500 8.67027 0.202 -0.107 5.70 1.475 1.21 12.88 44.68 3.871 614.0 2.697 8.59930 0.221 -0.110 402.7 -2.310.81 10.06 44.28 5.30 1.392 Displacement DIS 2432.0 gms VCG Position 29.35 % B Disp. Coeff. CDL 0.2002 6.75 cm @ Base Line 5.03 deg Static trim TAOo Water Temp. 19.00 deg C Density 998.407 kg/m3 Kin. Viscocity 0.1028E-05 m2/s Vel RT H TAO LC LK WSPH CV CT RT/DIS H/BPX TAO Cwsph x10-3 m/s qms Rel. Abs. CM cm Cm cm2 246.2 1038.1 0.759 1.090 0.42 2.41 32.20 59.57 39.22689 0.101 0.020 7.44 2.354 1.458 489.7 -0.03 5.69 33.41 48.30 923.1 1.016 49.02157 0.201 -0.001 10.72 2.093 1.827 518.7 0.213 -0.045 -0.95 6.46 28.18 42.26 795.9 1.273 38.38393 11.49 1.805 718.6 1.529 0.231 -0.102 2.194 562.2 -2.146.26 25.36 38.24 31.93805 11.29 1.630 668.6 1.789 659.5 2.035 0.197 -0.127 2.567 478.5 -2.67 4.13 21.73 37.43 21.33986 9.16 1.516 2.920 14.93532 0.176 -0.133 427.5 -2.79 3.01 20.13 38.24 8.04 1.495 3.275 438.3 -2.88 1.82 17.71 38.64 636.8 2.282 12.61427 0.180 -0.137 6.85 1.444 3.594 11.03895 0.189 -0.140 458.8 -2.95 1.40 15.70 40.25 632.2 2.504 6.43 1.434 3.881 482.5 -2.99 0.71 13.68 42.26 632.2 2.704 9.95589 0.198 -0.143 5.74 1.434 Displacement DIS 3042.0 gms Disp. Coeff. CDL 0.2504 29.39 % B 6.76 cm € Base Line VCG Position Static trim TAOo 5.43 deg Water Temp. 19.00 deg C Density 998.407 kg/m3 Kin. Viscocity 0.1028E-05 m2/s Vel RT н TAO LC T.K WSPH CV CT RT/DIS H/BPX TAO Cwsph cm2 x10-3 m/s gms CM Rel. CM CM Abs. 8.05 1.091 303.4 0.43 2.62 42.26 59.97 1152.8 0.760 43.48169 0.100 0.021 2.614 1.455 684.8 0.00 6.30 34.21 47.09 918.5 1.014 69.18816 0.225 0.000 11.73 2.083 1.818 819.0 -1.17 8.24 28.98 0.269 -0.056 1.753 39.45 773.2 1.267 62.95673 13.67 2.185 0.279 -0.133 849.7 -2.78 7.85 26.16 35.42 695.9 1.522 50.27636 13.28 1.578 2.554 720.0 -3.38 32.00575 0.237 -0.161 10.82 1.537 677.7 1.779 5.39 24.15 35.82 2.911 632.4 9.01 1.475 -3.513.58 21.73 35.82 650.4 2.028 22.53957 0.208 - 0.167

632.2 2.274

614.0 2.682

2.499

632.2

17.03099

13.93155

0.192 - 0.171

0.190 -0.174

12.89828 0.196 -0.175

1.434

1.434

1.392

7.75

6.66

6.19

3.264

3.587

3.849

583.6

576.7

-3.59

-3.66

597.0 -3.67

2.32

1.23

0.76

19.72

17.71

15.70

36.22

38.24

38.64