

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

FUEL OIL DAY TANK - PORT

## TANK CHARACTERISTICS

Trim: Aft 0.500/24.200, No Heel

Tank: FO\_DAY.P, Contents: FUEL OIL at 0.870 Specific Gravity

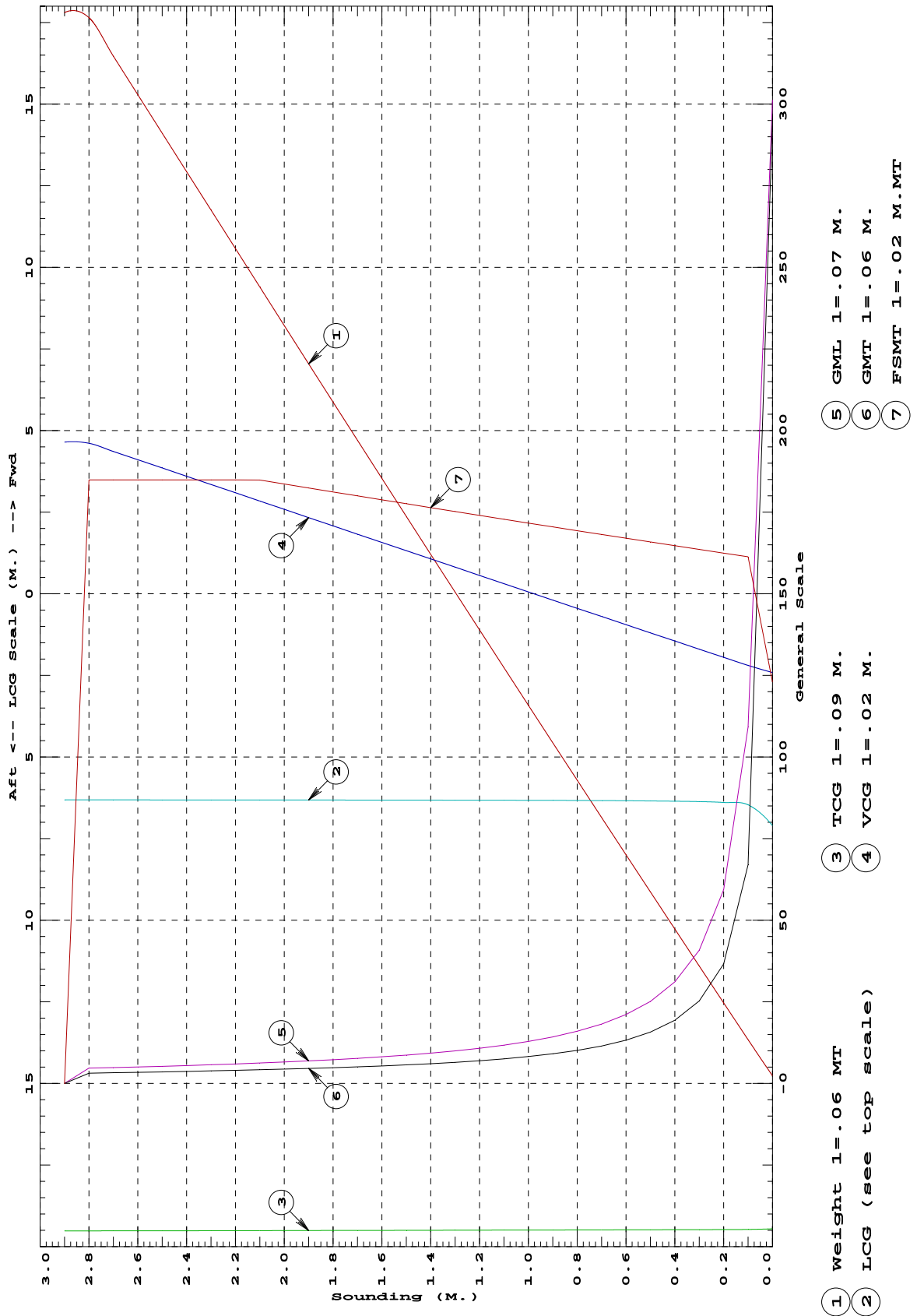
Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	159		0.14	7.103a	4.008p	2.518	21.09	2.46
100	923		0.80	6.466a	4.027p	2.561	7.64	3.23
200	1701		1.48	6.395a	4.030p	2.611	4.16	3.25
300	2481		2.16	6.368a	4.032p	2.660	2.86	3.27
400	3263		2.84	6.354a	4.034p	2.710	2.18	3.29
500	4046		3.52	6.346a	4.036p	2.760	1.76	3.32
600	4831		4.20	6.340a	4.037p	2.811	1.48	3.34
700	5618		4.89	6.335a	4.039p	2.861	1.27	3.36
800	6407		5.57	6.332a	4.040p	2.911	1.12	3.39
900	7198		6.26	6.330a	4.042p	2.961	1.00	3.41
1000	7990		6.95	6.327a	4.043p	3.012	0.90	3.43
1100	8784		7.64	6.326a	4.045p	3.062	0.82	3.46
1200	9580		8.33	6.324a	4.046p	3.113	0.75	3.48
1300	10378		9.03	6.323a	4.047p	3.163	0.70	3.50
1400	11178		9.72	6.322a	4.049p	3.213	0.65	3.53
1500	11979		10.42	6.321a	4.050p	3.264	0.61	3.55
1600	12782		11.12	6.320a	4.052p	3.315	0.57	3.58
1700	13587		11.82	6.319a	4.053p	3.365	0.54	3.60
1800	14394		12.52	6.319a	4.055p	3.416	0.51	3.62
1900	15203		13.23	6.318a	4.056p	3.467	0.48	3.65
2000	16013		13.93	6.317a	4.057p	3.517	0.46	3.67
2100	16825		14.64	6.317a	4.059p	3.568	0.44	3.70
2200	17638		15.35	6.316a	4.060p	3.619	0.42	3.70
2300	18451		16.05	6.316a	4.061p	3.669	0.40	3.70
2400	19264		16.76	6.315a	4.063p	3.720	0.38	3.70
2500	20077		17.47	6.315a	4.064p	3.771	0.37	3.70
2600	20890		18.17	6.315a	4.065p	3.821	0.35	3.70
2700	21703		18.88	6.314a	4.065p	3.872	0.34	3.70
2800	22516		19.59	6.314a	4.066p	3.922	0.33	3.70
2900	22623		19.68	6.313a	4.066p	3.929		

Soundings in mm.-----Other distances in METERS.-----

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

FUEL OIL DAY TANK - PORT

FO\_DAY.P  
TANK CHARACTERISTICS at 1.18 degrees AFT TRIM



FUEL OIL Specific Gravity = 0.870

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

FUEL OIL DAY TANK - STARBOARD

## TANK CHARACTERISTICS

Trim: Aft 0.500/24.200, No Heel

Tank: FO\_DAY.S, Contents: FUEL OIL at 0.870 Specific Gravity

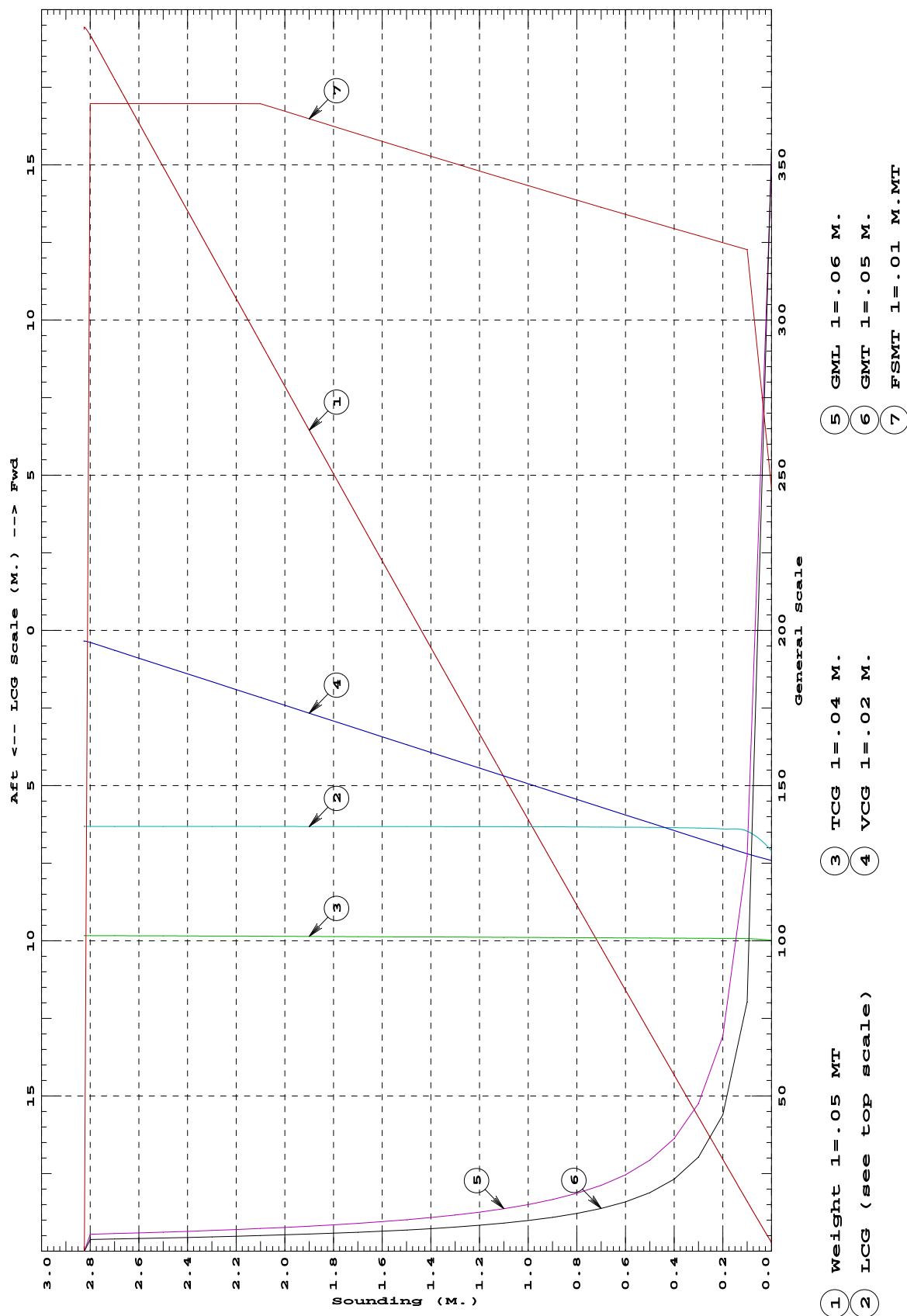
Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	159		0.14	7.103a	4.008s	2.518	21.09	2.46
100	923		0.80	6.466a	4.027s	2.561	7.64	3.23
200	1701		1.48	6.395a	4.030s	2.611	4.16	3.25
300	2481		2.16	6.368a	4.032s	2.660	2.86	3.27
400	3263		2.84	6.354a	4.034s	2.710	2.18	3.29
500	4046		3.52	6.346a	4.036s	2.760	1.76	3.32
600	4831		4.20	6.340a	4.037s	2.811	1.48	3.34
700	5618		4.89	6.335a	4.039s	2.861	1.27	3.36
800	6407		5.57	6.332a	4.040s	2.911	1.12	3.39
900	7198		6.26	6.330a	4.042s	2.961	1.00	3.41
1000	7990		6.95	6.327a	4.043s	3.012	0.90	3.43
1100	8784		7.64	6.326a	4.045s	3.062	0.82	3.46
1200	9580		8.33	6.324a	4.046s	3.113	0.75	3.48
1300	10378		9.03	6.323a	4.047s	3.163	0.70	3.50
1400	11178		9.72	6.322a	4.049s	3.213	0.65	3.53
1500	11979		10.42	6.321a	4.050s	3.264	0.61	3.55
1600	12782		11.12	6.320a	4.052s	3.315	0.57	3.58
1700	13587		11.82	6.319a	4.053s	3.365	0.54	3.60
1800	14394		12.52	6.319a	4.055s	3.416	0.51	3.62
1900	15203		13.23	6.318a	4.056s	3.467	0.48	3.65
2000	16013		13.93	6.317a	4.057s	3.517	0.46	3.67
2100	16825		14.64	6.317a	4.059s	3.568	0.44	3.70
2200	17638		15.35	6.316a	4.060s	3.619	0.42	3.70
2300	18451		16.05	6.316a	4.061s	3.669	0.40	3.70
2400	19264		16.76	6.315a	4.063s	3.720	0.38	3.70
2500	20077		17.47	6.315a	4.064s	3.771	0.37	3.70
2600	20890		18.17	6.315a	4.065s	3.821	0.35	3.70
2700	21703		18.88	6.314a	4.065s	3.872	0.34	3.70
2800	22516		19.59	6.314a	4.066s	3.922	0.33	3.70
2824	22623		19.68	6.313a	4.066s	3.929		

Soundings in mm.-----Other distances in METERS.-----

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

FUEL OIL DAY TANK - STARBOARD

FO\_DAY.S  
TANK CHARACTERISTICS at 1.18 degrees AFT TRIM



FUEL OIL Specific Gravity = 0.870

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

AFT DOUBLE BOTTOM FUEL OIL TANK - PORT

## TANK CHARACTERISTICS

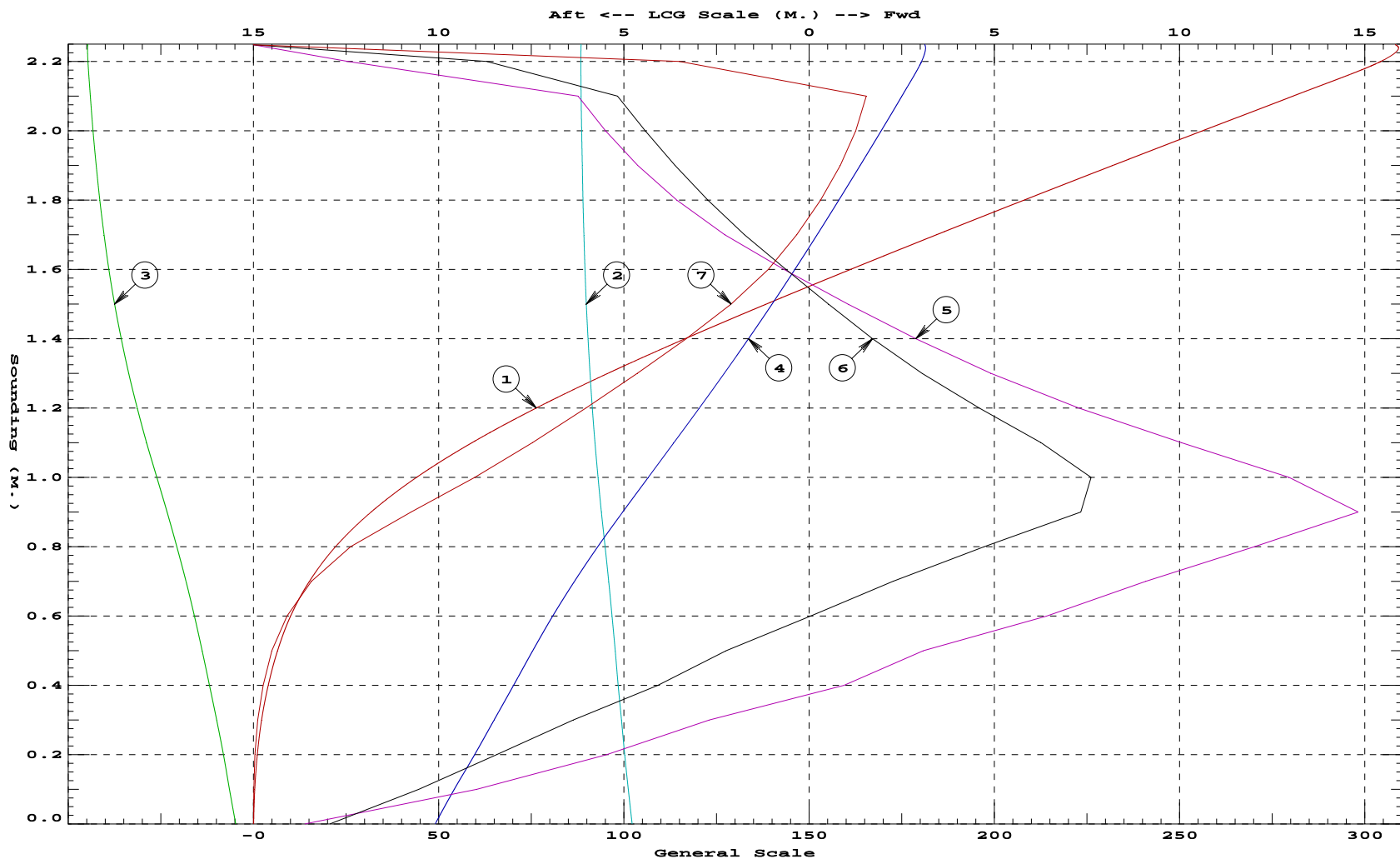
Trim: Aft 0.500/24.200, No Heel

Tank: FO\_AFT.P, Contents: FUEL OIL at 0.870 Specific Gravity

Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	4		0.00	4.778a	0.240p	0.491	0.12	0.00
100	26		0.02	4.882a	0.324p	0.542	0.54	0.02
200	72		0.06	4.978a	0.404p	0.597	0.86	0.08
300	151		0.13	5.064a	0.497p	0.650	1.11	0.23
400	275		0.24	5.155a	0.593p	0.702	1.43	0.52
500	449		0.39	5.234a	0.693p	0.754	1.63	1.00
600	692		0.60	5.321a	0.796p	0.808	1.93	1.81
700	1042		0.91	5.410a	0.910p	0.867	2.17	3.13
800	1528		1.33	5.505a	1.034p	0.930	2.43	5.24
900	2190		1.91	5.606a	1.166p	0.997	2.68	8.51
1000	3037		2.64	5.697a	1.305p	1.066	2.52	11.95
1100	4069		3.54	5.779a	1.442p	1.135	2.25	15.05
1200	5265		4.58	5.851a	1.568p	1.204	2.01	17.95
1300	6597		5.74	5.914a	1.683p	1.271	1.79	20.72
1400	8036		6.99	5.969a	1.785p	1.336	1.61	23.37
1500	9550		8.31	6.014a	1.874p	1.400	1.44	25.79
1600	11116		9.67	6.050a	1.951p	1.462	1.29	27.80
1700	12718		11.06	6.079a	2.017p	1.522	1.15	29.33
1800	14347		12.48	6.103a	2.073p	1.580	1.03	30.62
1900	15999		13.92	6.123a	2.122p	1.638	0.93	31.68
2000	17669		15.37	6.140a	2.165p	1.694	0.86	32.51
2100	19353		16.84	6.155a	2.202p	1.750	0.79	33.09
2200	20986		18.26	6.163a	2.233p	1.804	0.23	23.01
2248	21254		18.49	6.154a	2.238p	1.812		

Soundings in mm.-----Other distances in METERS.-----

FO\_AFT.P  
 TANK CHARACTERISTICS at 1.18 degrees AFT TRIM



- |                       |                |                  |
|-----------------------|----------------|------------------|
| ① Weight 1=.06 MT     | ③ TCG 1=.05 M. | ⑤ GML 1=.009 M.  |
| ② LCG (see top scale) | ④ VCG 1=.01 M. | ⑥ GMT 1=.02 M.   |
|                       |                | ⑦ FSMT 1=.2 M.MT |

FUEL OIL Specific Gravity = 0.870

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

AFT DOUBLE BOTTOM FUEL OIL TANK - STARBOARD

## TANK CHARACTERISTICS

Trim: Aft 0.500/24.200, No Heel

Tank: FO\_AFT.S, Contents: FUEL OIL at 0.870 Specific Gravity

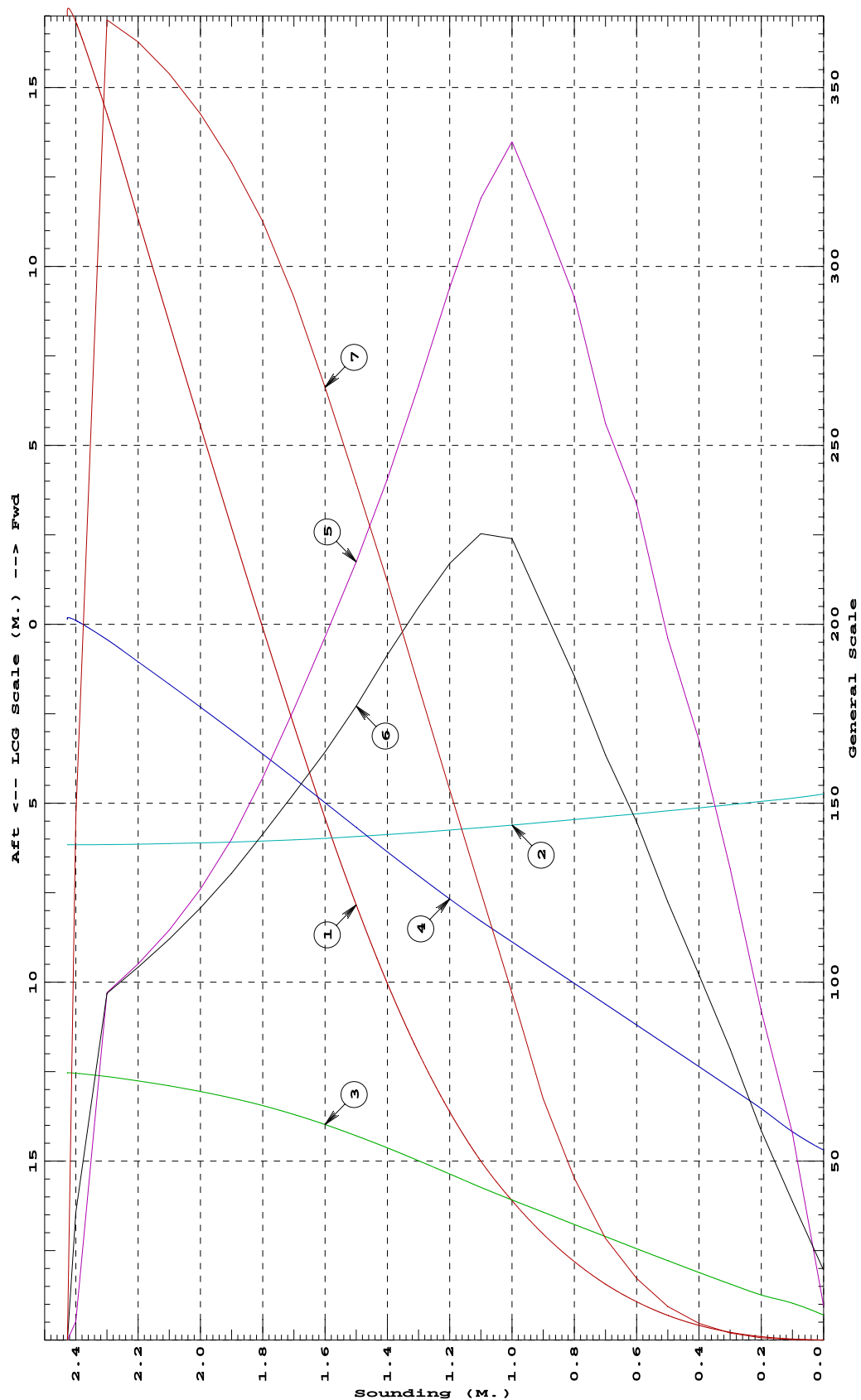
Snding	Volume	Weight	Center of Gravity			GML	FSM
	LITERS	METRIC TON	LCG	TCG	VCG		m. -MT
0	2	0.00	4.742a	0.209s	0.478	0.08	0.00
100	18	0.02	4.861a	0.309s	0.524	0.46	0.01
200	55	0.05	4.948a	0.378s	0.582	0.74	0.06
300	125	0.11	5.041a	0.470s	0.635	1.05	0.18
400	236	0.21	5.129a	0.566s	0.688	1.34	0.42
500	395	0.34	5.212a	0.665s	0.740	1.57	0.84
600	615	0.54	5.298a	0.765s	0.792	1.87	1.55
700	899	0.78	5.376a	0.867s	0.845	2.05	2.56
800	1260	1.10	5.457a	0.969s	0.897	2.33	4.07
900	1703	1.48	5.535a	1.072s	0.949	2.51	6.07
1000	2239	1.95	5.612a	1.175s	1.001	2.68	8.72
1100	2875	2.50	5.682a	1.280s	1.054	2.55	11.27
1200	3665	3.19	5.750a	1.392s	1.109	2.35	13.84
1300	4615	4.01	5.814a	1.503s	1.168	2.13	16.44
1400	5725	4.98	5.875a	1.611s	1.228	1.93	19.08
1500	6988	6.08	5.930a	1.713s	1.289	1.74	21.54
1600	8379	7.29	5.980a	1.806s	1.351	1.57	23.96
1700	9872	8.59	6.022a	1.891s	1.413	1.41	26.23
1800	11436	9.95	6.057a	1.965s	1.474	1.26	28.13
1900	13043	11.35	6.084a	2.029s	1.533	1.12	29.60
2000	14678	12.77	6.107a	2.084s	1.592	1.01	30.84
2100	16334	14.21	6.126a	2.131s	1.649	0.92	31.85
2200	18007	15.67	6.143a	2.172s	1.706	0.84	32.65
2300	19693	17.13	6.157a	2.209s	1.762	0.78	33.20
2400	21169	18.42	6.158a	2.237s	1.810	0.04	13.13
2427	21254	18.49	6.154a	2.238s	1.812		

Soundings in mm.-----Other distances in METERS.-----

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

AFT DOUBLE BOTTOM FUEL OIL TANK - STARBOARD

FO\_AFT.S  
TANK CHARACTERISTICS at 1.18 degrees AFT TRIM



FUEL OIL Specific Gravity = 0.870



GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

DOUBLE BOTTOM FUEL OIL TANK - PORT

## TANK CHARACTERISTICS

Trim: Aft 0.500/24.200, No Heel

Tank: FO\_DB.P, Contents: FUEL OIL at 0.870 Specific Gravity

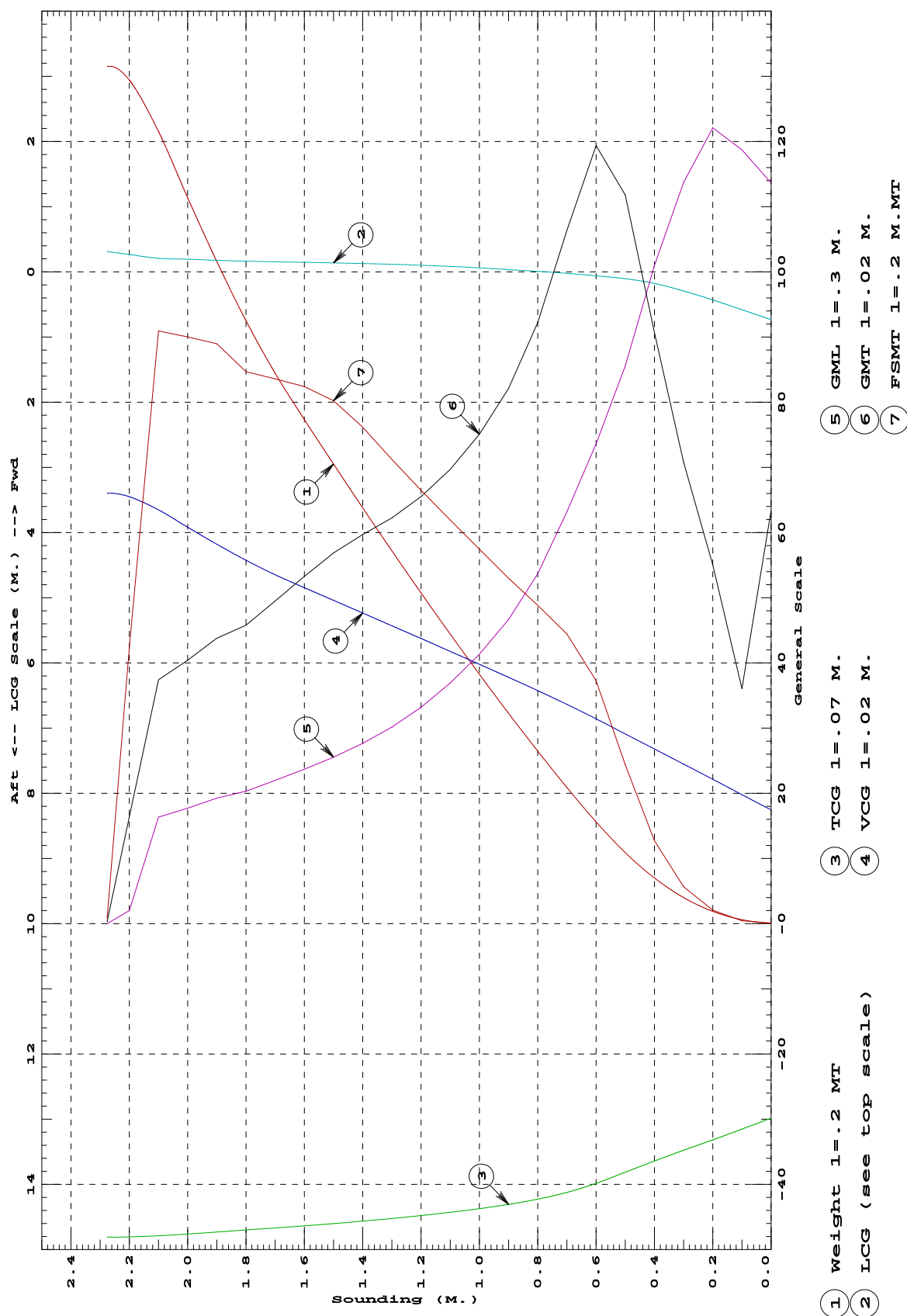
Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	18		0.02	0.733a	2.089p	0.349	34.09	0.02
100	141		0.12	0.580a	2.206p	0.396	35.62	0.09
200	432		0.38	0.430a	2.322p	0.443	36.63	0.41
300	918		0.80	0.294a	2.434p	0.490	34.11	1.13
400	1612		1.40	0.177a	2.550p	0.536	30.30	2.54
500	2507		2.18	0.105a	2.670p	0.582	25.67	4.88
600	3590		3.12	0.060a	2.789p	0.628	22.08	7.46
700	4802		4.18	0.023a	2.886p	0.673	18.96	8.89
800	6085		5.29	0.008f	2.959p	0.715	16.10	9.77
900	7417		6.45	0.035f	3.015p	0.756	14.00	10.60
1000	8795		7.65	0.061f	3.061p	0.796	12.40	11.49
1100	10213		8.88	0.083f	3.100p	0.836	11.07	12.39
1200	11665		10.15	0.102f	3.135p	0.875	9.96	13.30
1300	13149		11.44	0.116f	3.166p	0.914	9.04	14.24
1400	14665		12.76	0.128f	3.195p	0.953	8.30	15.23
1500	16211		14.10	0.138f	3.222p	0.992	7.66	16.04
1600	17777		15.47	0.146f	3.246p	1.031	7.11	16.48
1700	19410		16.89	0.155f	3.268p	1.071	6.60	16.72
1800	21264		18.50	0.164f	3.289p	1.115	6.10	16.94
1900	23354		20.32	0.178f	3.312p	1.164	5.78	17.79
2000	25604		22.28	0.194f	3.333p	1.216	5.32	18.00
2100	27939		24.31	0.208f	3.353p	1.270	4.90	18.18
2200	29755		25.89	0.266f	3.364p	1.310	0.60	8.48
2276	30225		26.30	0.313f	3.367p	1.320	0.00	0.16

Soundings in mm.-----Other distances in METERS.-----

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

DOUBLE BOTTOM FUEL OIL TANK - PORT

FO\_DB.P  
TANK CHARACTERISTICS at 1.18 degrees AFT TRIM



FUEL OIL Specific Gravity = 0.870

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

DOUBLE BOTTOM FUEL OIL TANK - CENTRE

## TANK CHARACTERISTICS

Trim: Aft 0.500/24.200, No Heel

Tank: FO\_DB.C, Contents: FUEL OIL at 0.870 Specific Gravity

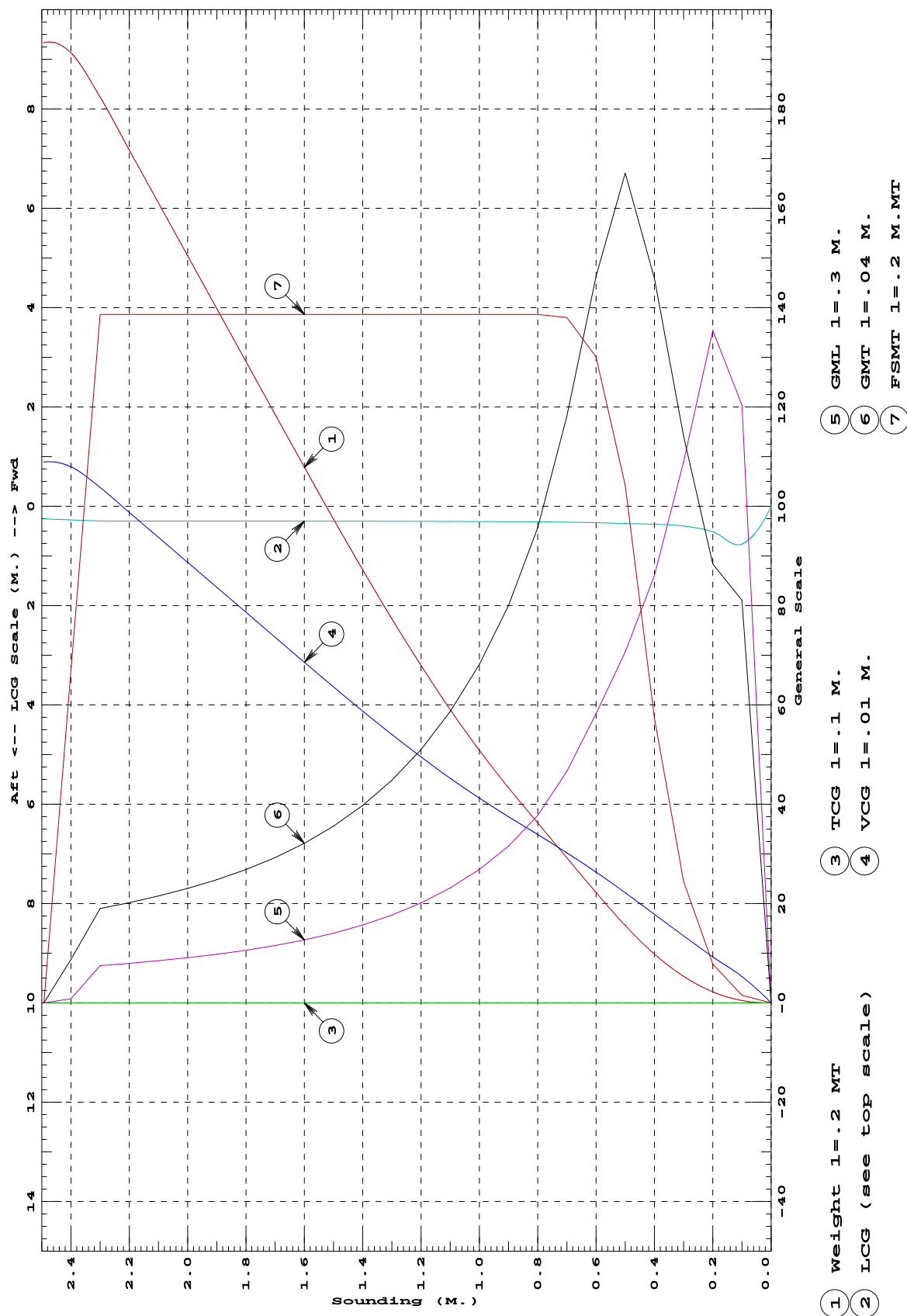
Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	0		0.00					
100	109		0.09	0.760a	0.000	0.053	36.11	0.31
200	510		0.44	0.512a	0.000	0.093	40.62	1.57
300	1231		1.07	0.397a	0.000	0.135	32.69	4.89
400	2258		1.96	0.363a	0.000	0.178	25.81	11.46
500	3583		3.12	0.348a	0.000	0.222	21.20	20.83
600	5108		4.44	0.331a	0.000	0.263	17.48	26.01
700	6711		5.84	0.319a	0.000	0.302	14.00	27.60
800	8327		7.24	0.313a	0.000	0.339	11.32	27.73
900	9953		8.66	0.310a	0.000	0.375	9.47	27.73
1000	11692		10.17	0.307a	0.000	0.412	8.07	27.73
1100	13578		11.81	0.305a	0.000	0.452	6.95	27.73
1200	15621		13.59	0.303a	0.000	0.495	6.04	27.73
1300	17778		15.47	0.302a	0.000	0.540	5.30	27.73
1400	20047		17.44	0.301a	0.000	0.588	4.70	27.73
1500	22393		19.48	0.300a	0.000	0.636	4.21	27.73
1600	24797		21.57	0.299a	0.000	0.686	3.80	27.73
1700	27235		23.69	0.299a	0.000	0.736	3.46	27.73
1800	29684		25.83	0.298a	0.000	0.786	3.18	27.73
1900	32133		27.96	0.298a	0.000	0.837	2.93	27.73
2000	34582		30.09	0.297a	0.000	0.887	2.73	27.73
2100	37030		32.22	0.297a	0.000	0.937	2.55	27.73
2200	39479		34.35	0.296a	0.000	0.988	2.39	27.73
2300	41928		36.48	0.296a	0.000	1.038	2.25	27.73
2400	43977		38.26	0.276a	0.000	1.079	0.25	13.40
2493	44451		38.67	0.252a	0.000	1.089		

Soundings in mm.-----Other distances in METERS.-----

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

DOUBLE BOTTOM FUEL OIL TANK - CENTRE

FO\_DB.C  
TANK CHARACTERISTICS at 1.18 degrees AFT TRIM



FUEL OIL Specific Gravity = 0.870

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

DOUBLE BOTTOM FUEL OIL TANK - STARBOARD

## TANK CHARACTERISTICS

Trim: Aft 0.500/24.200, No Heel

Tank: FO\_DB.S, Contents: FUEL OIL at 0.870 Specific Gravity

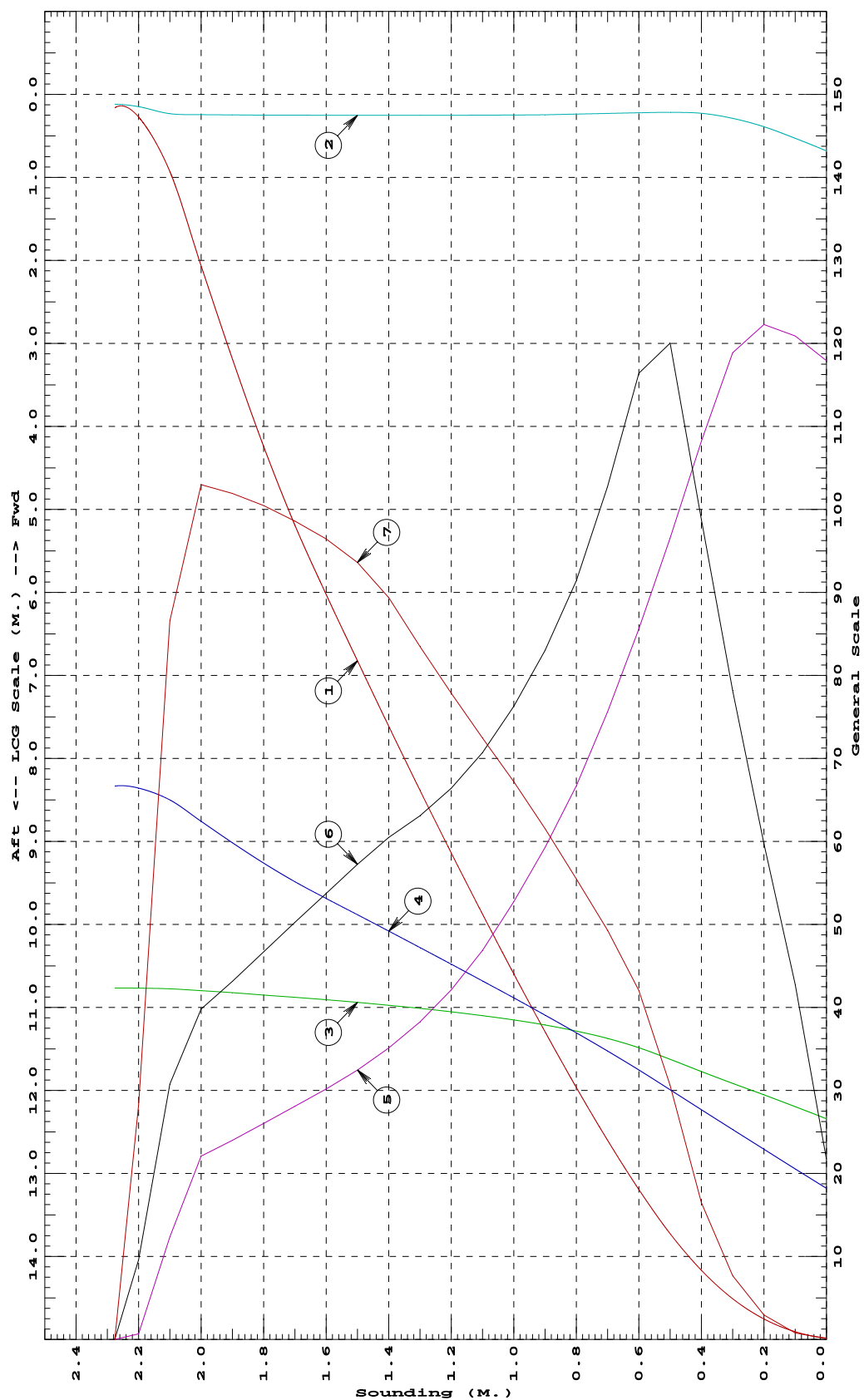
Snding	Volume		Weight		Center of Gravity			FSM
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	42		0.04	0.681a	2.126s	0.364	35.37	0.02
100	213		0.19	0.529a	2.244s	0.411	36.27	0.16
200	566		0.49	0.389a	2.357s	0.458	36.68	0.59
300	1129		0.98	0.288a	2.468s	0.506	35.66	1.54
400	1917		1.67	0.227a	2.582s	0.553	32.47	3.29
500	2930		2.55	0.216a	2.700s	0.602	28.97	6.12
600	4150		3.61	0.222a	2.812s	0.649	25.68	8.41
700	5514		4.80	0.229a	2.902s	0.695	22.69	9.86
800	6978		6.07	0.238a	2.972s	0.739	20.01	11.10
900	8520		7.41	0.245a	3.030s	0.781	17.78	12.31
1000	10124		8.81	0.249a	3.079s	0.823	15.82	13.44
1100	11778		10.25	0.250a	3.121s	0.864	14.06	14.49
1200	13474		11.72	0.251a	3.158s	0.904	12.63	15.57
1300	15210		13.23	0.251a	3.191s	0.944	11.48	16.70
1400	16985		14.78	0.252a	3.221s	0.984	10.53	17.87
1500	18795		16.35	0.252a	3.249s	1.023	9.74	18.72
1600	20631		17.95	0.251a	3.274s	1.063	9.05	19.29
1700	22550		19.62	0.251a	3.297s	1.103	8.43	19.72
1800	24733		21.52	0.249a	3.320s	1.148	7.81	20.09
1900	27153		23.62	0.247a	3.342s	1.197	7.20	20.38
2000	29734		25.87	0.244a	3.362s	1.249	6.62	20.60
2100	32345		28.14	0.233a	3.379s	1.300	3.71	17.32
2200	33855		29.45	0.148a	3.386s	1.329	0.20	5.65
2276	34110		29.68	0.119a	3.387s	1.333		

Soundings in mm.-----Other distances in METERS.-----

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

DOUBLE BOTTOM FUEL OIL TANK - STARBOARD

FO\_DB.S  
TANK CHARACTERISTICS at 1.18 degrees AFT TRIM



FUEL OIL Specific Gravity = 0.870

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

LUBE OIL TANK - STARBOARD

## TANK CHARACTERISTICS

Trim: Aft 0.500/24.200, No Heel

Tank: LUBE\_OIL.S, Contents: LUBE OIL at 0.924 Specific Gravity

Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	4		0.00	3.089f	4.410s	2.883	5.55	0.04
100	122		0.11	3.515f	4.410s	2.928	1.58	0.08
200	244		0.23	3.531f	4.410s	2.978	0.79	0.08
300	366		0.34	3.537f	4.410s	3.028	0.53	0.08
400	488		0.45	3.539f	4.410s	3.078	0.39	0.08
500	609		0.56	3.541f	4.410s	3.128	0.32	0.08
600	731		0.68	3.542f	4.410s	3.178	0.26	0.08
700	853		0.79	3.543f	4.410s	3.228	0.23	0.08
800	975		0.90	3.543f	4.410s	3.278	0.20	0.08
900	1097		1.01	3.544f	4.410s	3.328	0.18	0.08
1000	1219		1.13	3.544f	4.410s	3.378	0.16	0.08
1100	1341		1.24	3.544f	4.410s	3.428	0.14	0.08
1200	1463		1.35	3.545f	4.410s	3.478	0.13	0.08
1300	1585		1.46	3.545f	4.410s	3.528	0.12	0.08
1400	1707		1.58	3.545f	4.410s	3.578	0.11	0.08
1500	1828		1.69	3.545f	4.410s	3.628	0.11	0.08
1600	1950		1.80	3.545f	4.410s	3.678	0.10	0.08
1700	2072		1.91	3.546f	4.410s	3.728	0.09	0.08
1800	2194		2.03	3.546f	4.410s	3.778	0.09	0.08
1900	2316		2.14	3.546f	4.410s	3.828	0.08	0.08
2000	2423		2.24	3.547f	4.410s	3.872	0.00	0.01

Soundings in mm.-----Other distances in METERS.-----

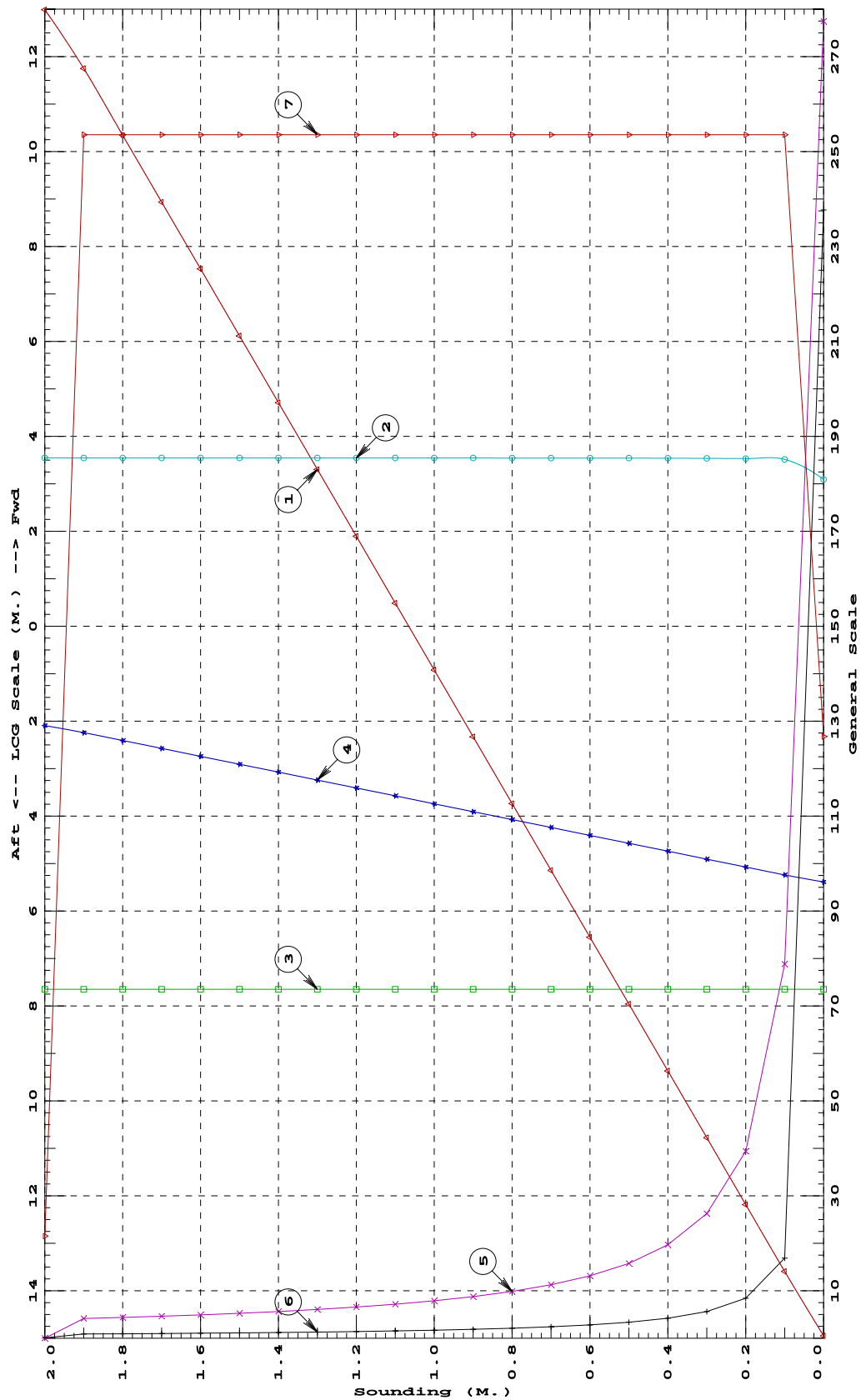
LUBE\_OIL.S Reference Point: Long.= 3.547f Trans.= 4.410s Vert.= 2.878

(Zero Sounding is at the Reference Point.)

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

LUBE OIL TANK - STARBOARD

LUBE\_OIL.S  
TANK CHARACTERISTICS at 1.18 degrees AFT TRIM



LUBE OIL Specific Gravity = 0.924



GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

OILY WATER TANK - STARBOARD

## TANK CHARACTERISTICS

Trim: Aft 0.500/24.200, No Heel

Tank: OILY\_WTR.S, Contents: OILY WATER at 1.025 Specific Gravity

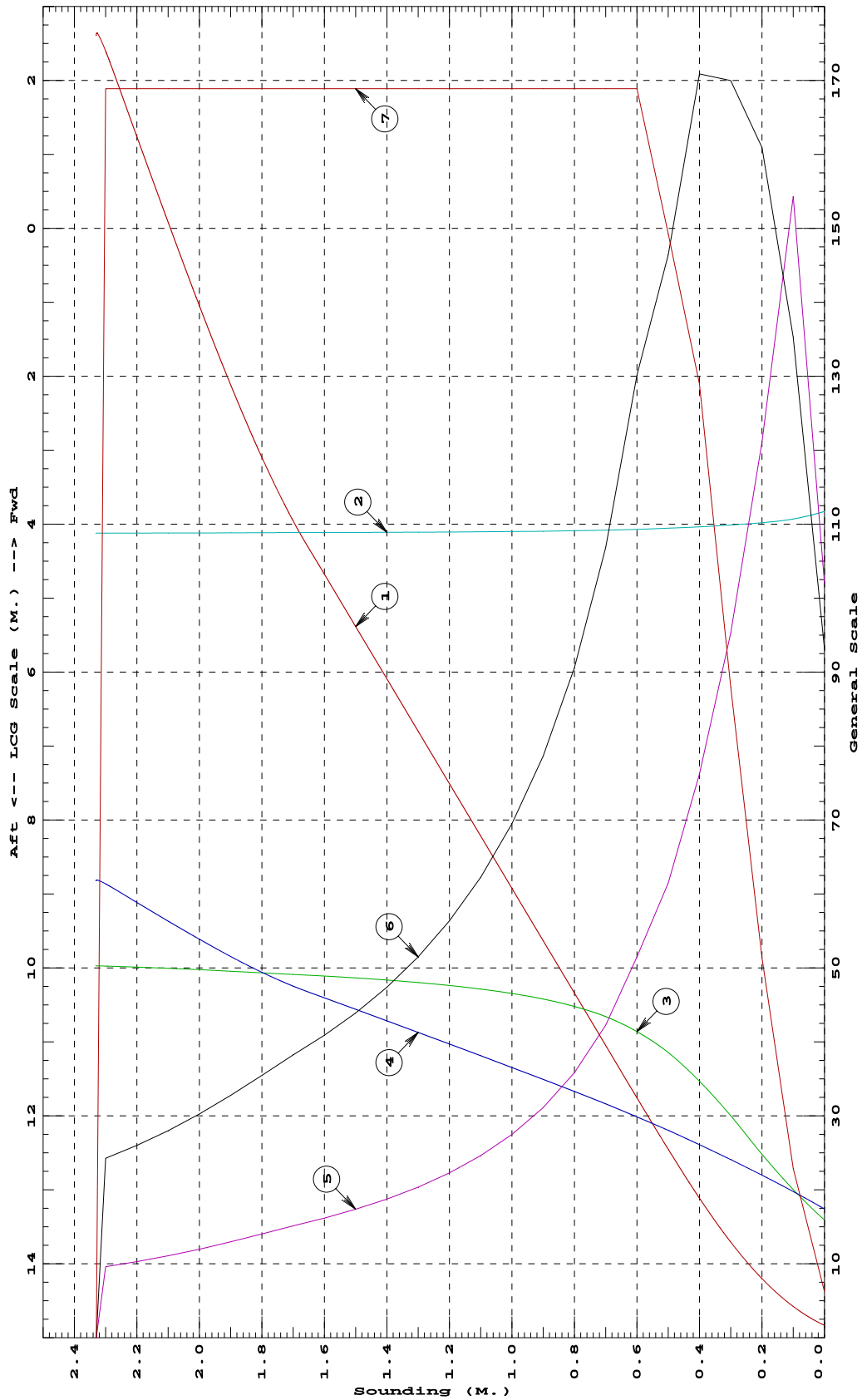
Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	33		0.03	3.828a	0.319s	0.348	0.71	0.03
100	82		0.08	3.930a	0.401s	0.395	1.08	0.11
200	156		0.16	3.980a	0.496s	0.440	0.85	0.26
300	252		0.26	4.011a	0.600s	0.482	0.67	0.44
400	368		0.38	4.035a	0.694s	0.522	0.53	0.64
500	497		0.51	4.054a	0.771s	0.561	0.43	0.75
600	633		0.65	4.069a	0.828s	0.597	0.36	0.84
700	771		0.79	4.081a	0.868s	0.632	0.30	0.84
800	909		0.93	4.089a	0.896s	0.666	0.25	0.84
900	1047		1.07	4.094a	0.916s	0.698	0.22	0.84
1000	1185		1.22	4.099a	0.931s	0.731	0.19	0.84
1100	1324		1.36	4.102a	0.943s	0.763	0.17	0.84
1200	1462		1.50	4.105a	0.953s	0.794	0.16	0.84
1300	1600		1.64	4.108a	0.961s	0.826	0.14	0.84
1400	1738		1.78	4.110a	0.967s	0.857	0.13	0.84
1500	1876		1.92	4.111a	0.973s	0.888	0.12	0.84
1600	2014		2.06	4.113a	0.978s	0.919	0.11	0.84
1700	2155		2.21	4.114a	0.982s	0.951	0.11	0.84
1800	2323		2.38	4.115a	0.987s	0.988	0.10	0.84
1900	2514		2.58	4.117a	0.991s	1.031	0.09	0.84
2000	2723		2.79	4.118a	0.995s	1.078	0.08	0.84
2100	2943		3.02	4.119a	0.999s	1.127	0.08	0.84
2200	3169		3.25	4.120a	1.002s	1.177	0.07	0.84
2300	3395		3.48	4.121a	1.005s	1.227	0.07	0.84
2330	3435		3.52	4.120a	1.005s	1.236		

Soundings in mm.-----Other distances in METERS.-----

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

OILY WATER TANK - STARBOARD

OILY\_WTR.S  
TANK CHARACTERISTICS at 1.18 degrees AFT TRIM



5 GML 1=.007 M.

6 GMT 1=.01 M.

7 FSMT 1=.005 M.MT

3 TCG 1=.02 M.

4 VCG 1=.02 M.

1 Weight 1=.02 MT

2 LCG (see top scale)

OILY WATER Specific Gravity = 1.025

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

WASTE OIL TANK - PORT

## TANK CHARACTERISTICS

Trim: Aft 0.500/24.200, No Heel

Tank: WASTE\_OIL.P, Contents: WASTE OIL at 0.924 Specific Gravity

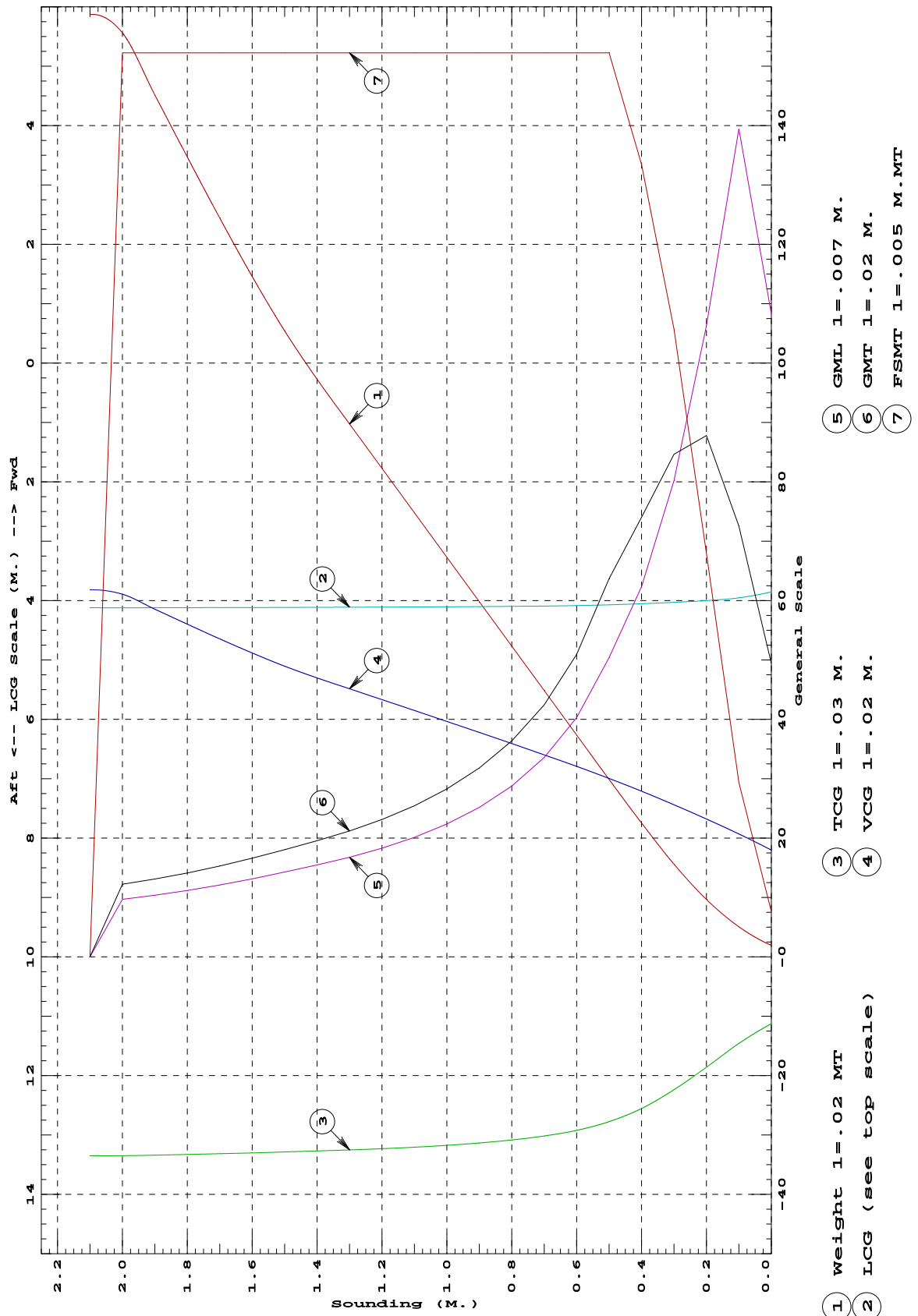
Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	42		0.04	3.853a	0.338p	0.360	0.76	0.04
100	109		0.10	3.954a	0.437p	0.414	0.98	0.15
200	209		0.19	3.999a	0.558p	0.464	0.74	0.34
300	338		0.31	4.030a	0.671p	0.512	0.56	0.53
400	488		0.45	4.053a	0.767p	0.558	0.44	0.67
500	647		0.60	4.071a	0.833p	0.601	0.35	0.76
600	809		0.75	4.083a	0.877p	0.641	0.28	0.76
700	971		0.90	4.091a	0.905p	0.680	0.23	0.76
800	1133		1.05	4.097a	0.926p	0.718	0.20	0.76
900	1295		1.20	4.102a	0.941p	0.756	0.18	0.76
1000	1457		1.35	4.105a	0.952p	0.793	0.16	0.76
1100	1619		1.50	4.108a	0.962p	0.830	0.14	0.76
1200	1781		1.65	4.110a	0.969p	0.866	0.13	0.76
1300	1943		1.80	4.112a	0.975p	0.903	0.12	0.76
1400	2105		1.95	4.114a	0.981p	0.940	0.11	0.76
1500	2282		2.11	4.115a	0.986p	0.979	0.10	0.76
1600	2480		2.29	4.117a	0.990p	1.023	0.09	0.76
1700	2693		2.49	4.118a	0.995p	1.071	0.08	0.76
1800	2916		2.69	4.119a	0.999p	1.121	0.08	0.76
1900	3142		2.90	4.120a	1.002p	1.171	0.07	0.76
2000	3368		3.11	4.121a	1.005p	1.221	0.07	0.76
2100	3435		3.17	4.120a	1.005p	1.236		

Soundings in mm.-----Other distances in METERS.-----

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

WASTE OIL TANK - PORT

WASTE\_OIL.P  
TANK CHARACTERISTICS at 1.18 degrees AFT TRIM



WASTE OIL Specific Gravity = 0.924

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

## FRESH WATER STORAGE TANK - PORT

## TANK CHARACTERISTICS

Trim: Aft 0.500/24.200, No Heel

Tank: FRESH\_WATER.P, Contents: FRESH WATER at 1.000 Specific Gravity

Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	9		0.01	5.985f	2.299p	0.696	0.62	0.00
100	17		0.02	6.041f	2.320p	0.724	0.79	0.00
200	30		0.03	6.095f	2.344p	0.750	0.90	0.01
300	46		0.05	6.129f	2.369p	0.776	1.00	0.01
400	67		0.07	6.169f	2.392p	0.802	1.10	0.02
500	94		0.09	6.214f	2.415p	0.828	1.20	0.04
600	125		0.13	6.246f	2.440p	0.854	1.28	0.06
700	163		0.16	6.279f	2.464p	0.881	1.34	0.08
800	207		0.21	6.315f	2.488p	0.907	1.39	0.11
900	258		0.26	6.352f	2.510p	0.933	1.44	0.14
1000	315		0.32	6.384f	2.534p	0.959	1.46	0.18
1100	379		0.38	6.412f	2.556p	0.985	1.45	0.22
1200	450		0.45	6.439f	2.579p	1.011	1.41	0.27
1300	547		0.55	6.469f	2.608p	1.044	1.34	0.34
1400	687		0.69	6.503f	2.643p	1.085	1.24	0.42
1500	875		0.87	6.539f	2.684p	1.134	1.11	0.51
1600	1108		1.11	6.574f	2.724p	1.188	0.99	0.61
1700	1375		1.37	6.604f	2.763p	1.243	0.88	0.71
1800	1660		1.66	6.629f	2.797p	1.297	0.79	0.82
1900	1961		1.96	6.649f	2.829p	1.351	0.70	0.94
2000	2278		2.28	6.665f	2.858p	1.404	0.64	1.07
2100	2609		2.61	6.678f	2.886p	1.457	0.58	1.21
2200	2956		2.96	6.689f	2.913p	1.510	0.54	1.36
2300	3317		3.32	6.699f	2.940p	1.563	0.50	1.50
2400	3691		3.69	6.707f	2.965p	1.615	0.46	1.62
2500	4077		4.08	6.716f	2.988p	1.667	0.43	1.73
2600	4472		4.47	6.723f	3.010p	1.719	0.41	1.83
2700	4876		4.88	6.730f	3.031p	1.771	0.38	1.93
2800	5287		5.29	6.737f	3.050p	1.822	0.36	2.02
2900	5705		5.71	6.742f	3.068p	1.873	0.34	2.11
3000	6130		6.13	6.747f	3.084p	1.924	0.32	2.21
3100	6562		6.56	6.752f	3.100p	1.974	0.30	2.31
3200	7001		7.00	6.756f	3.116p	2.024	0.29	2.41
3300	7446		7.45	6.760f	3.131p	2.075	0.28	2.51
3400	7897		7.90	6.764f	3.145p	2.125	0.26	2.61
3500	8355		8.36	6.767f	3.159p	2.175	0.25	2.71
3600	8819		8.82	6.770f	3.172p	2.225	0.24	2.81
3700	9289		9.29	6.773f	3.185p	2.275	0.23	2.90
3800	9781		9.78	6.776f	3.197p	2.326	0.22	3.00
3900	10306		10.31	6.779f	3.211p	2.381	0.22	3.11
4000	10854		10.85	6.782f	3.224p	2.437	0.21	3.23
4100	11419		11.42	6.784f	3.237p	2.494	0.20	3.34

Soundings in mm.-----Other distances in METERS.-----

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

FRESH WATER STORAGE TANK - PORT

## TANK CHARACTERISTICS, continued

Trim: Aft 0.500/24.200, No Heel

Tank: FRESH\_WATER.P, Contents: FRESH WATER at 1.000 Specific Gravity

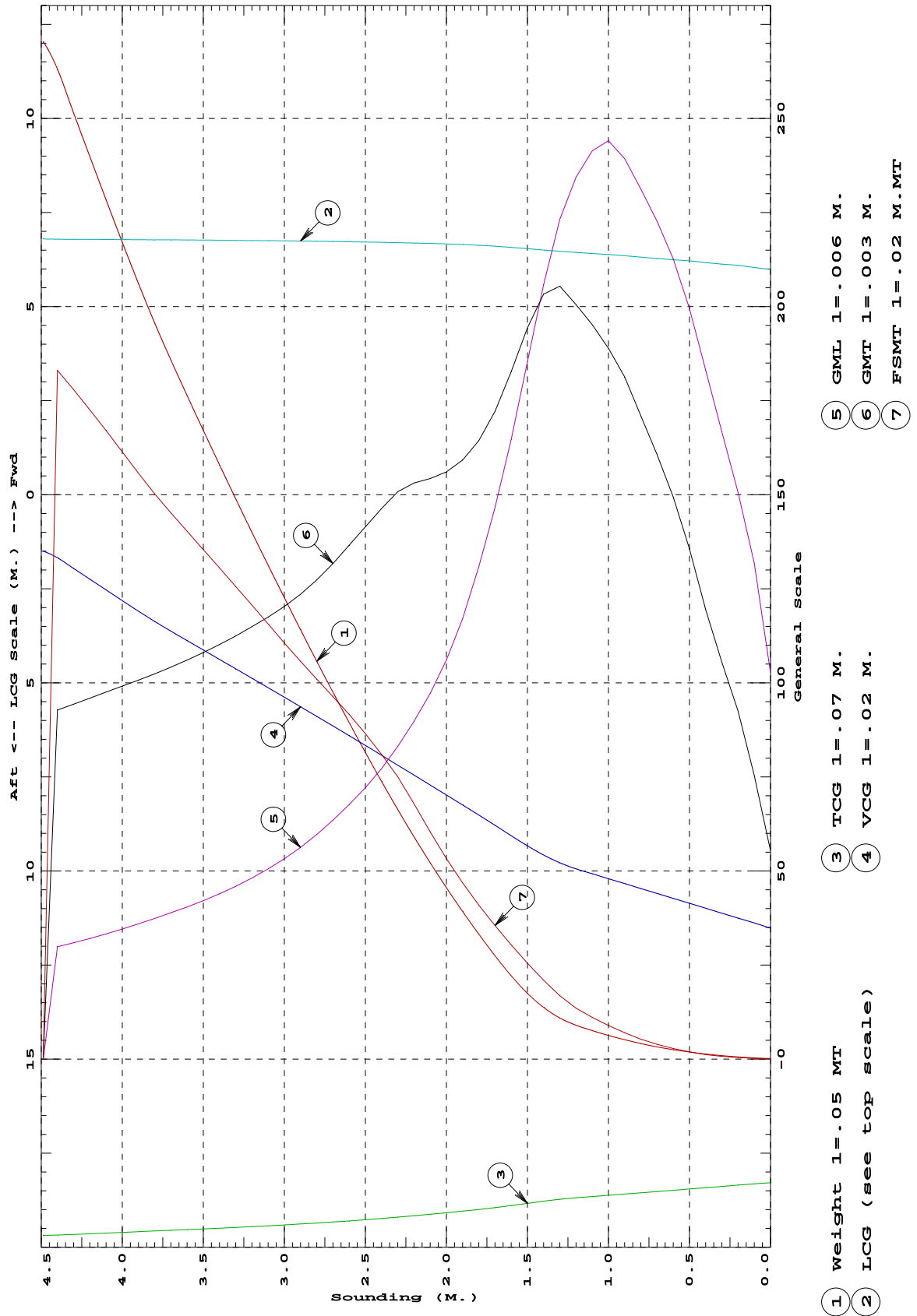
Snding	Volume	Weight	Center of Gravity			GML	FSM m.-MT
	LITERS	METRIC TON	LCG	TCG	VCG		
4200	11991	11.99	6.787f	3.249p	2.551	0.19	3.45
4300	12570	12.57	6.789f	3.262p	2.608	0.19	3.56
4400	13155	13.16	6.792f	3.273p	2.665	0.18	3.66
4488	13520	13.52	6.797f	3.280p	2.700		

Soundings in mm.-----Other distances in METERS.-----

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

FRESH WATER STORAGE TANK - PORT

FRESH\_WATER.P  
TANK CHARACTERISTICS at 1.18 degrees AFT TRIM



FRESH WATER Specific Gravity = 1.000

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

## FRESH WATER STORAGE TANK - STARBOARD

## TANK CHARACTERISTICS

Trim: Aft 0.500/24.200, No Heel

Tank: FRESH\_WATER.S, Contents: FRESH WATER at 1.000 Specific Gravity

Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	9		0.01	5.985f	2.299s	0.696	0.62	0.00
100	17		0.02	6.041f	2.320s	0.724	0.79	0.00
200	30		0.03	6.095f	2.344s	0.750	0.90	0.01
300	46		0.05	6.129f	2.369s	0.776	1.00	0.01
400	67		0.07	6.169f	2.392s	0.802	1.10	0.02
500	94		0.09	6.214f	2.415s	0.828	1.20	0.04
600	125		0.13	6.246f	2.440s	0.854	1.28	0.06
700	163		0.16	6.279f	2.464s	0.881	1.34	0.08
800	207		0.21	6.315f	2.488s	0.907	1.39	0.11
900	258		0.26	6.352f	2.510s	0.933	1.44	0.14
1000	315		0.32	6.384f	2.534s	0.959	1.46	0.18
1100	379		0.38	6.412f	2.556s	0.985	1.45	0.22
1200	450		0.45	6.439f	2.579s	1.011	1.41	0.27
1300	547		0.55	6.469f	2.608s	1.044	1.34	0.34
1400	687		0.69	6.503f	2.643s	1.085	1.24	0.42
1500	875		0.87	6.539f	2.684s	1.134	1.11	0.51
1600	1108		1.11	6.574f	2.724s	1.188	0.99	0.61
1700	1375		1.37	6.604f	2.763s	1.243	0.88	0.71
1800	1660		1.66	6.629f	2.797s	1.297	0.79	0.82
1900	1961		1.96	6.649f	2.829s	1.351	0.70	0.94
2000	2278		2.28	6.665f	2.858s	1.404	0.64	1.07
2100	2609		2.61	6.678f	2.886s	1.457	0.58	1.21
2200	2956		2.96	6.689f	2.913s	1.510	0.54	1.36
2300	3317		3.32	6.699f	2.940s	1.563	0.50	1.50
2400	3691		3.69	6.707f	2.965s	1.615	0.46	1.62
2500	4077		4.08	6.716f	2.988s	1.667	0.43	1.73
2600	4472		4.47	6.723f	3.010s	1.719	0.41	1.83
2700	4876		4.88	6.730f	3.031s	1.771	0.38	1.93
2800	5287		5.29	6.737f	3.050s	1.822	0.36	2.02
2900	5705		5.71	6.742f	3.068s	1.873	0.34	2.11
3000	6130		6.13	6.747f	3.084s	1.924	0.32	2.21
3100	6562		6.56	6.752f	3.100s	1.974	0.30	2.31
3200	7001		7.00	6.756f	3.116s	2.024	0.29	2.41
3300	7446		7.45	6.760f	3.131s	2.075	0.28	2.51
3400	7897		7.90	6.764f	3.145s	2.125	0.26	2.61
3500	8355		8.36	6.767f	3.159s	2.175	0.25	2.71
3600	8819		8.82	6.770f	3.172s	2.225	0.24	2.81
3700	9289		9.29	6.773f	3.185s	2.275	0.23	2.90
3800	9781		9.78	6.776f	3.197s	2.326	0.22	3.00
3900	10306		10.31	6.779f	3.211s	2.381	0.22	3.11
4000	10854		10.85	6.782f	3.224s	2.437	0.21	3.23
4100	11419		11.42	6.784f	3.237s	2.494	0.20	3.34

Soundings in mm.-----Other distances in METERS.-----



GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

FRESH WATER STORAGE TANK - STARBOARD

## TANK CHARACTERISTICS, continued

Trim: Aft 0.500/24.200, No Heel

Tank: FRESH\_WATER.S, Contents: FRESH WATER at 1.000 Specific Gravity

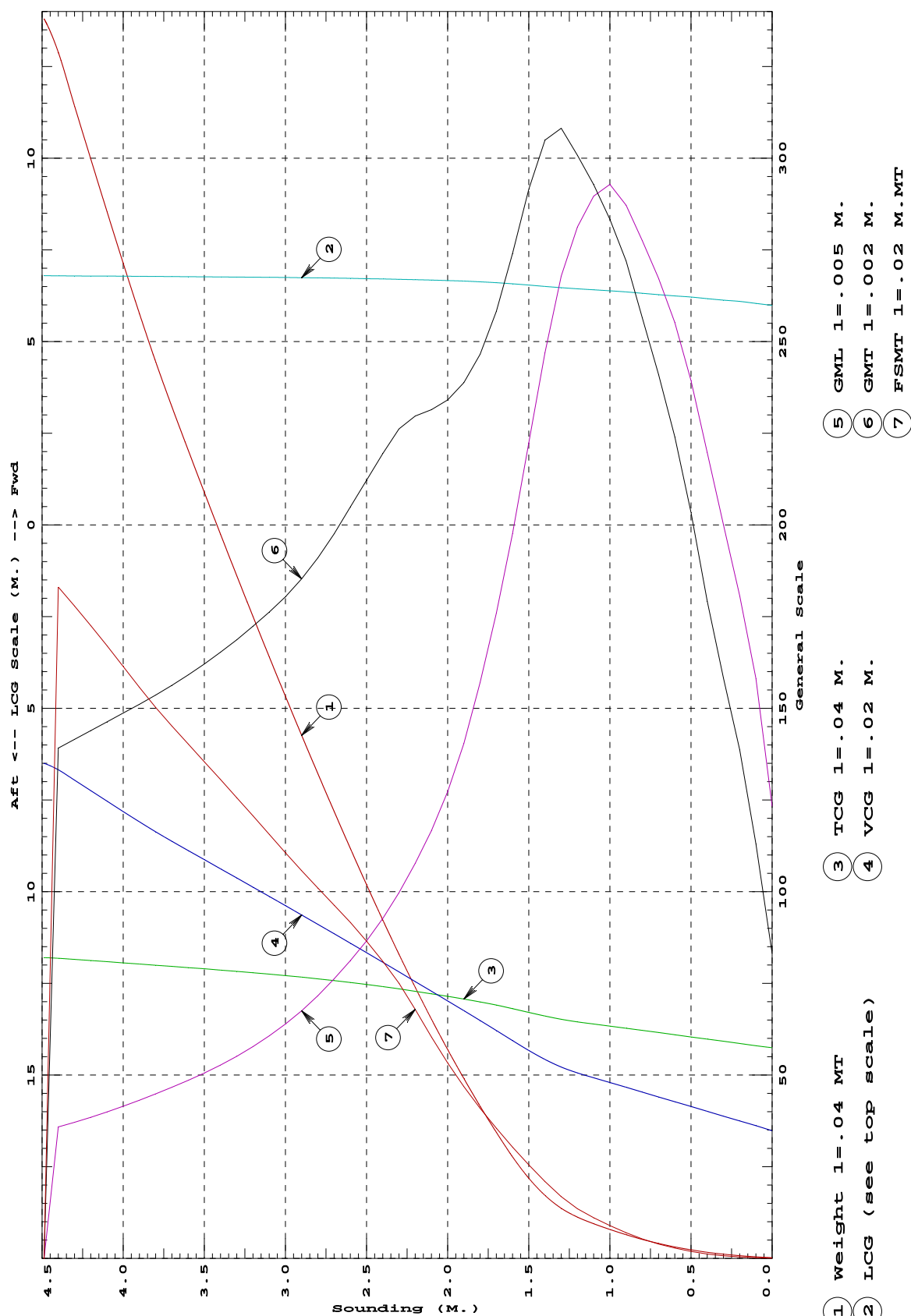
Snding	Volume	Weight	Center of Gravity			GML	FSM m.-MT
	LITERS	METRIC TON	LCG	TCG	VCG		
4200	11991	11.99	6.787f	3.249s	2.551	0.19	3.45
4300	12570	12.57	6.789f	3.262s	2.608	0.19	3.56
4400	13155	13.16	6.792f	3.273s	2.665	0.18	3.66
4488	13520	13.52	6.797f	3.280s	2.700		

Soundings in mm.-----Other distances in METERS.-----

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

FRESH WATER STORAGE TANK - STARBOARD

FRESH\_WATER.S  
TANK CHARACTERISTICS at 1.18 degrees AFT TRIM



FRESH WATER Specific Gravity = 1.000

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

## FIRE-FIGHTING FOAM TANK - CENTRE

## TANK CHARACTERISTICS

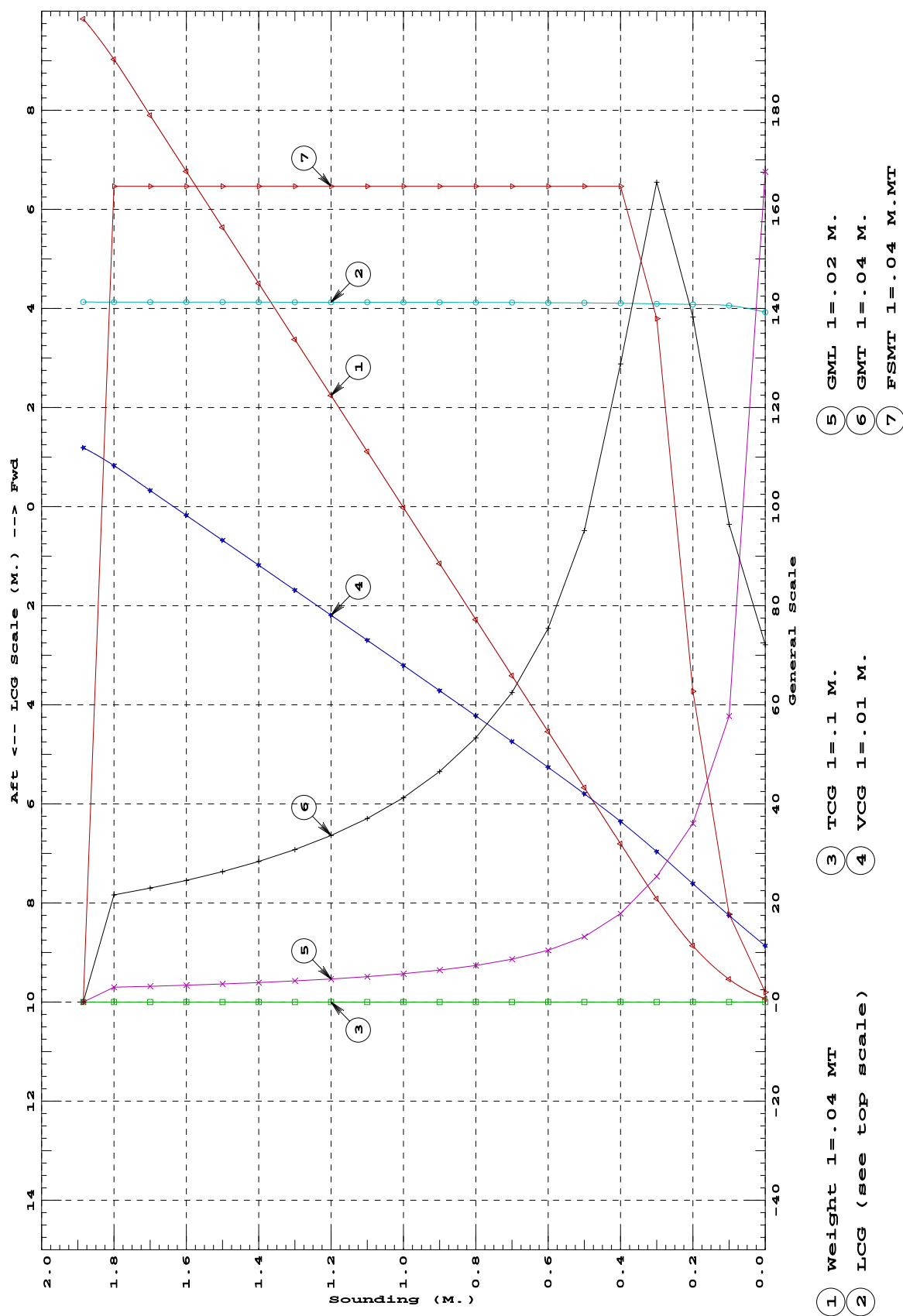
Trim: Aft 0.500/24.200, No Heel

Tank: FF\_FOAM.C, Contents: FOAM at 1.000 Specific Gravity

Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	27		0.03	3.922f	0.000	0.114	3.35	0.08
100	184		0.18	4.057f	0.000	0.175	1.15	0.71
200	454		0.45	4.081f	0.000	0.239	0.72	2.51
300	834		0.83	4.092f	0.000	0.304	0.51	5.52
400	1278		1.28	4.104f	0.000	0.364	0.36	6.59
500	1731		1.73	4.112f	0.000	0.420	0.26	6.59
600	2183		2.18	4.116f	0.000	0.474	0.21	6.59
700	2635		2.64	4.119f	0.000	0.526	0.17	6.59
800	3088		3.09	4.121f	0.000	0.577	0.15	6.59
900	3540		3.54	4.122f	0.000	0.629	0.13	6.59
1000	3992		3.99	4.124f	0.000	0.679	0.11	6.59
1100	4445		4.44	4.124f	0.000	0.730	0.10	6.59
1200	4897		4.90	4.125f	0.000	0.781	0.09	6.59
1300	5349		5.35	4.126f	0.000	0.831	0.09	6.59
1400	5802		5.80	4.126f	0.000	0.882	0.08	6.59
1500	6254		6.25	4.127f	0.000	0.932	0.07	6.59
1600	6706		6.71	4.127f	0.000	0.982	0.07	6.59
1700	7159		7.16	4.128f	0.000	1.033	0.06	6.59
1800	7611		7.61	4.128f	0.000	1.083	0.06	6.59
1885	7937		7.94	4.129f	0.000	1.119		

Soundings in mm.-----Other distances in METERS.-----

FF\_FOAM.C  
TANK CHARACTERISTICS at 1.18 degrees AFT TRIM



FOAM Specific Gravity = 1.000

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

## SEWAGE TANK - CENTRE

## TANK CHARACTERISTICS

Trim: Aft 0.500/24.200, No Heel

Tank: SEWAGE.C, Contents: SEWAGE at 1.000 Specific Gravity

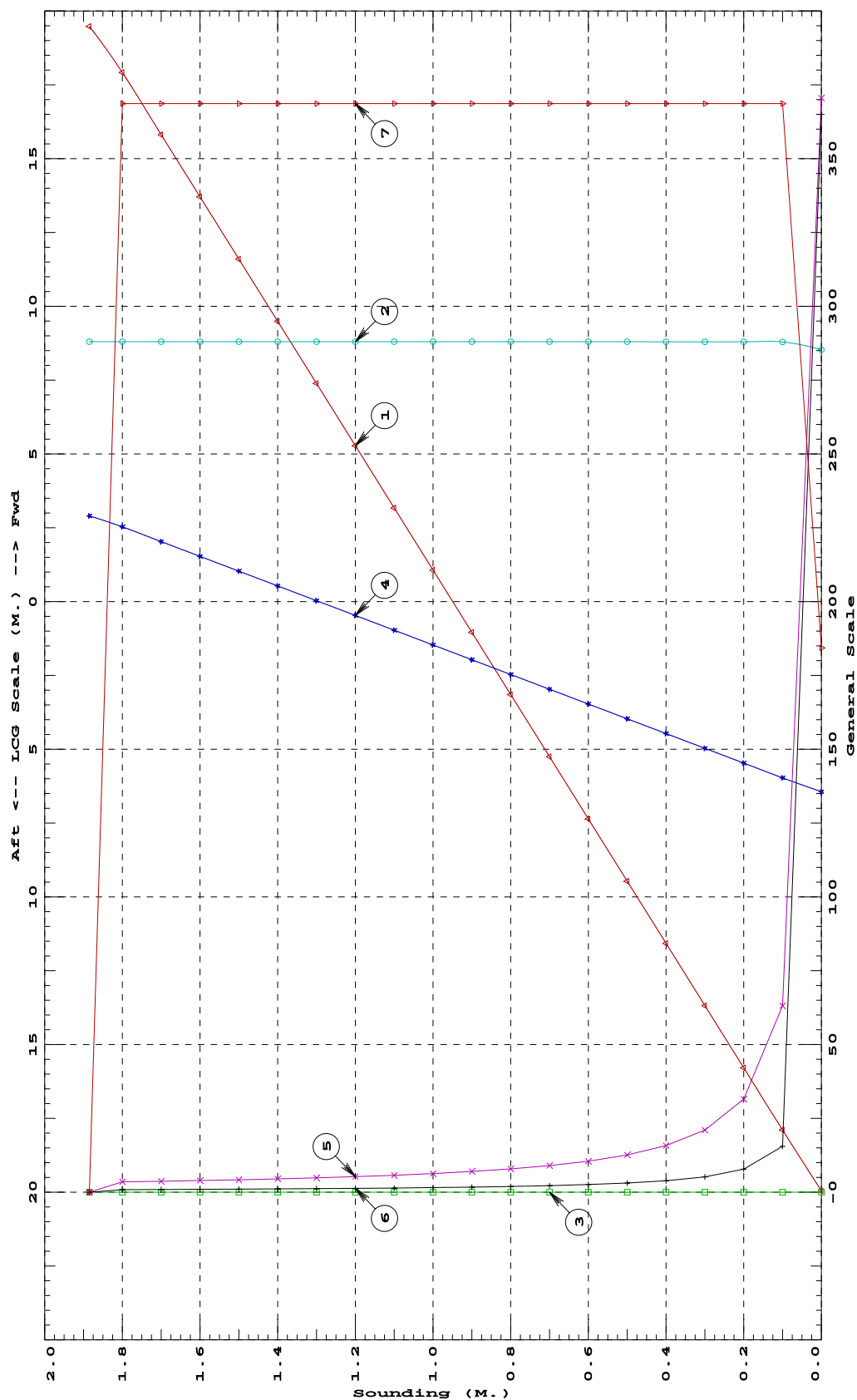
Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	2		0.00	8.527f	0.000	1.356	3.33	0.07
100	105		0.11	8.791f	0.000	1.403	0.57	0.15
200	211		0.21	8.797f	0.000	1.453	0.28	0.15
300	316		0.32	8.799f	0.000	1.503	0.19	0.15
400	421		0.42	8.800f	0.000	1.553	0.14	0.15
500	527		0.53	8.800f	0.000	1.603	0.11	0.15
600	632		0.63	8.801f	0.000	1.653	0.09	0.15
700	737		0.74	8.801f	0.000	1.703	0.08	0.15
800	843		0.84	8.801f	0.000	1.753	0.07	0.15
900	948		0.95	8.801f	0.000	1.803	0.06	0.15
1000	1053		1.05	8.801f	0.000	1.853	0.06	0.15
1100	1159		1.16	8.801f	0.000	1.903	0.05	0.15
1200	1264		1.26	8.801f	0.000	1.953	0.05	0.15
1300	1369		1.37	8.802f	0.000	2.003	0.04	0.15
1400	1475		1.47	8.802f	0.000	2.053	0.04	0.15
1500	1580		1.58	8.802f	0.000	2.103	0.04	0.15
1600	1685		1.69	8.802f	0.000	2.153	0.04	0.15
1700	1791		1.79	8.802f	0.000	2.203	0.03	0.15
1800	1896		1.90	8.802f	0.000	2.253	0.03	0.15
1885	1974		1.97	8.802f	0.000	2.290		

Soundings in mm.-----Other distances in METERS.-----

SEWAGE.C Reference Point: Long.= 8.802f Trans.= 0.000 Vert.= 1.353

(Zero Sounding is at the Reference Point.)

SEWAGE.C  
TANK CHARACTERISTICS at 1.18 degrees AFT TRIM



SEWAGE Specific Gravity = 1.000

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

FUEL OIL OVERFLOW TANK - PORT

## TANK CHARACTERISTICS

Trim: Aft 0.500/24.200, No Heel

Tank: FO\_OF.P, Contents: FUEL OIL at 0.870 Specific Gravity

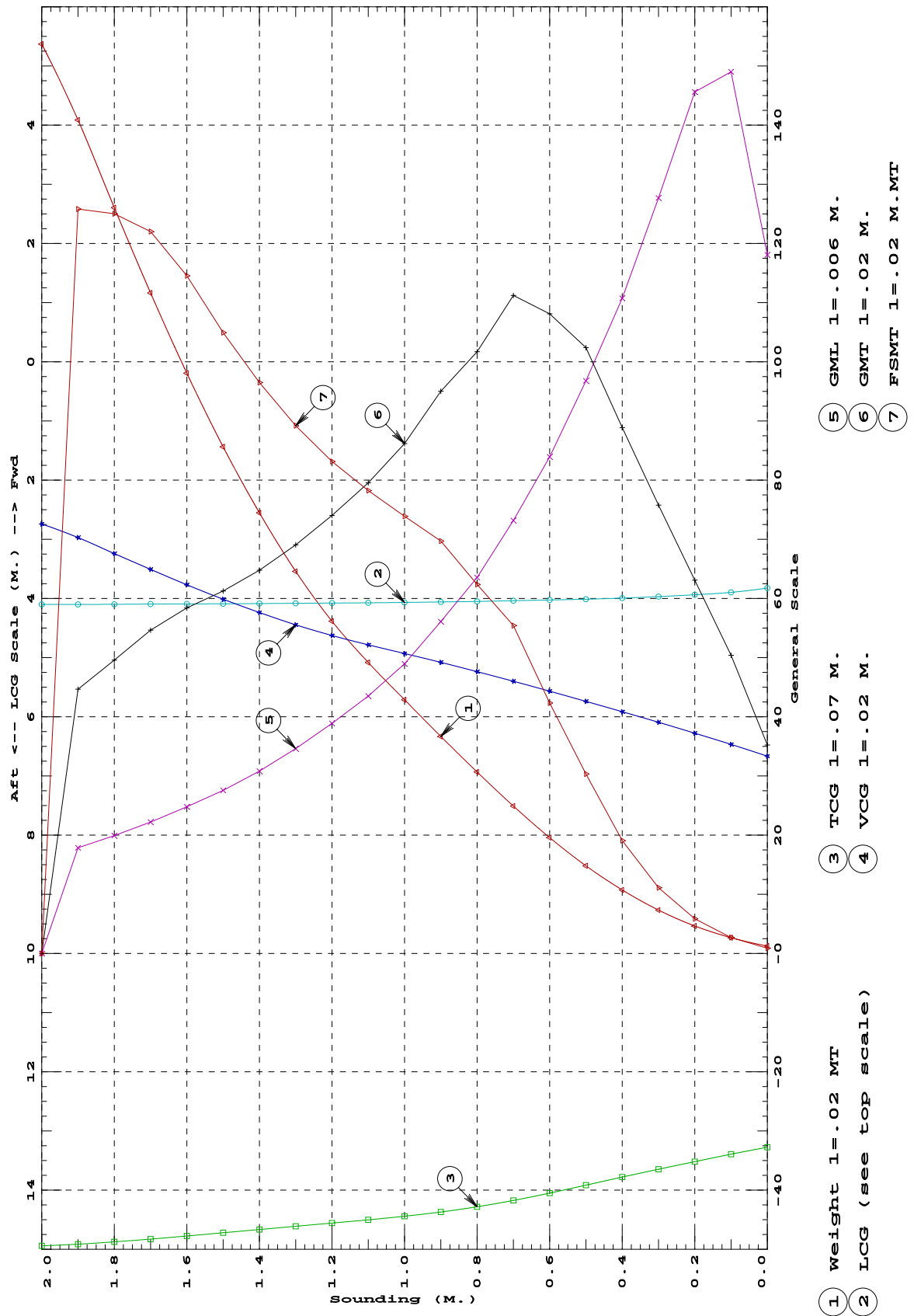
Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	29		0.03	3.824a	2.293p	0.667	0.71	0.02
100	61		0.05	3.897a	2.375p	0.707	0.89	0.05
200	107		0.09	3.937a	2.463p	0.745	0.87	0.12
300	169		0.15	3.969a	2.553p	0.781	0.77	0.22
400	247		0.21	3.993a	2.646p	0.817	0.66	0.38
500	341		0.30	4.012a	2.741p	0.852	0.58	0.61
600	450		0.39	4.026a	2.835p	0.887	0.50	0.85
700	573		0.50	4.039a	2.922p	0.920	0.44	1.11
800	705		0.61	4.050a	2.997p	0.953	0.38	1.25
900	843		0.73	4.059a	3.059p	0.984	0.34	1.39
1000	985		0.86	4.067a	3.109p	1.014	0.29	1.48
1100	1131		0.98	4.073a	3.151p	1.043	0.26	1.56
1200	1291		1.12	4.078a	3.189p	1.075	0.23	1.66
1300	1485		1.29	4.082a	3.228p	1.111	0.21	1.78
1400	1712		1.49	4.086a	3.267p	1.152	0.18	1.93
1500	1969		1.71	4.090a	3.305p	1.198	0.17	2.10
1600	2254		1.96	4.093a	3.343p	1.246	0.15	2.29
1700	2566		2.23	4.095a	3.379p	1.298	0.13	2.44
1800	2898		2.52	4.098a	3.412p	1.352	0.12	2.50
1900	3238		2.82	4.100a	3.440p	1.406	0.11	2.52
2000	3533		3.07	4.100a	3.459p	1.452		

Soundings in mm.-----Other distances in METERS.-----

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

FUEL OIL OVERFLOW TANK - PORT

FO\_OF.P  
TANK CHARACTERISTICS at 1.18 degrees AFT TRIM



FUEL OIL Specific Gravity = 0.870



GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

FOREPEAK - CENTRE

## TANK CHARACTERISTICS

Trim: Aft 0.500/24.200, No Heel

Tank: FOREPEAK.C, Contents: FRESH WATER at 1.000 Specific Gravity

Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	1		0.00	11.842f	0.000	1.364	0.00	0.00
100	10		0.01	11.892f	0.000	1.424	0.02	0.00
200	35		0.04	11.942f	0.000	1.487	0.04	0.01
300	82		0.08	11.992f	0.000	1.551	0.06	0.03
400	146		0.15	12.028f	0.000	1.630	0.15	0.09
500	228		0.23	12.060f	0.000	1.707	0.17	0.16
600	336		0.34	12.093f	0.000	1.779	0.19	0.25
700	472		0.47	12.128f	0.000	1.849	0.22	0.38
800	642		0.64	12.163f	0.000	1.919	0.24	0.54
900	834		0.83	12.190f	0.000	1.991	0.24	0.74
1000	1054		1.05	12.214f	0.000	2.063	0.25	0.99
1100	1308		1.31	12.239f	0.000	2.135	0.26	1.31
1200	1599		1.60	12.264f	0.000	2.206	0.28	1.67
1300	1927		1.93	12.291f	0.000	2.276	0.29	2.07
1400	2295		2.29	12.317f	0.000	2.347	0.30	2.54
1500	2695		2.70	12.341f	0.000	2.417	0.29	3.05
1600	3124		3.12	12.361f	0.000	2.488	0.30	3.65
1700	3593		3.59	12.382f	0.000	2.558	0.31	4.35
1800	4103		4.10	12.402f	0.000	2.629	0.32	5.14
1900	4658		4.66	12.424f	0.000	2.699	0.33	6.04
2000	5259		5.26	12.445f	0.000	2.770	0.34	7.05
2100	5908		5.91	12.467f	0.000	2.841	0.35	8.12
2200	6608		6.61	12.489f	0.000	2.912	0.36	9.30
2300	7340		7.34	12.509f	0.000	2.983	0.34	10.46
2400	8113		8.11	12.528f	0.000	3.054	0.35	11.78
2500	8935		8.93	12.546f	0.000	3.124	0.36	13.19
2600	9807		9.81	12.566f	0.000	3.195	0.37	14.75
2700	10732		10.73	12.586f	0.000	3.266	0.38	16.45
2800	11711		11.71	12.606f	0.000	3.337	0.39	18.30
2900	12746		12.75	12.626f	0.000	3.408	0.40	20.31
3000	13839		13.84	12.647f	0.000	3.479	0.41	22.45
3100	14985		14.99	12.667f	0.000	3.551	0.39	24.58
3200	16166		16.17	12.685f	0.000	3.621	0.40	26.95
3300	17404		17.40	12.704f	0.000	3.692	0.41	29.45
3400	18702		18.70	12.722f	0.000	3.763	0.42	32.14
3500	20062		20.06	12.741f	0.000	3.835	0.43	35.03
3600	21484		21.48	12.761f	0.000	3.906	0.43	38.09
3700	22970		22.97	12.780f	0.000	3.977	0.44	41.38
3800	24522		24.52	12.800f	0.000	4.049	0.45	44.86
3900	26140		26.14	12.820f	0.000	4.120	0.46	48.52
4000	27827		27.83	12.840f	0.000	4.192	0.47	52.29
4100	29555		29.56	12.859f	0.000	4.263	0.43	55.80

Soundings in mm.-----Other distances in METERS.-----

FOREPEAK.C Reference Point: Long.= 13.475f Trans.= 0.000 Vert.= 1.344

(Zero Sounding is at the Reference Point.)

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

FOREPEAK - CENTRE

## TANK CHARACTERISTICS, continued

Trim: Aft 0.500/24.200, No Heel

Tank: FOREPEAK.C, Contents: FRESH WATER at 1.000 Specific Gravity

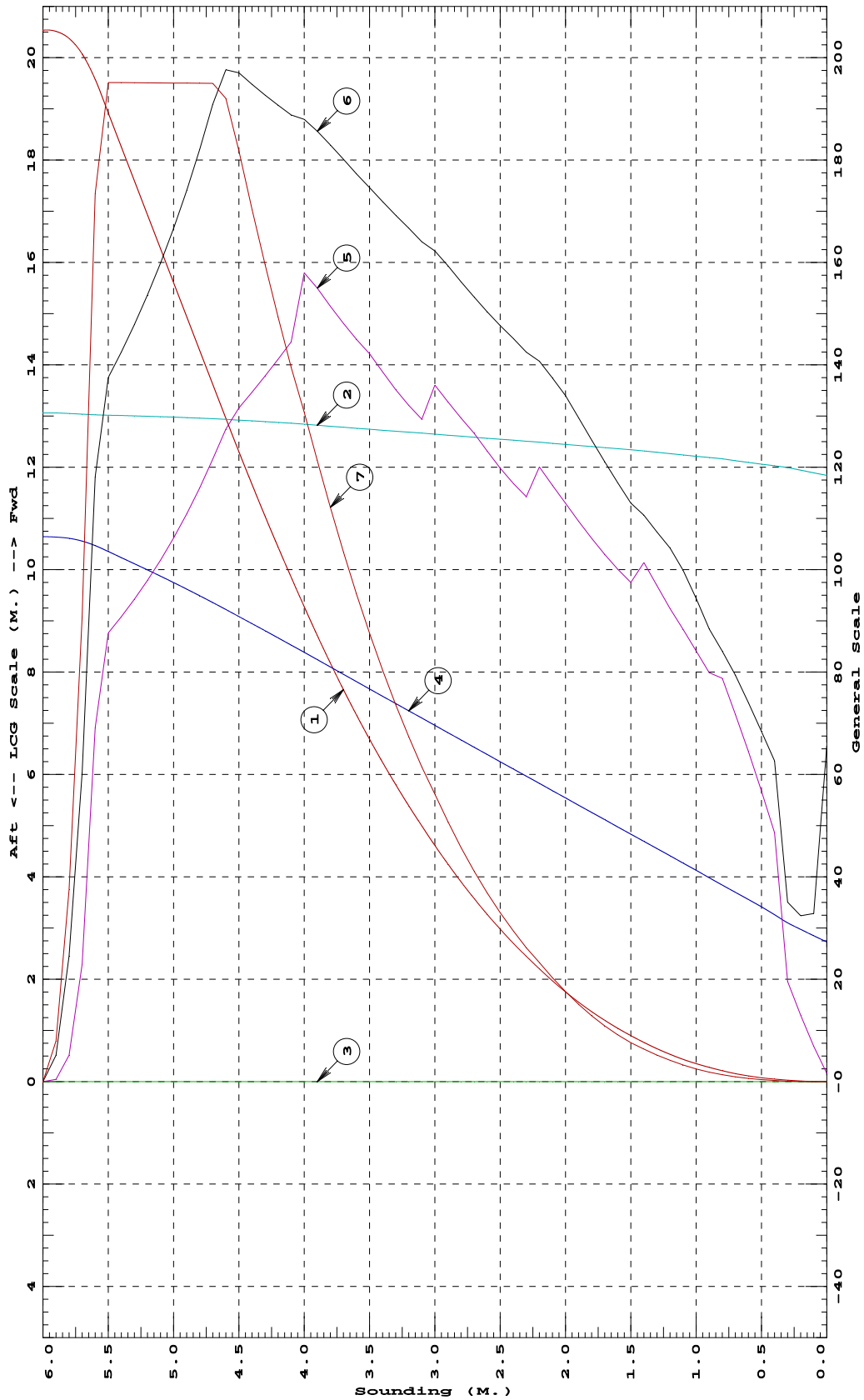
Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
4200	31321		31.32	12.875f	0.000	4.334	0.42	59.73
4300	33135		33.13	12.891f	0.000	4.403	0.41	63.84
4400	34998		35.00	12.906f	0.000	4.473	0.40	68.17
4500	36909		36.91	12.920f	0.000	4.542	0.39	72.72
4600	38867		38.87	12.934f	0.000	4.611	0.38	76.81
4700	40851		40.85	12.947f	0.000	4.679	0.36	77.99
4800	42839		42.84	12.958f	0.000	4.745	0.35	78.00
4900	44826		44.83	12.969f	0.000	4.810	0.33	78.01
5000	46814		46.81	12.979f	0.000	4.873	0.32	78.01
5100	48802		48.80	12.987f	0.000	4.936	0.31	78.02
5200	50789		50.79	12.996f	0.000	4.997	0.29	78.03
5300	52777		52.78	13.003f	0.000	5.058	0.28	78.04
5400	54766		54.77	13.010f	0.000	5.117	0.27	78.05
5500	56754		56.75	13.017f	0.000	5.177	0.26	78.06
5600	58723		58.72	13.023f	0.000	5.235	0.21	69.38
5700	60222		60.22	13.036f	0.000	5.279	0.07	36.31
5800	61123		61.12	13.050f	0.000	5.306	0.02	15.00
5900	61537		61.54	13.059f	0.000	5.318	0.00	3.17
6000	61598		61.60	13.061f	0.000	5.321	0.00	0.00

Soundings in mm.-----Other distances in METERS.-----

FOREPEAK.C Reference Point: Long.= 13.475f Trans.= 0.000 Vert.= 1.344

(Zero Sounding is at the Reference Point.)

FOREPEAK.C  
TANK CHARACTERISTICS at 1.18 degrees AFT TRIM



- 1 Weight 1=.3 MT  
 2 LCG (see top scale)  
 3 TCG 1=.1 M.  
 4 VCG 1=.05 M.  
 5 GML 1=.003 M.  
 6 GMT 1=.01 M.  
 7 FSMT 1=.4 M.MT

FRESH WATER Specific Gravity = 1.000

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

AFT PEAK - CENTRE

## TANK CHARACTERISTICS

Trim: Aft 0.500/24.200, No Heel

Tank: AFTPEAK.C, Contents: FRESH WATER at 1.000 Specific Gravity

Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	0		0.00					
100	11		0.01	12.479a	0.000	2.358	0.11	0.02
200	88		0.09	12.587a	0.000	2.434	0.37	0.37
300	245		0.25	12.643a	0.000	2.508	0.41	1.60
400	516		0.52	12.696a	0.000	2.579	0.46	4.61
500	923		0.92	12.746a	0.000	2.649	0.47	9.31
600	1397		1.40	12.772a	0.000	2.717	0.35	11.40
700	1961		1.96	12.802a	0.000	2.786	0.38	15.48
800	2629		2.63	12.837a	0.000	2.854	0.41	20.01
900	3404		3.40	12.873a	0.000	2.922	0.43	25.53
1000	4291		4.29	12.910a	0.000	2.989	0.46	31.72
1100	5235		5.23	12.938a	0.000	3.056	0.40	36.48
1200	6300		6.30	12.970a	0.000	3.124	0.45	43.97
1300	7491		7.49	13.004a	0.000	3.194	0.48	52.26
1400	8808		8.81	13.040a	0.000	3.263	0.52	61.27
1500	10257		10.26	13.078a	0.000	3.332	0.55	71.76
1600	11776		11.78	13.109a	0.000	3.401	0.51	79.39
1700	13439		13.44	13.143a	0.000	3.471	0.56	90.80
1800	15244		15.24	13.179a	0.000	3.541	0.59	102.04
1900	17183		17.18	13.217a	0.000	3.611	0.62	112.25
2000	19246		19.25	13.255a	0.000	3.680	0.65	119.50
2100	21276		21.28	13.284a	0.000	3.745	0.49	114.35
2200	23298		23.30	13.307a	0.000	3.808	0.45	114.35
2300	25320		25.32	13.326a	0.000	3.868	0.42	114.35
2400	27343		27.34	13.343a	0.000	3.927	0.39	114.35
2500	29365		29.36	13.357a	0.000	3.984	0.36	114.35
2600	31387		31.39	13.369a	0.000	4.041	0.34	114.36
2700	33409		33.41	13.380a	0.000	4.097	0.32	114.36
2800	35432		35.43	13.390a	0.000	4.152	0.30	114.36
2900	37454		37.45	13.398a	0.000	4.207	0.28	114.36
3000	39476		39.48	13.406a	0.000	4.261	0.27	114.36
3100	41498		41.50	13.413a	0.000	4.314	0.25	114.36
3200	43520		43.52	13.419a	0.000	4.368	0.24	114.36
3300	44805		44.81	13.431a	0.000	4.402	0.00	15.46
3382	44870		44.87	13.433a	0.000	4.404		

Soundings in mm.-----Other distances in METERS.-----

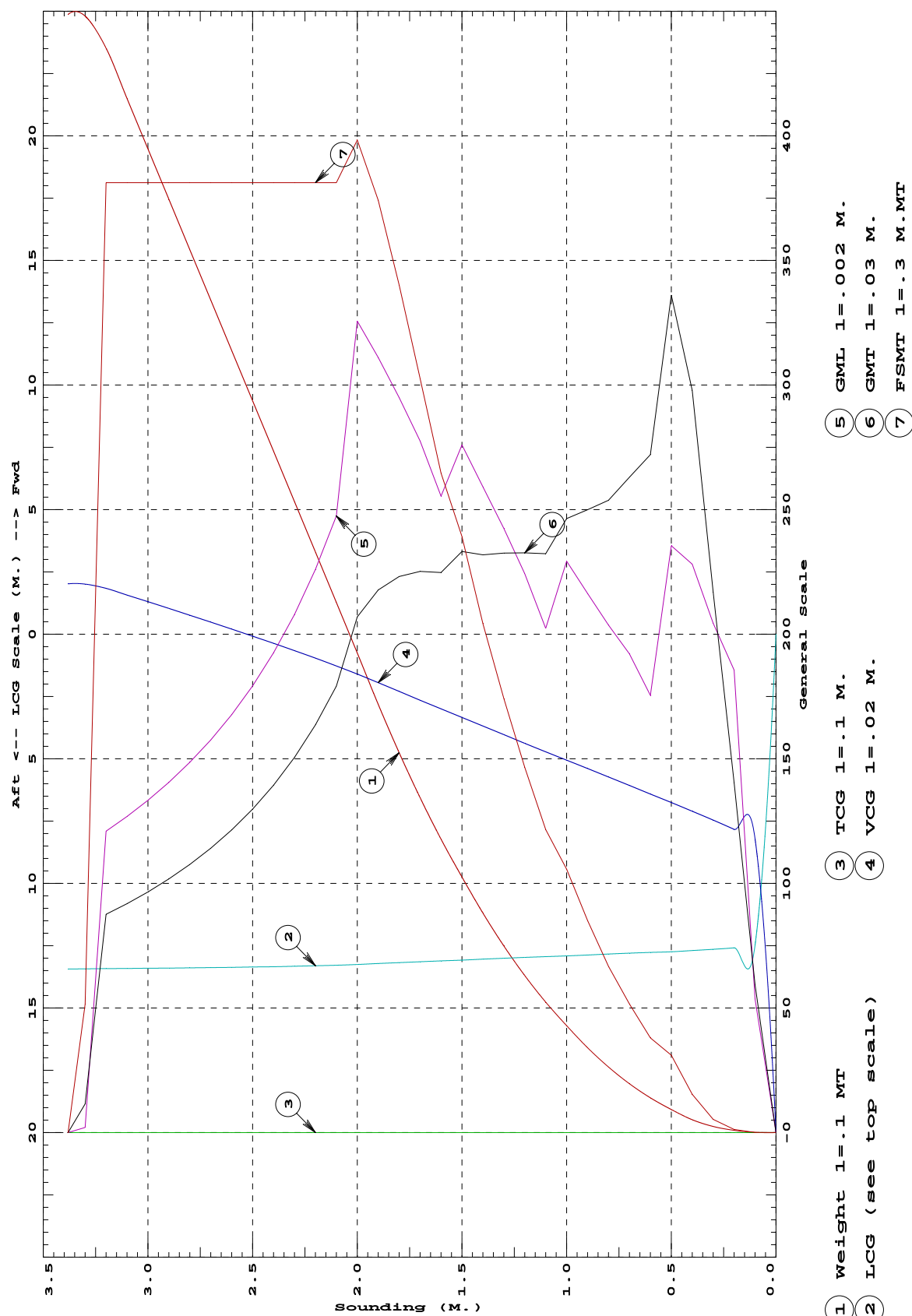
AFTPEAK.C Reference Point: Long.= 13.750a Trans.= 0.000 Vert.= 2.313

(Zero Sounding is at the Reference Point.)

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

AFT PEAK - CENTRE

AFTPEAK.C  
TANK CHARACTERISTICS at 1.18 degrees AFT TRIM



FRESH WATER Specific Gravity = 1.000

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

FUEL OIL DAY TANK - PORT

## TANK CHARACTERISTICS

Trim: Fwd 0.500/24.200, No Heel

Tank: FO\_DAY.P, Contents: FUEL OIL at 0.870 Specific Gravity

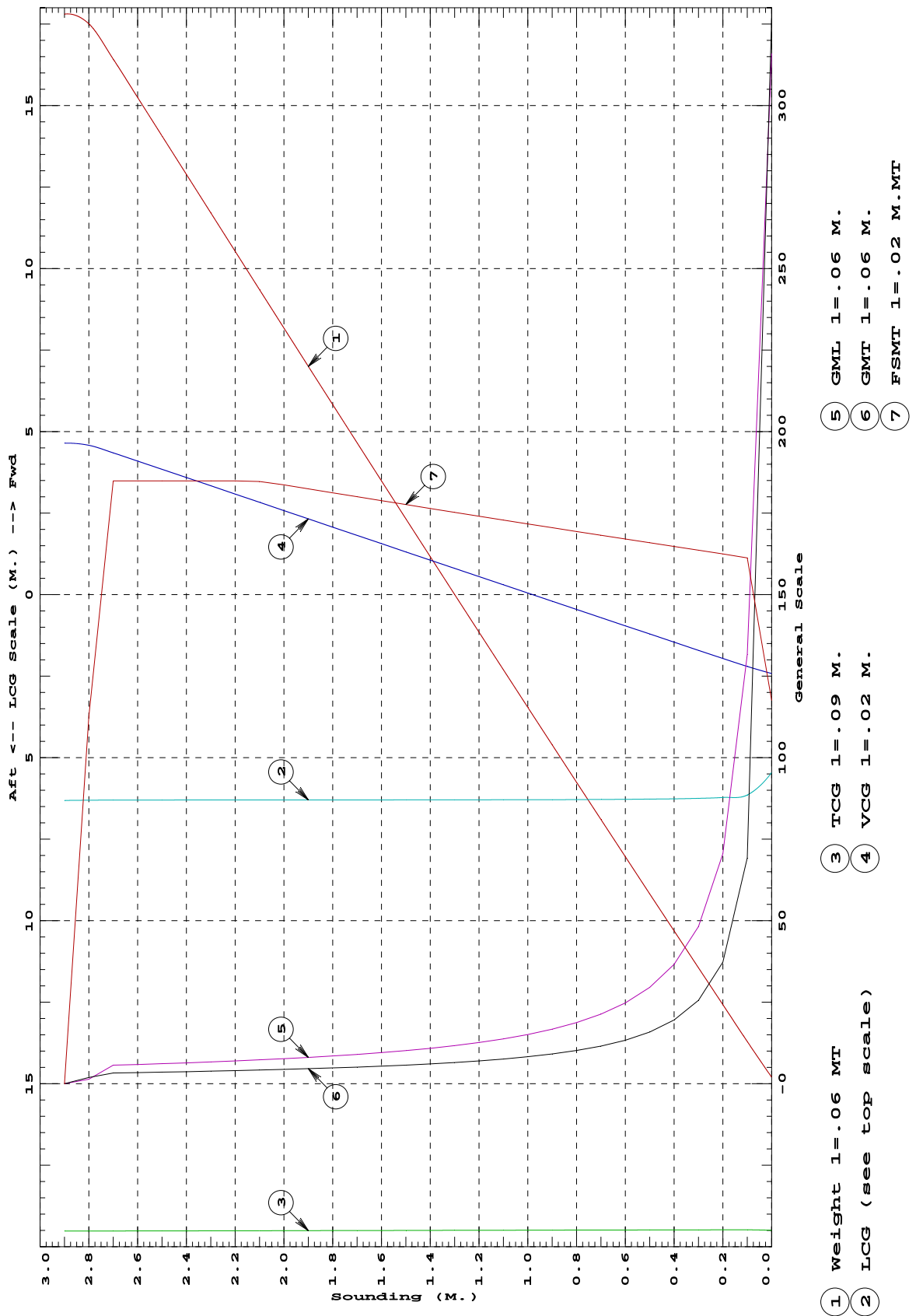
Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	138		0.12	5.459a	4.047p	2.516	18.96	2.35
100	892		0.78	6.145a	4.033p	2.559	7.90	3.23
200	1670		1.45	6.222a	4.034p	2.609	4.23	3.25
300	2450		2.13	6.250a	4.035p	2.658	2.89	3.27
400	3232		2.81	6.264a	4.036p	2.708	2.20	3.30
500	4015		3.49	6.273a	4.037p	2.758	1.77	3.32
600	4801		4.18	6.279a	4.039p	2.809	1.49	3.34
700	5588		4.86	6.283a	4.040p	2.859	1.28	3.36
800	6377		5.55	6.286a	4.041p	2.909	1.12	3.39
900	7167		6.24	6.288a	4.043p	2.959	1.00	3.41
1000	7960		6.92	6.290a	4.044p	3.010	0.90	3.43
1100	8754		7.62	6.292a	4.045p	3.060	0.82	3.46
1200	9550		8.31	6.293a	4.047p	3.111	0.76	3.48
1300	10348		9.00	6.294a	4.048p	3.161	0.70	3.50
1400	11147		9.70	6.295a	4.050p	3.212	0.65	3.53
1500	11949	10.40		6.296a	4.051p	3.262	0.61	3.55
1600	12752	11.09		6.296a	4.052p	3.313	0.57	3.58
1700	13557	11.79		6.297a	4.054p	3.363	0.54	3.60
1800	14364	12.50		6.298a	4.055p	3.414	0.51	3.62
1900	15172	13.20		6.298a	4.056p	3.465	0.48	3.65
2000	15982	13.90		6.298a	4.058p	3.515	0.46	3.67
2100	16794	14.61		6.299a	4.059p	3.566	0.44	3.69
2200	17607	15.32		6.299a	4.061p	3.617	0.42	3.70
2300	18420	16.03		6.299a	4.062p	3.668	0.40	3.70
2400	19233	16.73		6.300a	4.063p	3.718	0.38	3.70
2500	20046	17.44		6.300a	4.064p	3.769	0.37	3.70
2600	20859	18.15		6.300a	4.065p	3.819	0.35	3.70
2700	21672	18.86		6.300a	4.066p	3.870	0.34	3.70
2800	22420	19.51		6.304a	4.066p	3.916	0.08	2.25
2900	22623	19.68		6.313a	4.066p	3.929		

Soundings in mm.-----Other distances in METERS.-----

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

FUEL OIL DAY TANK - PORT

FO\_DAY.P  
TANK CHARACTERISTICS at 1.18 degrees FWD TRIM



FUEL OIL Specific Gravity = 0.870

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

FUEL OIL DAY TANK - STARBOARD

## TANK CHARACTERISTICS

Trim: Fwd 0.500/24.200, No Heel

Tank: FO\_DAY.S, Contents: FUEL OIL at 0.870 Specific Gravity

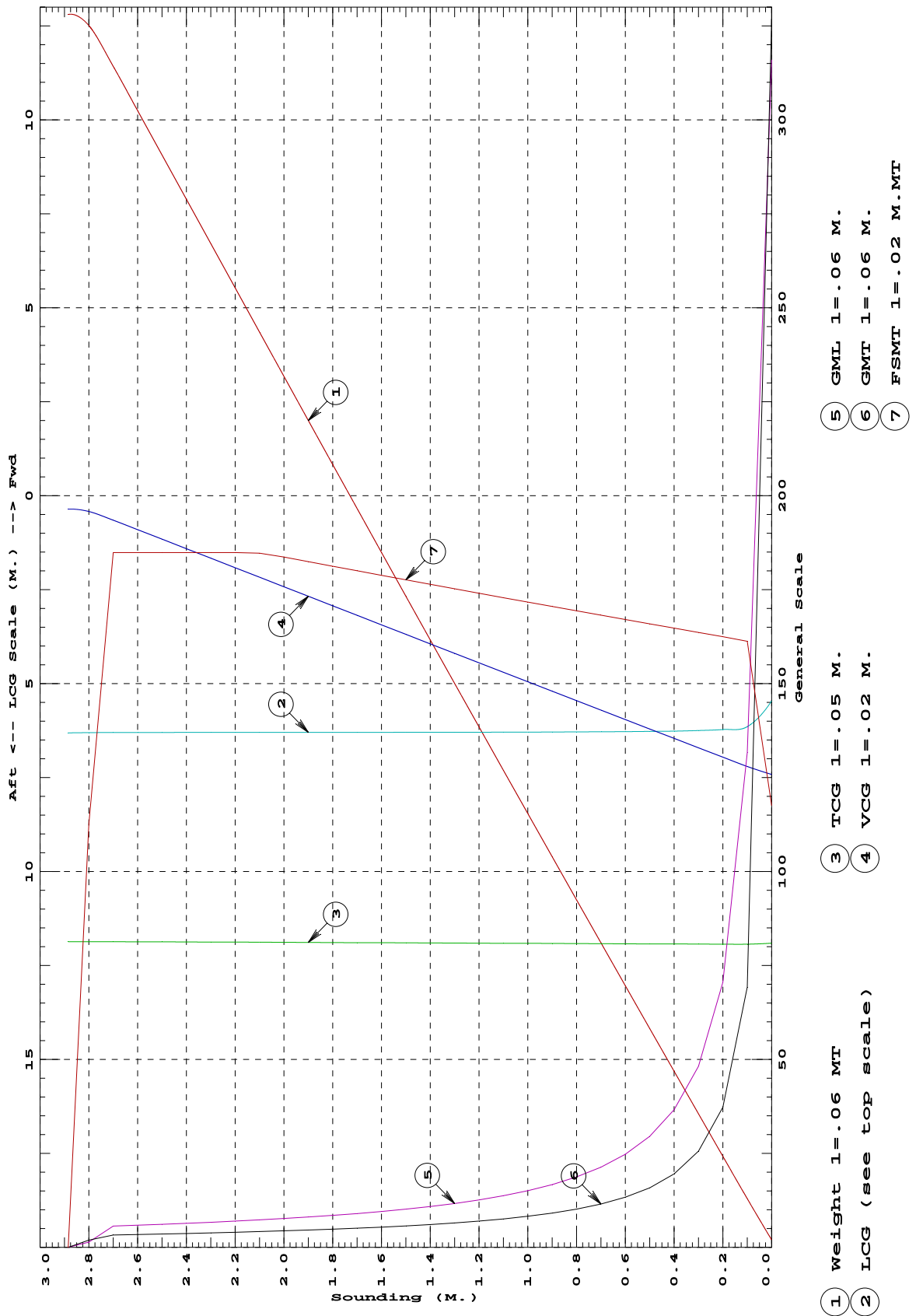
Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	138		0.12	5.459a	4.047s	2.516	18.96	2.35
100	892		0.78	6.145a	4.033s	2.559	7.90	3.23
200	1670		1.45	6.222a	4.034s	2.609	4.23	3.25
300	2450		2.13	6.250a	4.035s	2.658	2.89	3.27
400	3232		2.81	6.264a	4.036s	2.708	2.20	3.30
500	4015		3.49	6.273a	4.037s	2.758	1.77	3.32
600	4801		4.18	6.279a	4.039s	2.809	1.49	3.34
700	5588		4.86	6.283a	4.040s	2.859	1.28	3.36
800	6377		5.55	6.286a	4.041s	2.909	1.12	3.39
900	7167		6.24	6.288a	4.043s	2.959	1.00	3.41
1000	7960		6.92	6.290a	4.044s	3.010	0.90	3.43
1100	8754		7.62	6.292a	4.045s	3.060	0.82	3.46
1200	9550		8.31	6.293a	4.047s	3.111	0.76	3.48
1300	10348		9.00	6.294a	4.048s	3.161	0.70	3.50
1400	11147		9.70	6.295a	4.050s	3.212	0.65	3.53
1500	11949	10.40		6.296a	4.051s	3.262	0.61	3.55
1600	12752	11.09		6.296a	4.052s	3.313	0.57	3.58
1700	13557	11.79		6.297a	4.054s	3.363	0.54	3.60
1800	14364	12.50		6.298a	4.055s	3.414	0.51	3.62
1900	15172	13.20		6.298a	4.056s	3.465	0.48	3.65
2000	15982	13.90		6.298a	4.058s	3.515	0.46	3.67
2100	16794	14.61		6.299a	4.059s	3.566	0.44	3.69
2200	17607	15.32		6.299a	4.061s	3.617	0.42	3.70
2300	18420	16.03		6.299a	4.062s	3.668	0.40	3.70
2400	19233	16.73		6.300a	4.063s	3.718	0.38	3.70
2500	20046	17.44		6.300a	4.064s	3.769	0.37	3.70
2600	20859	18.15		6.300a	4.065s	3.819	0.35	3.70
2700	21672	18.86		6.300a	4.066s	3.870	0.34	3.70
2800	22420	19.51		6.304a	4.066s	3.916	0.08	2.25
2885	22623	19.68		6.313a	4.066s	3.929		

Soundings in mm.-----Other distances in METERS.-----



GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)  
FUEL OIL DAY TANK - STARBOARD

FO\_DAY.S  
TANK CHARACTERISTICS at 1.18 degrees FWD TRIM



FUEL OIL Specific Gravity = 0.870

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

AFT DOUBLE BOTTOM FUEL OIL TANK - PORT

## TANK CHARACTERISTICS

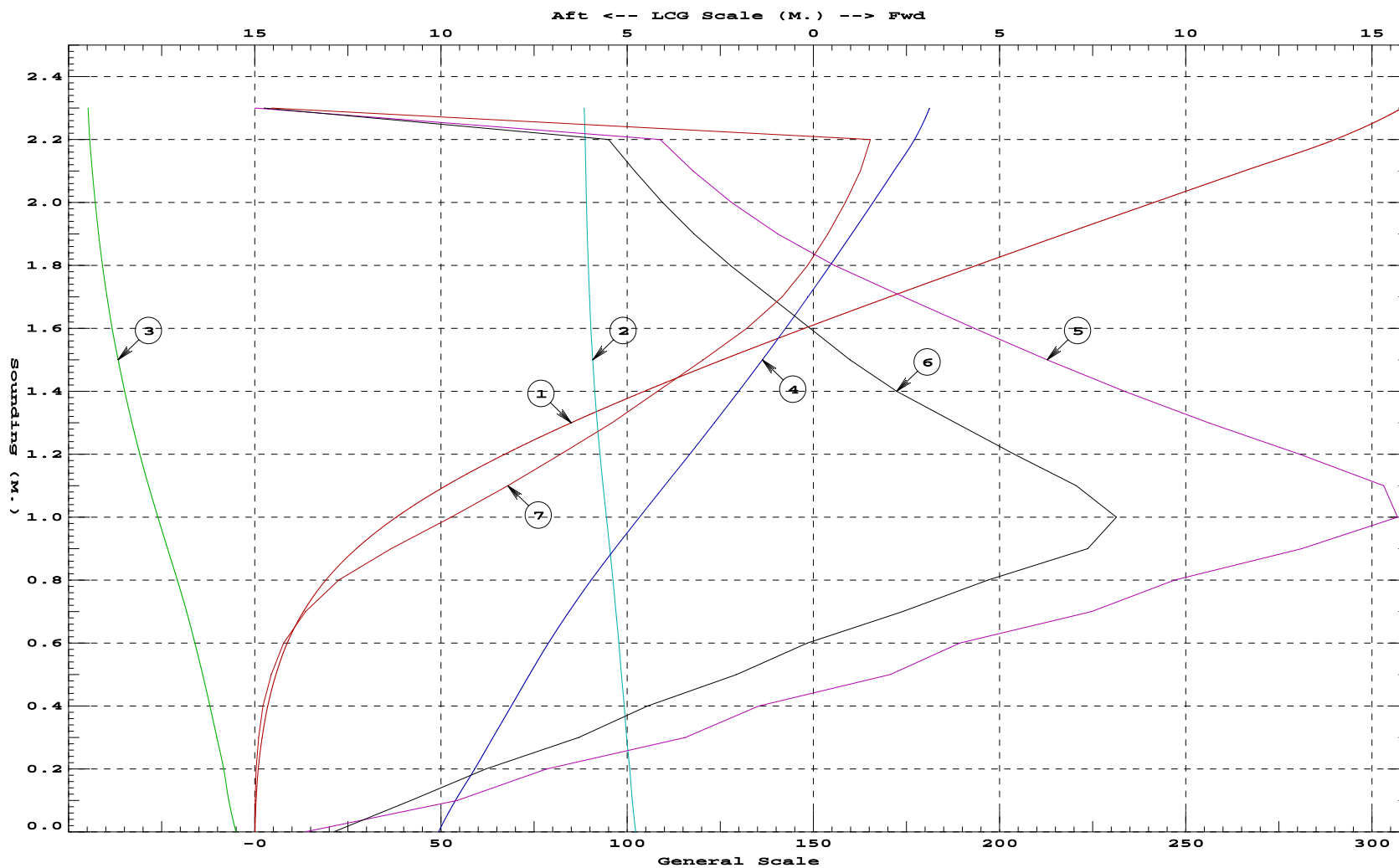
Trim: Fwd 0.500/24.200, No Heel

Tank: FO\_AFT.P, Contents: FUEL OIL at 0.870 Specific Gravity

Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	4		0.00	4.768a	0.251p	0.493	0.09	0.00
100	25		0.02	4.862a	0.349p	0.539	0.38	0.02
200	65		0.06	4.930a	0.417p	0.591	0.55	0.07
300	136		0.12	5.013a	0.508p	0.640	0.81	0.21
400	241		0.21	5.079a	0.603p	0.689	0.95	0.44
500	393		0.34	5.155a	0.700p	0.738	1.19	0.88
600	600		0.52	5.222a	0.803p	0.788	1.33	1.55
700	901		0.78	5.301a	0.916p	0.844	1.57	2.73
800	1316		1.14	5.381a	1.039p	0.903	1.73	4.51
900	1882		1.64	5.467a	1.170p	0.967	1.97	7.32
1000	2620		2.28	5.558a	1.301p	1.033	2.15	10.55
1100	3541		3.08	5.648a	1.427p	1.101	2.12	13.59
1200	4628		4.03	5.731a	1.543p	1.168	1.96	16.42
1300	5861		5.10	5.806a	1.650p	1.234	1.79	19.19
1400	7214		6.28	5.870a	1.747p	1.299	1.63	21.64
1500	8661		7.53	5.926a	1.835p	1.363	1.49	24.08
1600	10182		8.86	5.973a	1.915p	1.425	1.35	26.42
1700	11755		10.23	6.012a	1.984p	1.486	1.22	28.33
1800	13363		11.63	6.044a	2.045p	1.545	1.09	29.69
1900	14997		13.05	6.070a	2.097p	1.603	0.98	30.78
2000	16651		14.49	6.093a	2.142p	1.660	0.90	31.72
2100	18321		15.94	6.112a	2.181p	1.716	0.82	32.52
2200	20004		17.40	6.128a	2.216p	1.772	0.76	33.07
2300	21246		18.48	6.153a	2.238p	1.812	0.00	0.91

Soundings in mm.-----Other distances in METERS.-----

FO\_AFT.P  
 TANK CHARACTERISTICS at 1.18 degrees FWD TRIM



- |                       |                |                  |
|-----------------------|----------------|------------------|
| ① Weight 1=.06 MT     | ③ TCG 1=.05 M. | ⑤ GML 1=.007 M.  |
| ② LCG (see top scale) | ④ VCG 1=.01 M. | ⑥ GMT 1=.02 M.   |
|                       |                | ⑦ FSMT 1=.2 M.MT |

FUEL OIL Specific Gravity = 0.870

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

AFT DOUBLE BOTTOM FUEL OIL TANK - STARBOARD

## TANK CHARACTERISTICS

Trim: Fwd 0.500/24.200, No Heel

Tank: FO\_AFT.S, Contents: FUEL OIL at 0.870 Specific Gravity

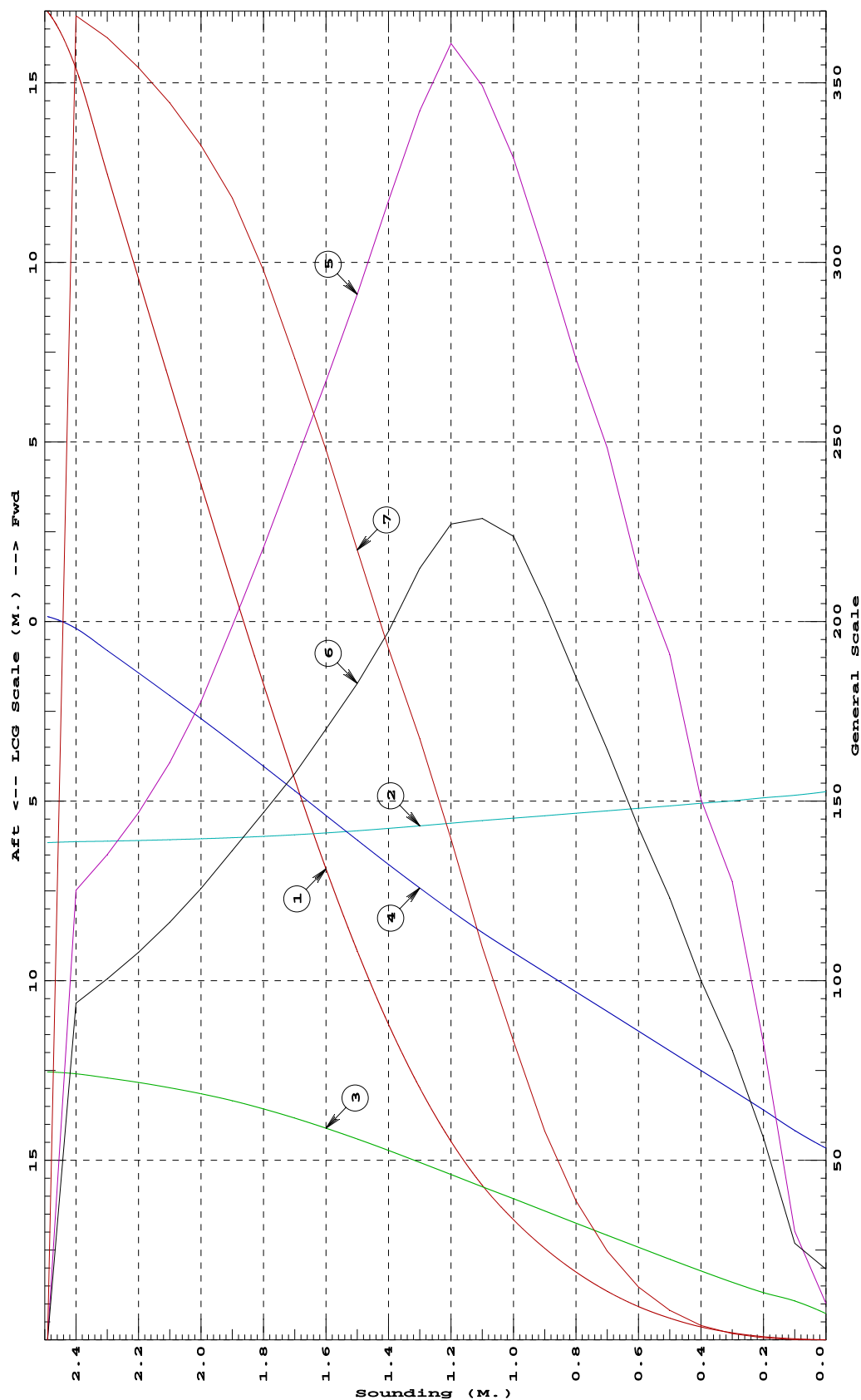
Snding	Volume		Weight		Center of Gravity			FSM
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	2		0.00	4.739a	0.219s	0.480	0.06	0.00
100	17		0.01	4.838a	0.325s	0.525	0.18	0.01
200	50		0.04	4.908a	0.394s	0.576	0.50	0.05
300	113		0.10	4.992a	0.482s	0.626	0.77	0.16
400	207		0.18	5.059a	0.576s	0.675	0.90	0.36
500	346		0.30	5.135a	0.673s	0.724	1.15	0.74
600	533		0.46	5.201a	0.773s	0.774	1.28	1.32
700	778		0.68	5.272a	0.873s	0.823	1.49	2.22
800	1085		0.94	5.338a	0.975s	0.872	1.64	3.49
900	1465		1.27	5.406a	1.076s	0.921	1.81	5.23
1000	1923		1.67	5.472a	1.179s	0.971	1.97	7.48
1100	2474		2.15	5.541a	1.278s	1.021	2.10	9.85
1200	3176		2.76	5.615a	1.381s	1.075	2.17	12.55
1300	4031		3.51	5.688a	1.482s	1.132	2.05	15.07
1400	5049		4.39	5.759a	1.582s	1.191	1.90	17.33
1500	6224		5.41	5.825a	1.678s	1.252	1.75	19.79
1600	7537		6.56	5.884a	1.768s	1.314	1.60	22.30
1700	8969		7.80	5.937a	1.852s	1.376	1.46	24.60
1800	10492		9.13	5.982a	1.929s	1.437	1.32	26.80
1900	12073	10.50		6.019a	1.997s	1.498	1.19	28.62
2000	13687	11.91		6.050a	2.056s	1.557	1.07	29.93
2100	15325	13.33		6.075a	2.106s	1.614	0.96	31.00
2200	16982	14.77		6.097a	2.150s	1.671	0.88	31.88
2300	18655	16.23		6.115a	2.188s	1.727	0.81	32.63
2400	20341	17.70		6.131a	2.222s	1.783	0.75	33.18
2491	21254	18.49		6.154a	2.238s	1.812		

Soundings in mm.-----Other distances in METERS.-----

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

AFT DOUBLE BOTTOM FUEL OIL TANK - STARBOARD

FO\_AFT.S  
TANK CHARACTERISTICS at 1.18 degrees FWD TRIM



FUEL OIL Specific Gravity = 0.870

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

DOUBLE BOTTOM FUEL OIL TANK - PORT

## TANK CHARACTERISTICS

Trim: Fwd 0.500/24.200, No Heel

Tank: FO\_DB.P, Contents: FUEL OIL at 0.870 Specific Gravity

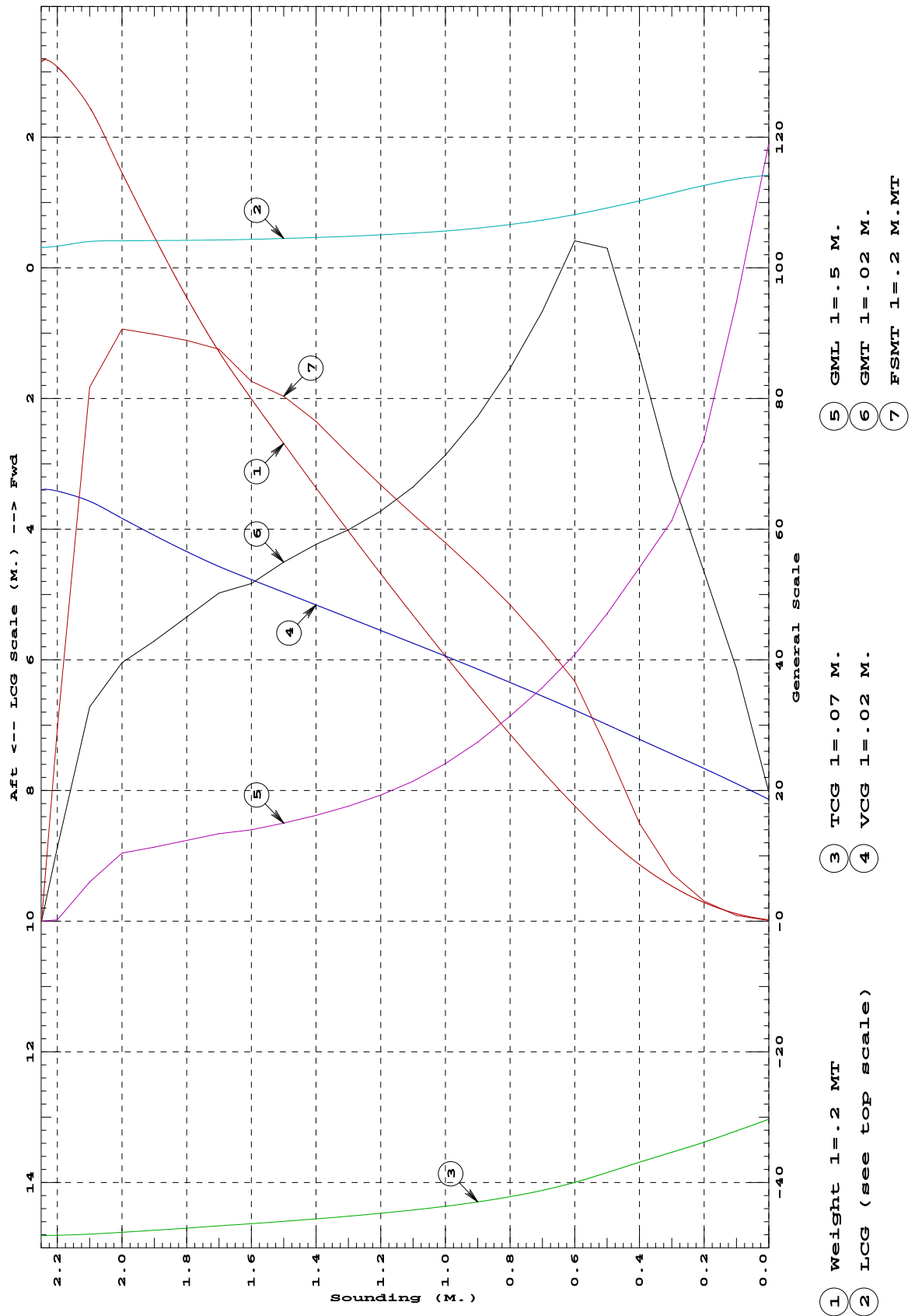
Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	52		0.05	1.418f	2.122p	0.373	59.53	0.02
100	261		0.23	1.359f	2.247p	0.421	47.39	0.18
200	659		0.57	1.260f	2.368p	0.467	36.87	0.61
300	1233		1.07	1.144f	2.476p	0.512	30.65	1.46
400	1993		1.73	1.025f	2.583p	0.557	27.06	3.00
500	2939		2.56	0.917f	2.693p	0.602	23.54	5.27
600	4053		3.53	0.816f	2.799p	0.646	20.40	7.34
700	5276		4.59	0.731f	2.884p	0.689	17.88	8.57
800	6577		5.72	0.662f	2.952p	0.730	15.69	9.68
900	7935		6.90	0.608f	3.008p	0.771	13.71	10.67
1000	9333		8.12	0.565f	3.055p	0.811	12.05	11.58
1100	10764		9.37	0.531f	3.095p	0.851	10.70	12.45
1200	12227		10.64	0.504f	3.129p	0.890	9.65	13.35
1300	13722		11.94	0.483f	3.161p	0.929	8.80	14.30
1400	15248		13.27	0.465f	3.190p	0.968	8.10	15.30
1500	16804		14.62	0.450f	3.217p	1.007	7.50	16.07
1600	18379		15.99	0.436f	3.241p	1.046	6.99	16.52
1700	20033		17.43	0.426f	3.264p	1.086	6.69	17.51
1800	21951		19.10	0.421f	3.289p	1.131	6.18	17.78
1900	24073		20.94	0.416f	3.313p	1.181	5.67	17.96
2000	26331		22.91	0.412f	3.334p	1.233	5.21	18.13
2100	28638		24.91	0.405f	3.353p	1.285	3.00	16.35
2200	30055		26.15	0.332f	3.365p	1.316	0.11	5.89
2249	30231		26.30	0.314f	3.367p	1.320		

Soundings in mm.-----Other distances in METERS.-----

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

DOUBLE BOTTOM FUEL OIL TANK - PORT

FO\_DB.P  
TANK CHARACTERISTICS at 1.18 degrees FWD TRIM



FUEL OIL Specific Gravity = 0.870

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

DOUBLE BOTTOM FUEL OIL TANK - CENTRE

## TANK CHARACTERISTICS

Trim: Fwd 0.500/24.200, No Heel

Tank: FO\_DB.C, Contents: FUEL OIL at 0.870 Specific Gravity

Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	92		0.08	1.481f	0.000	0.054	46.78	0.25
100	461		0.40	1.050f	0.000	0.087	29.98	1.42
200	1083		0.94	0.836f	0.000	0.126	24.43	4.32
300	1977		1.72	0.673f	0.000	0.167	21.50	10.01
400	3160		2.75	0.538f	0.000	0.208	19.54	18.82
500	4560		3.97	0.403f	0.000	0.248	16.37	22.44
600	6060		5.27	0.284f	0.000	0.286	13.81	24.75
700	7622		6.63	0.187f	0.000	0.323	11.77	26.31
800	9220		8.02	0.110f	0.000	0.359	10.08	27.27
900	10843		9.43	0.051f	0.000	0.394	8.70	27.73
1000	12581		10.95	0.003f	0.000	0.431	7.50	27.73
1100	14467		12.59	0.035a	0.000	0.471	6.52	27.73
1200	16511		14.36	0.067a	0.000	0.514	5.71	27.73
1300	18668		16.24	0.093a	0.000	0.559	5.05	27.73
1400	20937		18.22	0.115a	0.000	0.606	4.50	27.73
1500	23283		20.26	0.132a	0.000	0.655	4.05	27.73
1600	25687		22.35	0.147a	0.000	0.704	3.67	27.73
1700	28125		24.47	0.160a	0.000	0.754	3.35	27.73
1800	30573		26.60	0.170a	0.000	0.805	3.08	27.73
1900	33022		28.73	0.179a	0.000	0.855	2.86	27.73
2000	35471		30.86	0.187a	0.000	0.905	2.66	27.73
2100	37920		32.99	0.194a	0.000	0.956	2.49	27.73
2200	40369		35.12	0.200a	0.000	1.006	2.34	27.73
2300	42817		37.25	0.205a	0.000	1.056	2.12	27.34
2400	44337		38.57	0.245a	0.000	1.087	0.03	7.65
2493	44451		38.67	0.252a	0.000	1.089		

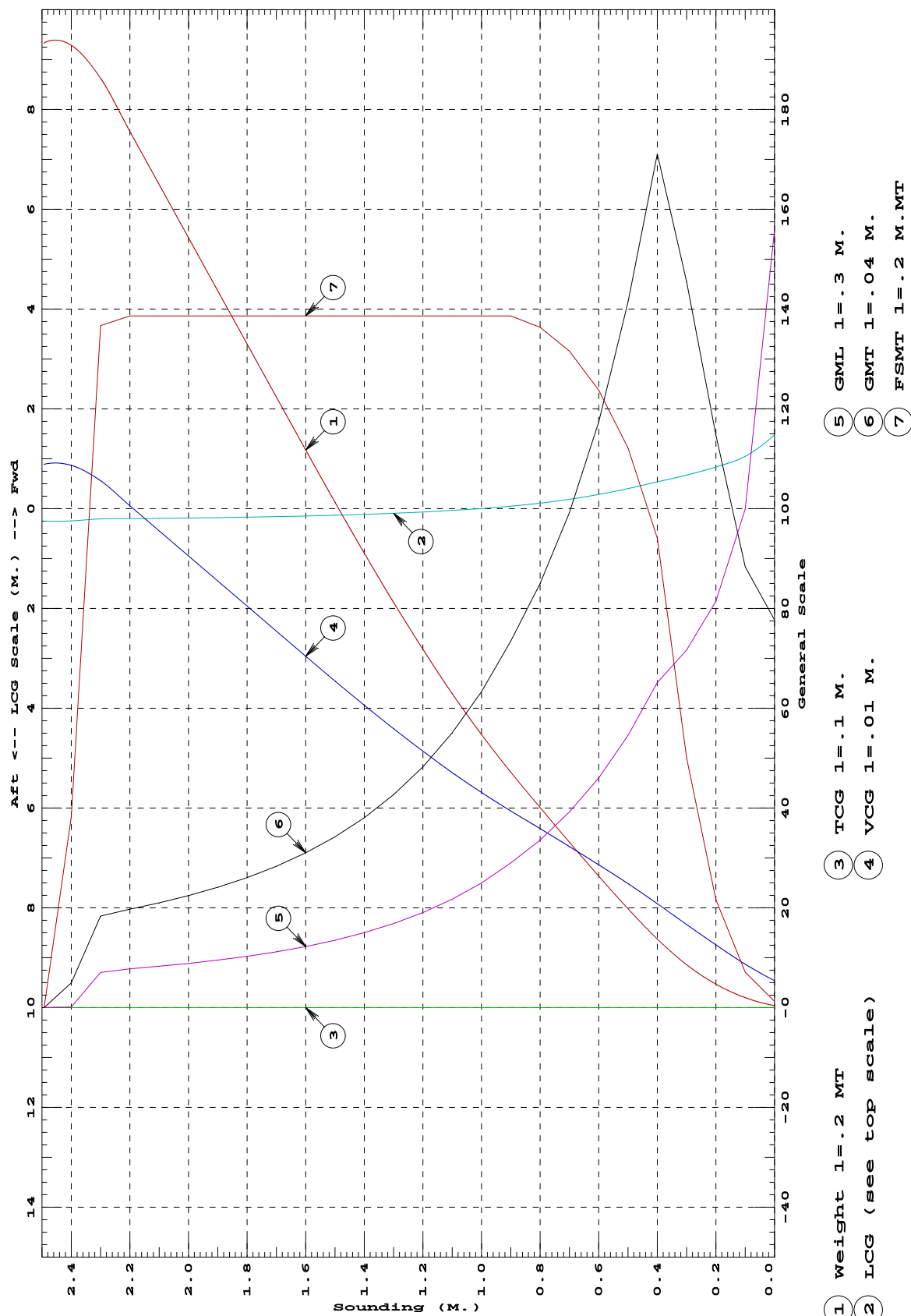
Soundings in mm.-----Other distances in METERS.-----



GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

DOUBLE BOTTOM FUEL OIL TANK - CENTRE

FO\_DB.C  
TANK CHARACTERISTICS at 1.18 degrees FWD TRIM



FUEL OIL Specific Gravity = 0.870

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

DOUBLE BOTTOM FUEL OIL TANK - STARBOARD

## TANK CHARACTERISTICS

Trim: Fwd 0.500/24.200, No Heel

Tank: FO\_DB.S, Contents: FUEL OIL at 0.870 Specific Gravity

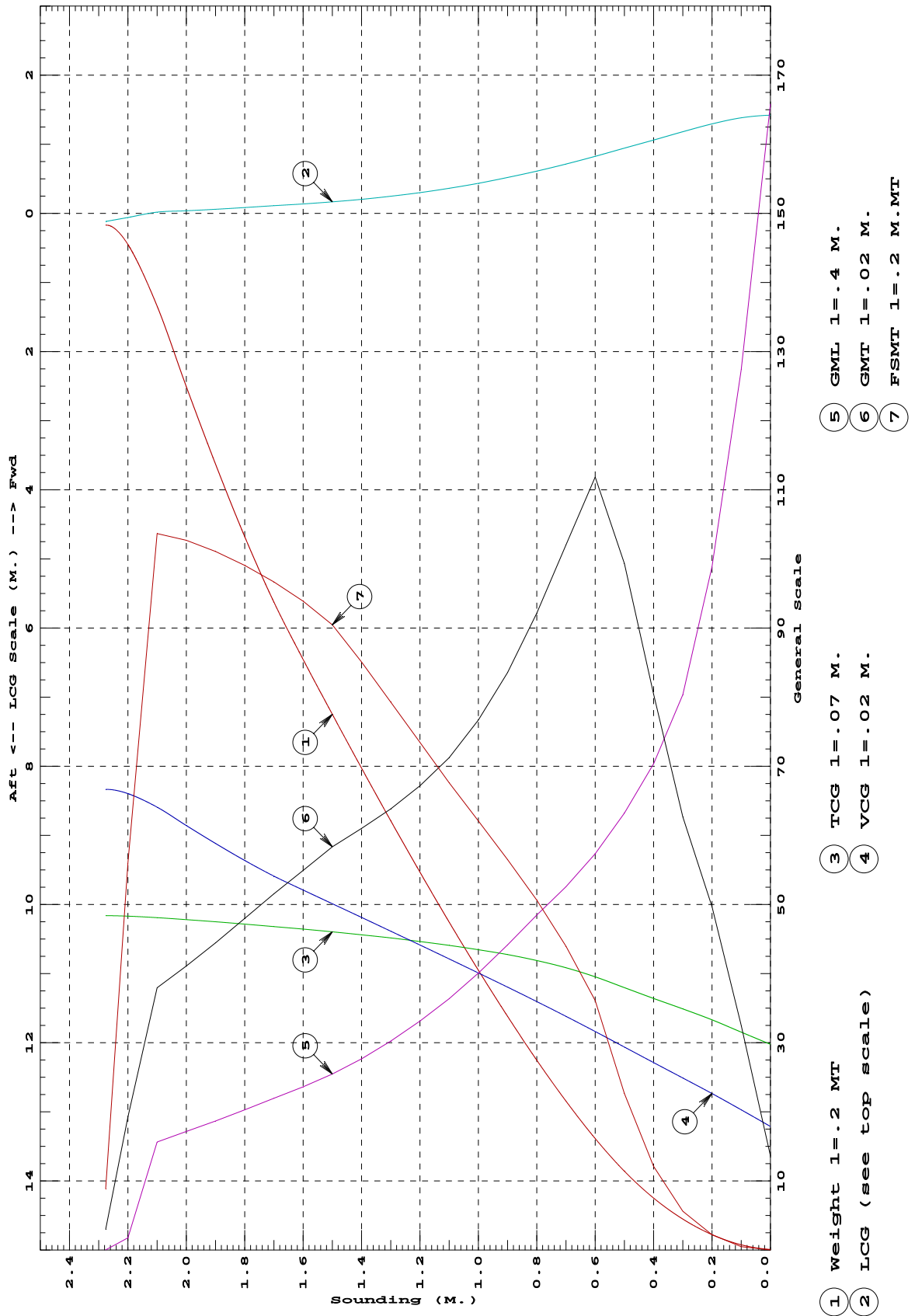
Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	21		0.02	1.420f	2.083s	0.357	66.34	0.01
100	175		0.15	1.384f	2.207s	0.406	50.96	0.10
200	511		0.44	1.296f	2.331s	0.453	39.55	0.44
300	1030		0.90	1.182f	2.442s	0.498	32.14	1.12
400	1730		1.51	1.061f	2.548s	0.542	28.15	2.42
500	2621		2.28	0.944f	2.657s	0.587	25.29	4.53
600	3709		3.23	0.826f	2.767s	0.632	22.94	7.22
700	4952		4.31	0.715f	2.859s	0.676	21.03	8.79
800	6314		5.49	0.612f	2.933s	0.719	19.39	10.13
900	7771		6.76	0.519f	2.992s	0.761	17.66	11.30
1000	9306		8.10	0.436f	3.042s	0.802	16.03	12.42
1100	10908		9.49	0.363f	3.086s	0.843	14.55	13.52
1200	12568		10.93	0.300f	3.125s	0.883	13.25	14.69
1300	14277		12.42	0.248f	3.161s	0.923	12.09	15.86
1400	16030		13.95	0.204f	3.193s	0.963	11.06	17.02
1500	17821		15.50	0.168f	3.223s	1.002	10.19	18.09
1600	19644		17.09	0.137f	3.251s	1.042	9.45	18.78
1700	21552		18.75	0.111f	3.276s	1.082	8.78	19.33
1800	23727		20.64	0.085f	3.301s	1.127	8.12	19.81
1900	26143		22.74	0.060f	3.325s	1.177	7.46	20.21
2000	28721		24.99	0.038f	3.347s	1.228	6.86	20.54
2100	31399		27.32	0.018f	3.367s	1.281	6.25	20.74
2200	33449		29.10	0.059a	3.381s	1.321	0.70	11.20
2276	34090		29.66	0.116a	3.387s	1.333	0.00	1.77

Soundings in mm.-----Other distances in METERS.-----

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

DOUBLE BOTTOM FUEL OIL TANK - STARBOARD

FO\_DB.S  
TANK CHARACTERISTICS at 1.18 degrees FWD TRIM



FUEL OIL Specific Gravity = 0.870

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

LUBE OIL TANK - STARBOARD

## TANK CHARACTERISTICS

Trim: Fwd 0.500/24.200, No Heel

Tank: LUBE\_OIL.S, Contents: LUBE OIL at 0.924 Specific Gravity

Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	4		0.00	4.006f	4.410s	2.883	5.55	0.04
100	122		0.11	3.580f	4.410s	2.928	1.58	0.08
200	244		0.23	3.564f	4.410s	2.978	0.79	0.08
300	366		0.34	3.558f	4.410s	3.028	0.53	0.08
400	488		0.45	3.556f	4.410s	3.078	0.39	0.08
500	609		0.56	3.554f	4.410s	3.128	0.32	0.08
600	731		0.68	3.553f	4.410s	3.178	0.26	0.08
700	853		0.79	3.552f	4.410s	3.228	0.23	0.08
800	975		0.90	3.551f	4.410s	3.278	0.20	0.08
900	1097		1.01	3.551f	4.410s	3.328	0.18	0.08
1000	1219		1.13	3.551f	4.410s	3.378	0.16	0.08
1100	1341		1.24	3.550f	4.410s	3.428	0.14	0.08
1200	1463		1.35	3.550f	4.410s	3.478	0.13	0.08
1300	1585		1.46	3.550f	4.410s	3.528	0.12	0.08
1400	1707		1.58	3.550f	4.410s	3.578	0.11	0.08
1500	1828		1.69	3.550f	4.410s	3.628	0.11	0.08
1600	1950		1.80	3.549f	4.410s	3.678	0.10	0.08
1700	2072		1.91	3.549f	4.410s	3.728	0.09	0.08
1800	2194		2.03	3.549f	4.410s	3.778	0.09	0.08
1900	2316		2.14	3.549f	4.410s	3.828	0.08	0.08
2000	2423		2.24	3.547f	4.410s	3.872	0.00	0.00

Soundings in mm.-----Other distances in METERS.-----

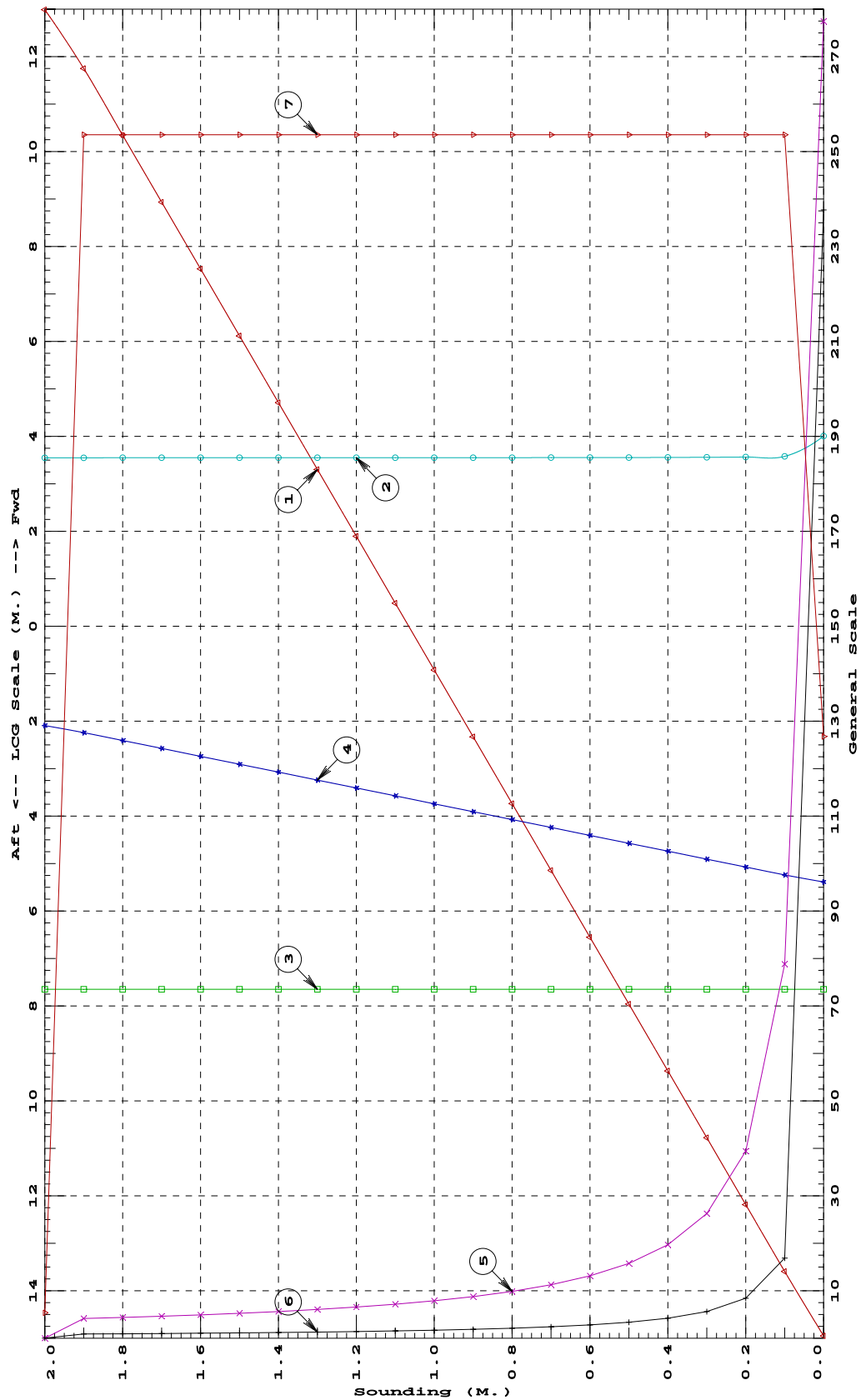
LUBE\_OIL.S Reference Point: Long.= 3.547f Trans.= 4.410s Vert.= 2.878

(Zero Sounding is at the Reference Point.)

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

LUBE OIL TANK - STARBOARD

LUBE\_OIL.S  
TANK CHARACTERISTICS at 1.18 degrees FWD TRIM



LUBE OIL Specific Gravity = 0.924

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

OILY WATER TANK - STARBOARD

## TANK CHARACTERISTICS

Trim: Fwd 0.500/24.200, No Heel

Tank: OILY\_WTR.S, Contents: OILY WATER at 1.025 Specific Gravity

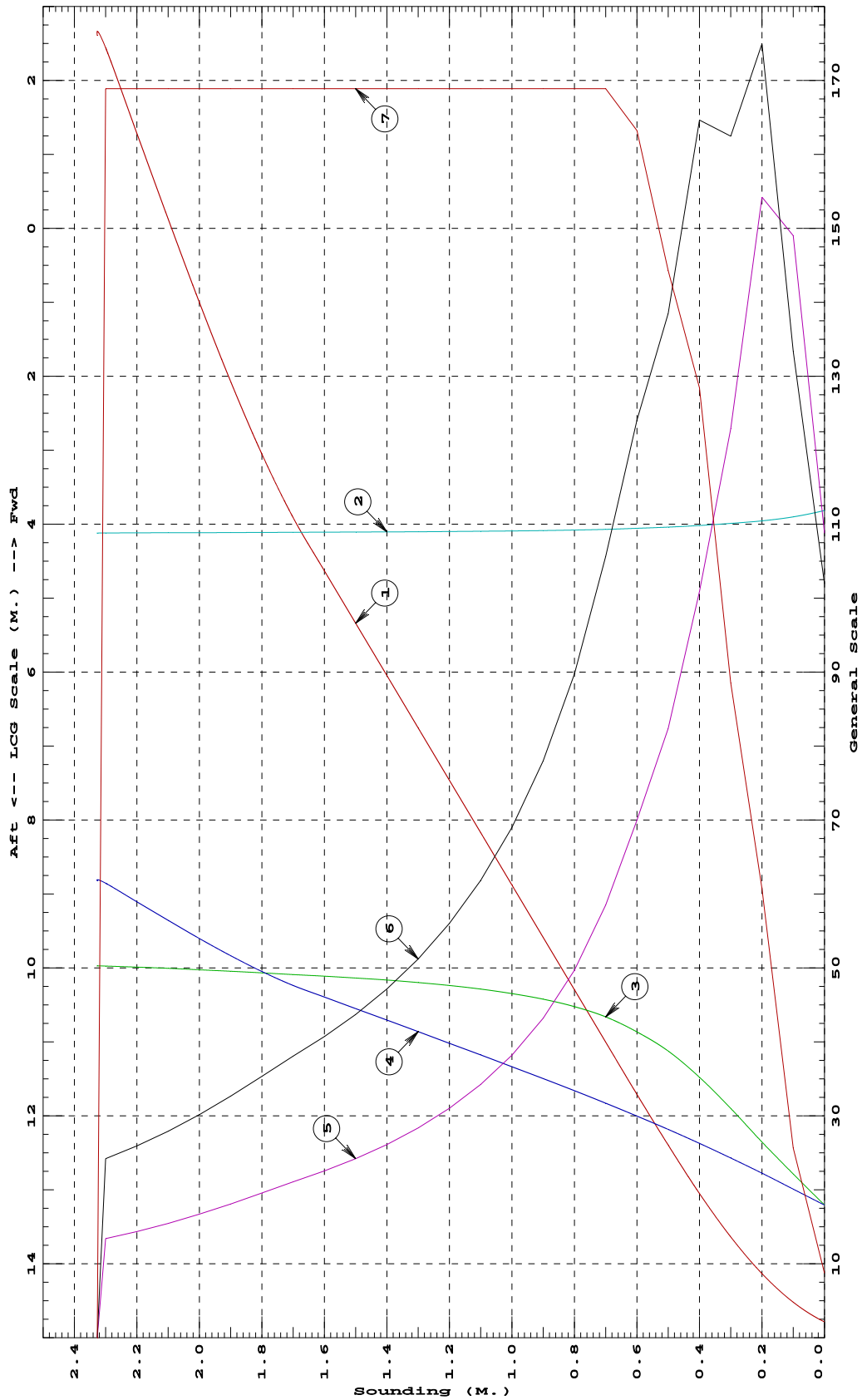
Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	42		0.04	3.815a	0.359s	0.358	0.54	0.04
100	94		0.10	3.902a	0.443s	0.402	0.75	0.13
200	169		0.17	3.954a	0.529s	0.445	0.77	0.30
300	266		0.27	3.989a	0.620s	0.486	0.61	0.44
400	381		0.39	4.017a	0.704s	0.525	0.50	0.64
500	508		0.52	4.039a	0.775s	0.563	0.41	0.72
600	642		0.66	4.056a	0.827s	0.599	0.35	0.82
700	780		0.80	4.069a	0.868s	0.634	0.29	0.84
800	918		0.94	4.079a	0.895s	0.668	0.25	0.84
900	1056		1.08	4.086a	0.915s	0.701	0.22	0.84
1000	1194		1.22	4.091a	0.931s	0.733	0.19	0.84
1100	1332		1.37	4.096a	0.943s	0.765	0.17	0.84
1200	1471		1.51	4.099a	0.952s	0.796	0.16	0.84
1300	1609		1.65	4.102a	0.960s	0.828	0.14	0.84
1400	1747		1.79	4.104a	0.967s	0.859	0.13	0.84
1500	1885		1.93	4.106a	0.973s	0.890	0.12	0.84
1600	2023		2.07	4.108a	0.978s	0.921	0.11	0.84
1700	2164		2.22	4.110a	0.982s	0.953	0.11	0.84
1800	2331		2.39	4.111a	0.987s	0.990	0.10	0.84
1900	2523		2.59	4.113a	0.991s	1.033	0.09	0.84
2000	2731		2.80	4.115a	0.995s	1.080	0.08	0.84
2100	2952		3.03	4.116a	0.999s	1.129	0.08	0.84
2200	3177		3.26	4.117a	1.002s	1.179	0.07	0.84
2300	3403		3.49	4.118a	1.005s	1.229	0.07	0.84
2327	3435		3.52	4.120a	1.005s	1.236		

Soundings in mm.-----Other distances in METERS.-----

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

OILY WATER TANK - STARBOARD

OILY\_WTR.S  
TANK CHARACTERISTICS at 1.18 degrees FWD TRIM



- 1 Weight 1=.02 MT  
 2 LCG (see top scale)  
 3 TCG 1=.02 M.  
 4 VCG 1=.02 M.  
 5 GML 1=.005 M.  
 6 GMT 1=.01 M.  
 7 FSMT 1=.005 M.MT

OILY WATER Specific Gravity = 1.025

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

WASTE OIL TANK - PORT

## TANK CHARACTERISTICS

Trim: Fwd 0.500/24.200, No Heel

Tank: WASTE\_OIL.P, Contents: WASTE OIL at 0.924 Specific Gravity

Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	44		0.04	3.820a	0.364p	0.361	0.55	0.04
100	110		0.10	3.918a	0.460p	0.412	0.88	0.16
200	207		0.19	3.970a	0.568p	0.462	0.70	0.32
300	330		0.31	4.006a	0.669p	0.509	0.55	0.49
400	476		0.44	4.034a	0.760p	0.554	0.43	0.63
500	632		0.58	4.055a	0.824p	0.597	0.35	0.73
600	794		0.73	4.070a	0.871p	0.638	0.29	0.76
700	956		0.88	4.081a	0.901p	0.677	0.24	0.76
800	1118		1.03	4.088a	0.923p	0.715	0.20	0.76
900	1280		1.18	4.094a	0.938p	0.752	0.18	0.76
1000	1442		1.33	4.098a	0.951p	0.790	0.16	0.76
1100	1604		1.48	4.102a	0.960p	0.826	0.14	0.76
1200	1766		1.63	4.105a	0.968p	0.863	0.13	0.76
1300	1928		1.78	4.107a	0.974p	0.900	0.12	0.76
1400	2091		1.93	4.109a	0.980p	0.936	0.11	0.76
1500	2267		2.09	4.111a	0.985p	0.976	0.10	0.76
1600	2465		2.28	4.113a	0.990p	1.020	0.09	0.76
1700	2678		2.47	4.114a	0.994p	1.068	0.09	0.76
1800	2901		2.68	4.116a	0.998p	1.117	0.08	0.76
1900	3127		2.89	4.117a	1.001p	1.168	0.07	0.76
2000	3353		3.10	4.118a	1.004p	1.218	0.07	0.76
2100	3435		3.17	4.120a	1.005p	1.236		

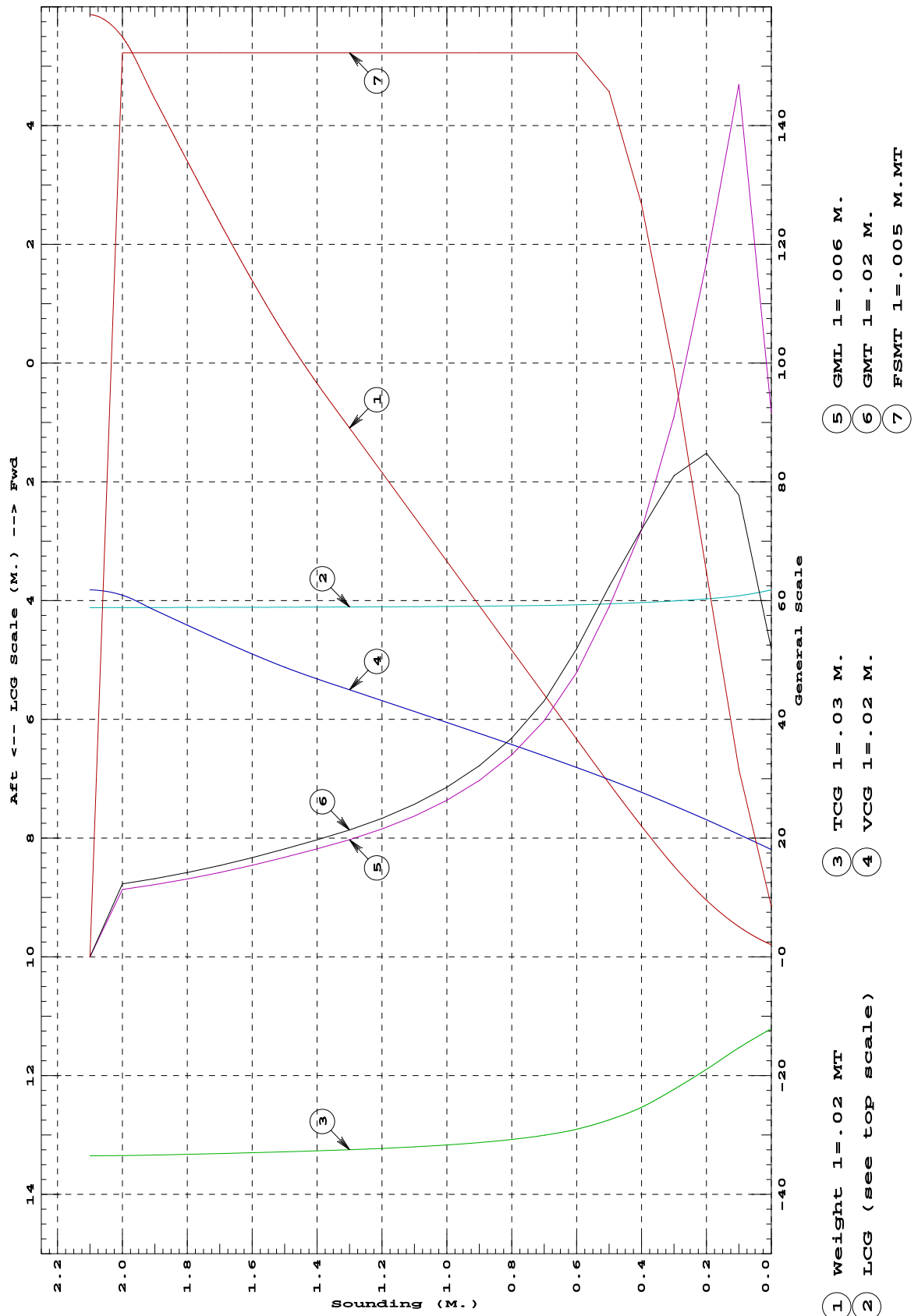
Soundings in mm.-----Other distances in METERS.-----



GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

WASTE OIL TANK - PORT

WASTE\_OIL.P  
TANK CHARACTERISTICS at 1.18 degrees FWD TRIM



WASTE OIL Specific Gravity = 0.924

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

## FRESH WATER STORAGE TANK - PORT

## TANK CHARACTERISTICS

Trim: Fwd 0.500/24.200, No Heel

Tank: FRESH\_WATER.P, Contents: FRESH WATER at 1.000 Specific Gravity

Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	8		0.01	6.021f	2.282p	0.696	0.98	0.00
100	18		0.02	6.095f	2.308p	0.725	1.11	0.02
200	31		0.03	6.139f	2.334p	0.753	1.31	0.01
300	49		0.05	6.190f	2.358p	0.781	1.44	0.02
400	73		0.07	6.238f	2.382p	0.809	1.56	0.03
500	102		0.10	6.278f	2.407p	0.837	1.65	0.04
600	137		0.14	6.320f	2.431p	0.864	1.71	0.06
700	180		0.18	6.364f	2.455p	0.892	1.78	0.09
800	229		0.23	6.399f	2.479p	0.920	1.79	0.11
900	285		0.28	6.431f	2.504p	0.947	1.74	0.15
1000	347		0.35	6.461f	2.528p	0.974	1.67	0.19
1100	416		0.42	6.487f	2.552p	1.000	1.58	0.23
1200	493		0.49	6.511f	2.576p	1.027	1.50	0.28
1300	596		0.60	6.537f	2.605p	1.060	1.40	0.35
1400	746		0.75	6.566f	2.643p	1.102	1.26	0.44
1500	943		0.94	6.595f	2.686p	1.151	1.12	0.53
1600	1186		1.19	6.623f	2.728p	1.205	0.98	0.63
1700	1462		1.46	6.648f	2.766p	1.261	0.86	0.73
1800	1754		1.75	6.667f	2.801p	1.315	0.76	0.84
1900	2061		2.06	6.682f	2.832p	1.368	0.68	0.96
2000	2383		2.38	6.694f	2.862p	1.422	0.62	1.09
2100	2720		2.72	6.705f	2.890p	1.474	0.57	1.24
2200	3072		3.07	6.714f	2.917p	1.527	0.53	1.40
2300	3439		3.44	6.722f	2.944p	1.580	0.49	1.54
2400	3819		3.82	6.729f	2.969p	1.633	0.46	1.66
2500	4210		4.21	6.736f	2.993p	1.685	0.43	1.77
2600	4609		4.61	6.742f	3.015p	1.737	0.40	1.86
2700	5016		5.02	6.748f	3.035p	1.789	0.37	1.95
2800	5431		5.43	6.753f	3.054p	1.840	0.35	2.05
2900	5851		5.85	6.758f	3.071p	1.891	0.33	2.14
3000	6279		6.28	6.762f	3.088p	1.941	0.31	2.24
3100	6714		6.71	6.766f	3.104p	1.992	0.30	2.34
3200	7155		7.16	6.769f	3.119p	2.042	0.28	2.45
3300	7603		7.60	6.772f	3.134p	2.092	0.27	2.55
3400	8057		8.06	6.776f	3.148p	2.142	0.26	2.65
3500	8518		8.52	6.778f	3.162p	2.193	0.25	2.74
3600	8984		8.98	6.781f	3.175p	2.243	0.24	2.84
3700	9457		9.46	6.784f	3.188p	2.293	0.23	2.94
3800	9951		9.95	6.786f	3.201p	2.344	0.22	3.04
3900	10479		10.48	6.789f	3.214p	2.399	0.21	3.15
4000	11029		11.03	6.791f	3.227p	2.455	0.21	3.26
4100	11596		11.60	6.793f	3.240p	2.512	0.20	3.38

Soundings in mm.-----Other distances in METERS.-----

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

FRESH WATER STORAGE TANK - PORT

## TANK CHARACTERISTICS, continued

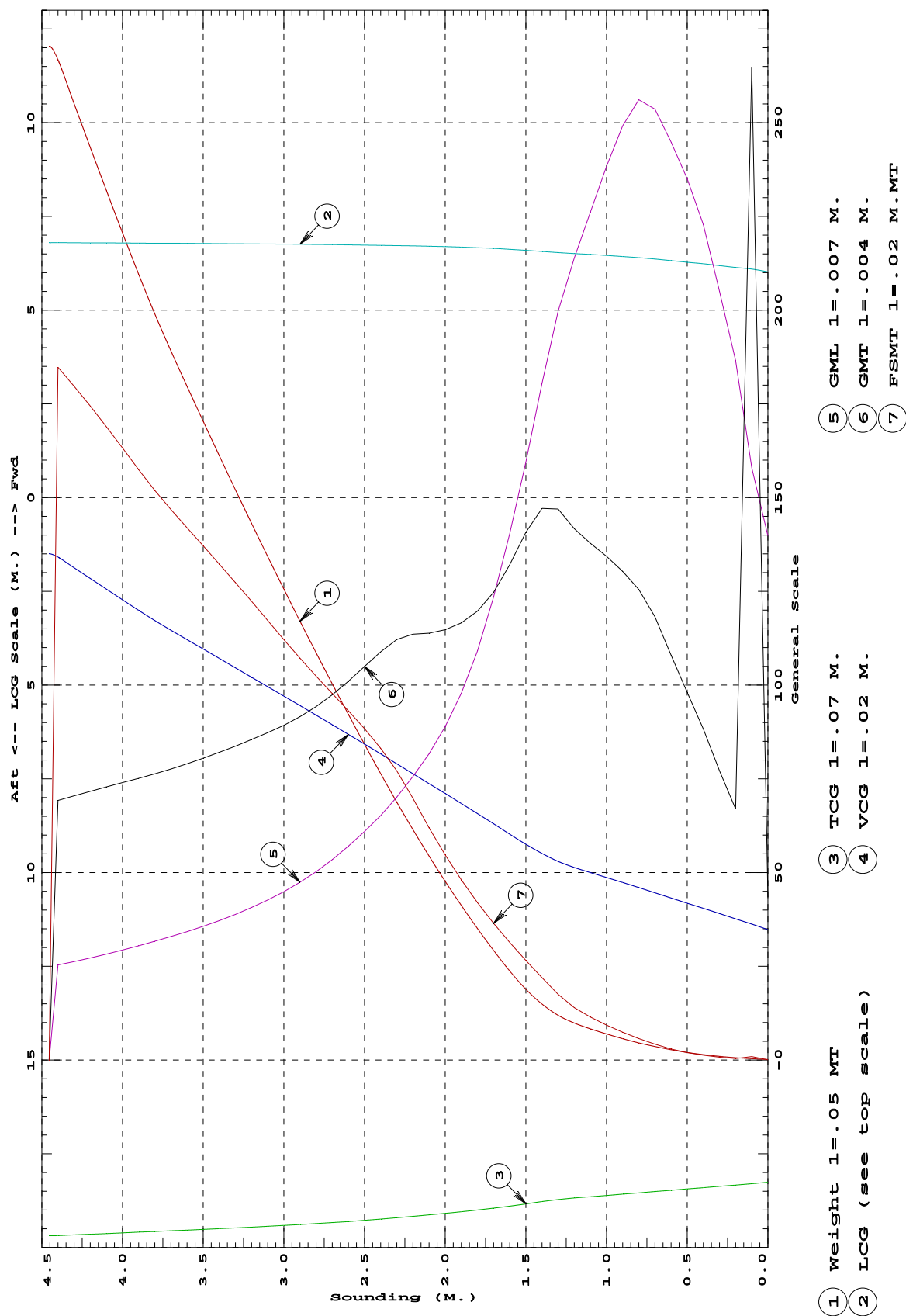
Trim: Fwd 0.500/24.200, No Heel

Tank: FRESH\_WATER.P, Contents: FRESH WATER at 1.000 Specific Gravity

Snding	Volume		Weight		Center of Gravity			FSM
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	m.-MT
4200	12171		12.17	6.796f	3.252p	2.569	0.19	3.49
4300	12753		12.75	6.798f	3.265p	2.626	0.18	3.59
4400	13340		13.34	6.800f	3.276p	2.683	0.18	3.70
4454	13520		13.52	6.797f	3.280p	2.700		

Soundings in mm.-----Other distances in METERS.-----

FRESH\_WATER.P  
TANK CHARACTERISTICS at 1.18 degrees FWD TRIM



FRESH WATER Specific Gravity = 1.000

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

## FRESH WATER STORAGE TANK - STARBOARD

## TANK CHARACTERISTICS

Trim: Fwd 0.500/24.200, No Heel

Tank: FRESH\_WATER.S, Contents: FRESH WATER at 1.000 Specific Gravity

Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	8		0.01	6.021f	2.282s	0.696	0.98	0.00
100	18		0.02	6.095f	2.308s	0.725	1.11	0.02
200	31		0.03	6.139f	2.334s	0.753	1.31	0.01
300	49		0.05	6.190f	2.358s	0.781	1.44	0.02
400	73		0.07	6.238f	2.382s	0.809	1.56	0.03
500	102		0.10	6.278f	2.407s	0.837	1.65	0.04
600	137		0.14	6.320f	2.431s	0.864	1.71	0.06
700	180		0.18	6.364f	2.455s	0.892	1.78	0.09
800	229		0.23	6.399f	2.479s	0.920	1.79	0.11
900	285		0.28	6.431f	2.504s	0.947	1.74	0.15
1000	347		0.35	6.461f	2.528s	0.974	1.67	0.19
1100	416		0.42	6.487f	2.552s	1.000	1.58	0.23
1200	493		0.49	6.511f	2.576s	1.027	1.50	0.28
1300	596		0.60	6.537f	2.605s	1.060	1.40	0.35
1400	746		0.75	6.566f	2.643s	1.102	1.26	0.44
1500	943		0.94	6.595f	2.686s	1.151	1.12	0.53
1600	1186		1.19	6.623f	2.728s	1.205	0.98	0.63
1700	1462		1.46	6.648f	2.766s	1.261	0.86	0.73
1800	1754		1.75	6.667f	2.801s	1.315	0.76	0.84
1900	2061		2.06	6.682f	2.832s	1.368	0.68	0.96
2000	2383		2.38	6.694f	2.862s	1.422	0.62	1.09
2100	2720		2.72	6.705f	2.890s	1.474	0.57	1.24
2200	3072		3.07	6.714f	2.917s	1.527	0.53	1.40
2300	3439		3.44	6.722f	2.944s	1.580	0.49	1.54
2400	3819		3.82	6.729f	2.969s	1.633	0.46	1.66
2500	4210		4.21	6.736f	2.993s	1.685	0.43	1.77
2600	4609		4.61	6.742f	3.015s	1.737	0.40	1.86
2700	5016		5.02	6.748f	3.035s	1.789	0.37	1.95
2800	5431		5.43	6.753f	3.054s	1.840	0.35	2.05
2900	5851		5.85	6.758f	3.071s	1.891	0.33	2.14
3000	6279		6.28	6.762f	3.088s	1.941	0.31	2.24
3100	6714		6.71	6.766f	3.104s	1.992	0.30	2.34
3200	7155		7.16	6.769f	3.119s	2.042	0.28	2.45
3300	7603		7.60	6.772f	3.134s	2.092	0.27	2.55
3400	8057		8.06	6.776f	3.148s	2.142	0.26	2.65
3500	8518		8.52	6.778f	3.162s	2.193	0.25	2.74
3600	8984		8.98	6.781f	3.175s	2.243	0.24	2.84
3700	9457		9.46	6.784f	3.188s	2.293	0.23	2.94
3800	9951		9.95	6.786f	3.201s	2.344	0.22	3.04
3900	10479		10.48	6.789f	3.214s	2.399	0.21	3.15
4000	11029		11.03	6.791f	3.227s	2.455	0.21	3.26
4100	11596		11.60	6.793f	3.240s	2.512	0.20	3.38

Soundings in mm.-----Other distances in METERS.-----

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

FRESH WATER STORAGE TANK - STARBOARD

## TANK CHARACTERISTICS, continued

Trim: Fwd 0.500/24.200, No Heel

Tank: FRESH\_WATER.S, Contents: FRESH WATER at 1.000 Specific Gravity

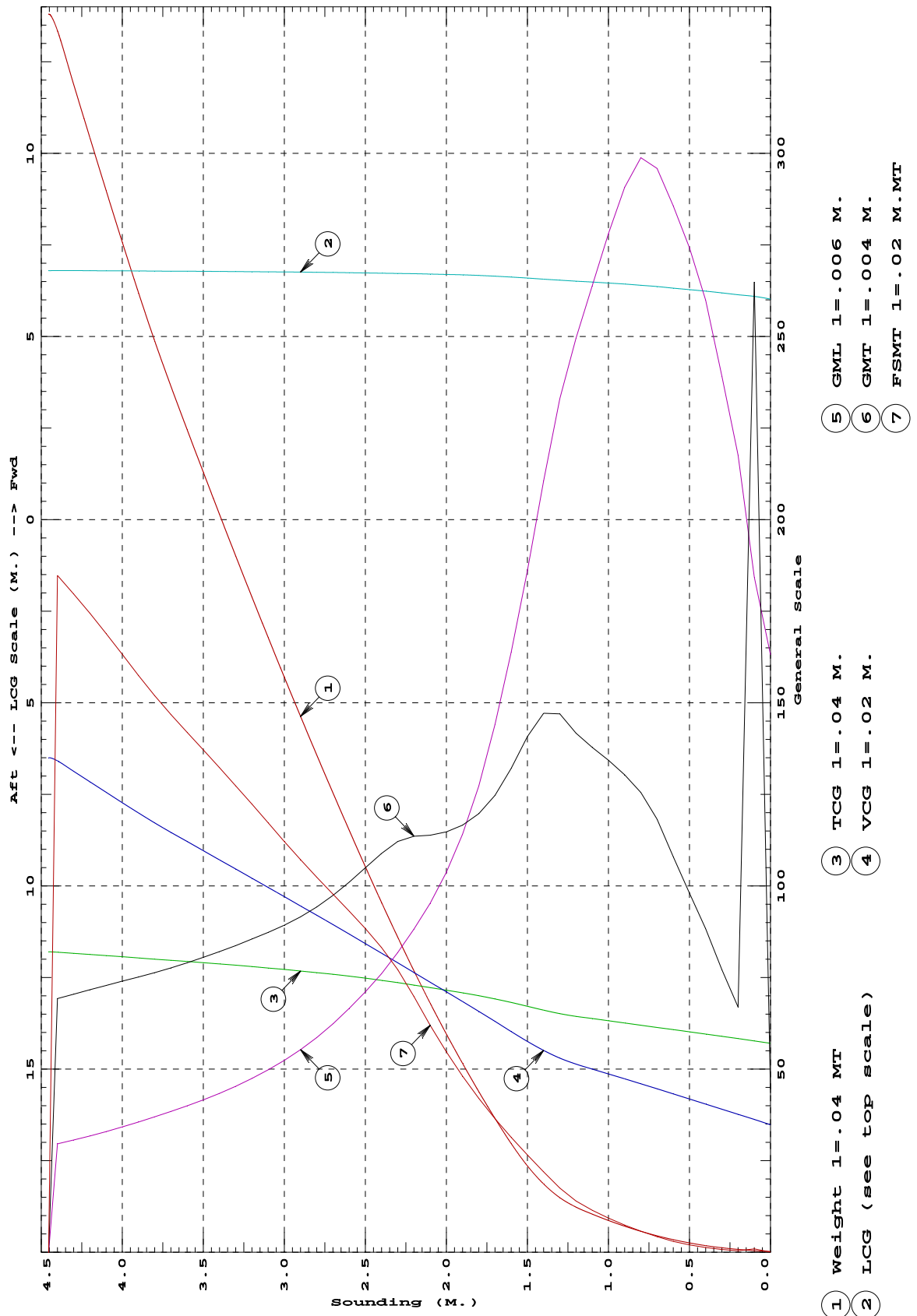
Snding	Volume		Weight		Center of Gravity			FSM
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	m.-MT
4200	12171		12.17	6.796f	3.252s	2.569	0.19	3.49
4300	12753		12.75	6.798f	3.265s	2.626	0.18	3.59
4400	13340		13.34	6.800f	3.276s	2.683	0.18	3.70
4454	13520		13.52	6.797f	3.280s	2.700		

Soundings in mm.-----Other distances in METERS.-----

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

FRESH WATER STORAGE TANK - STARBOARD

FRESH\_WATER.S  
TANK CHARACTERISTICS at 1.18 degrees FWD TRIM



FRESH WATER Specific Gravity = 1.000

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

## FIRE-FIGHTING FOAM TANK - CENTRE

## TANK CHARACTERISTICS

Trim: Fwd 0.500/24.200, No Heel

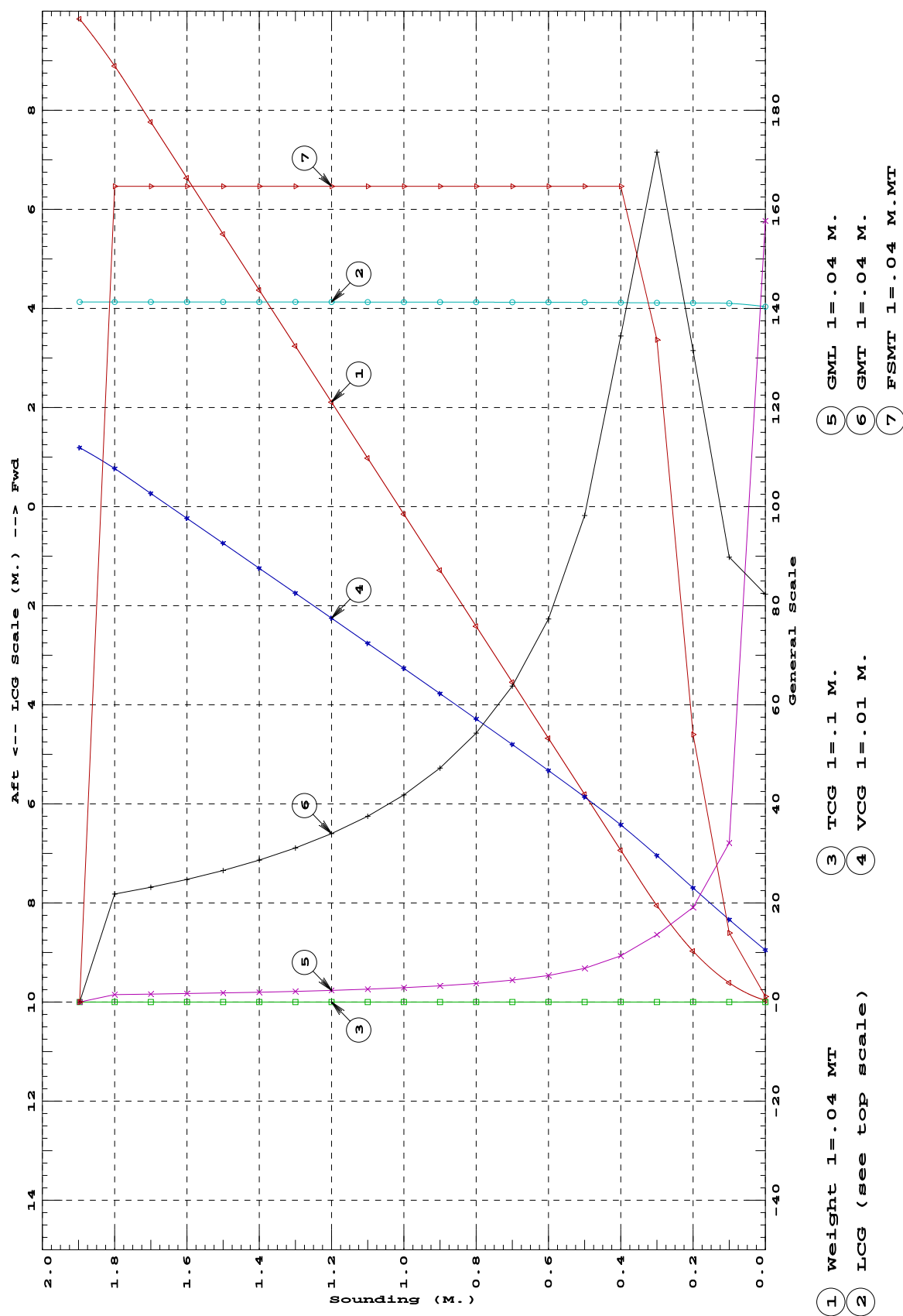
Tank: FF\_FOAM.C, Contents: FOAM at 1.000 Specific Gravity

Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	14		0.01	4.035f	0.000	0.105	6.31	0.04
100	155		0.16	4.104f	0.000	0.166	1.28	0.56
200	411		0.41	4.110f	0.000	0.230	0.76	2.16
300	779		0.78	4.113f	0.000	0.295	0.54	5.35
400	1225		1.22	4.118f	0.000	0.358	0.37	6.59
500	1677		1.68	4.122f	0.000	0.414	0.27	6.59
600	2129		2.13	4.124f	0.000	0.467	0.21	6.59
700	2582		2.58	4.126f	0.000	0.520	0.18	6.59
800	3034		3.03	4.127f	0.000	0.571	0.15	6.59
900	3486		3.49	4.128f	0.000	0.622	0.13	6.59
1000	3939		3.94	4.128f	0.000	0.673	0.12	6.59
1100	4391		4.39	4.129f	0.000	0.724	0.10	6.59
1200	4843		4.84	4.129f	0.000	0.775	0.09	6.59
1300	5296		5.30	4.129f	0.000	0.825	0.09	6.59
1400	5748		5.75	4.130f	0.000	0.876	0.08	6.59
1500	6200		6.20	4.130f	0.000	0.926	0.07	6.59
1600	6653		6.65	4.130f	0.000	0.976	0.07	6.59
1700	7105		7.11	4.130f	0.000	1.027	0.06	6.59
1800	7557		7.56	4.130f	0.000	1.077	0.06	6.59
1897	7937		7.94	4.129f	0.000	1.119		

Soundings in mm.-----Other distances in METERS.-----



FF\_FOAM.C  
TANK CHARACTERISTICS at 1.18 degrees FWD TRIM



FOAM Specific Gravity = 1.000

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

SEWAGE TANK - CENTRE

## TANK CHARACTERISTICS

Trim: Fwd 0.500/24.200, No Heel

Tank: SEWAGE.C, Contents: SEWAGE at 1.000 Specific Gravity

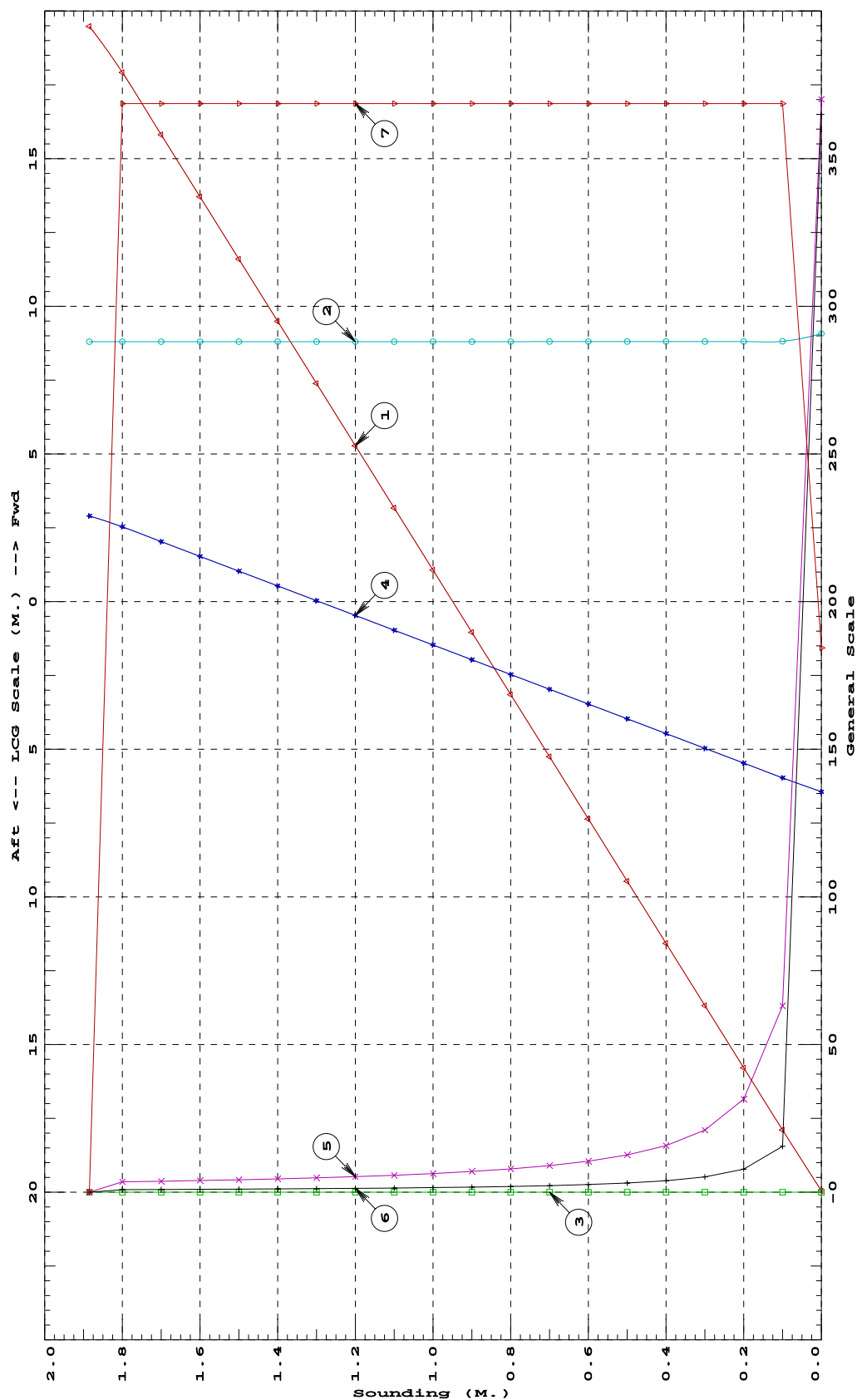
Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	2		0.00	9.078f	0.000	1.356	3.33	0.07
100	105		0.11	8.814f	0.000	1.403	0.57	0.15
200	211		0.21	8.808f	0.000	1.453	0.28	0.15
300	316		0.32	8.806f	0.000	1.503	0.19	0.15
400	421		0.42	8.805f	0.000	1.553	0.14	0.15
500	527		0.53	8.805f	0.000	1.603	0.11	0.15
600	632		0.63	8.804f	0.000	1.653	0.09	0.15
700	737		0.74	8.804f	0.000	1.703	0.08	0.15
800	843		0.84	8.804f	0.000	1.753	0.07	0.15
900	948		0.95	8.804f	0.000	1.803	0.06	0.15
1000	1053		1.05	8.804f	0.000	1.853	0.06	0.15
1100	1159		1.16	8.804f	0.000	1.903	0.05	0.15
1200	1264		1.26	8.803f	0.000	1.953	0.05	0.15
1300	1369		1.37	8.803f	0.000	2.003	0.04	0.15
1400	1475		1.47	8.803f	0.000	2.053	0.04	0.15
1500	1580		1.58	8.803f	0.000	2.103	0.04	0.15
1600	1685		1.69	8.803f	0.000	2.153	0.04	0.15
1700	1791		1.79	8.803f	0.000	2.203	0.03	0.15
1800	1896		1.90	8.803f	0.000	2.253	0.03	0.15
1885	1974		1.97	8.802f	0.000	2.290		

Soundings in mm.-----Other distances in METERS.-----

SEWAGE.C Reference Point: Long.= 8.802f Trans.= 0.000 Vert.= 1.353

(Zero Sounding is at the Reference Point.)

SEWAGE.C  
TANK CHARACTERISTICS at 1.18 degrees FWD TRIM



SEWAGE Specific Gravity = 1.000

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

FUEL OIL OVERFLOW TANK - PORT

## TANK CHARACTERISTICS

Trim: Fwd 0.500/24.200, No Heel

Tank: FO\_OF.P, Contents: FUEL OIL at 0.870 Specific Gravity

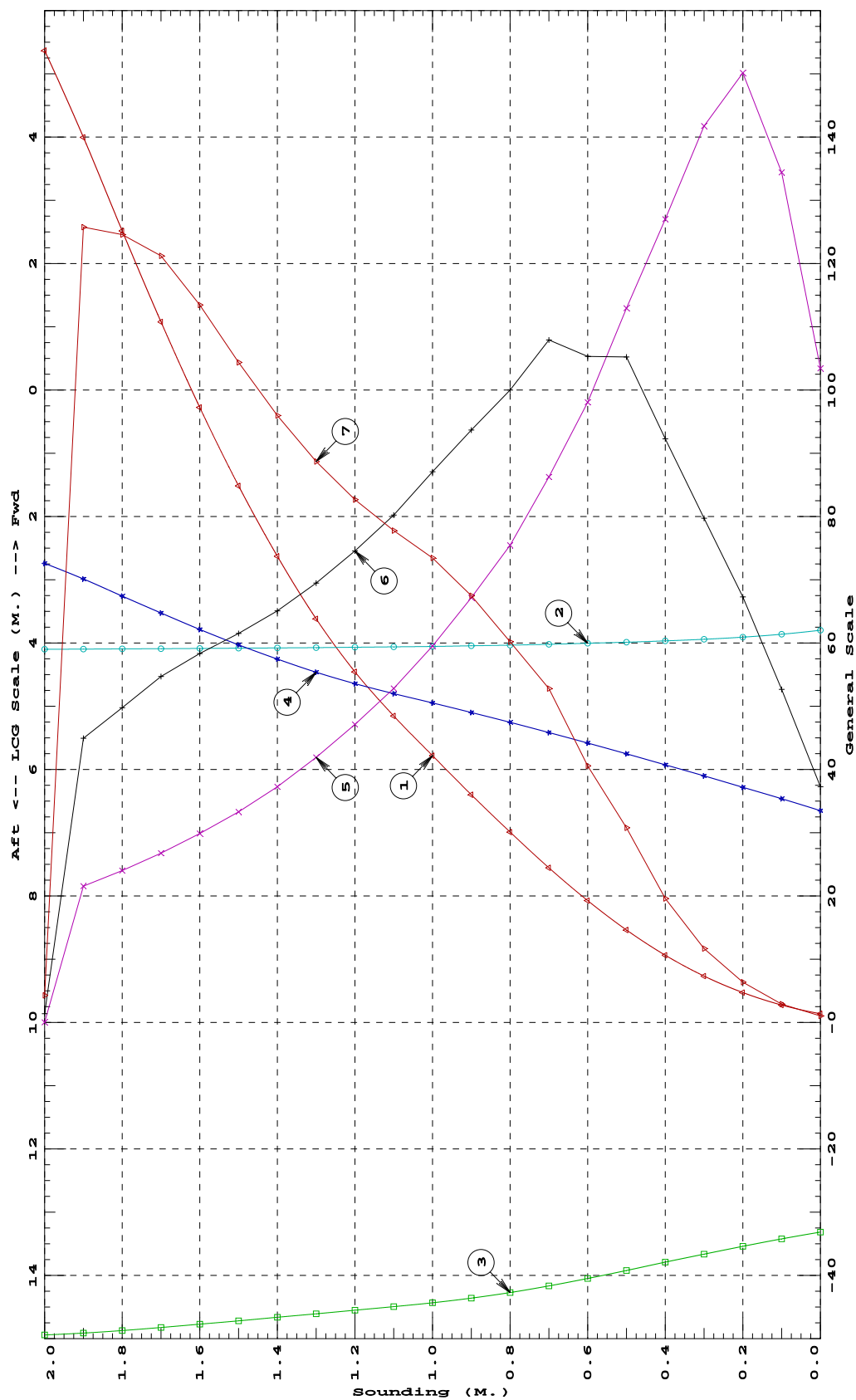
Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	32		0.03	3.798a	2.320p	0.670	0.52	0.02
100	63		0.06	3.861a	2.395p	0.708	0.67	0.06
200	109		0.09	3.908a	2.478p	0.744	0.75	0.13
300	168		0.15	3.940a	2.564p	0.780	0.71	0.23
400	244		0.21	3.967a	2.653p	0.815	0.64	0.39
500	336		0.29	3.988a	2.745p	0.850	0.56	0.62
600	443		0.39	4.005a	2.834p	0.884	0.49	0.81
700	562		0.49	4.020a	2.916p	0.917	0.43	1.06
800	692		0.60	4.033a	2.990p	0.949	0.38	1.20
900	828		0.72	4.044a	3.051p	0.980	0.34	1.35
1000	970		0.84	4.054a	3.103p	1.010	0.30	1.47
1100	1114		0.97	4.061a	3.146p	1.040	0.26	1.56
1200	1274		1.11	4.067a	3.185p	1.071	0.24	1.65
1300	1467		1.28	4.073a	3.224p	1.108	0.21	1.77
1400	1695		1.47	4.078a	3.264p	1.149	0.19	1.92
1500	1951		1.70	4.083a	3.302p	1.194	0.17	2.09
1600	2235		1.94	4.086a	3.340p	1.243	0.15	2.27
1700	2547		2.22	4.090a	3.377p	1.295	0.13	2.42
1800	2877		2.50	4.093a	3.410p	1.348	0.12	2.49
1900	3218		2.80	4.096a	3.438p	1.402	0.11	2.52
2000	3533		3.07	4.100a	3.459p	1.452	0.00	0.09

Soundings in mm.-----Other distances in METERS.-----

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

FUEL OIL OVERFLOW TANK - PORT

FO\_OF.P  
TANK CHARACTERISTICS at 1.18 degrees FWD TRIM



- 1 Weight 1=.02 MT  
 2 LCG (see top scale)  
 3 TCG 1=.07 M.  
 4 VCG 1=.02 M.  
 5 GML 1=.005 M.  
 6 GMT 1=.02 M.  
 7 FSMT 1=.02 M.MT

FUEL OIL Specific Gravity = 0.870

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

FOREPEAK - CENTRE

## TANK CHARACTERISTICS

Trim: Fwd 0.500/24.200, No Heel

Tank: FOREPEAK.C, Contents: FRESH WATER at 1.000 Specific Gravity

Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
0	0		0.00					
100	2		0.00	11.860f	0.000	1.383	0.01	0.00
200	17		0.02	11.913f	0.000	1.445	0.03	0.01
300	51		0.05	11.966f	0.000	1.509	0.05	0.02
400	107		0.11	12.015f	0.000	1.581	0.14	0.06
500	177		0.18	12.048f	0.000	1.665	0.17	0.12
600	272		0.27	12.083f	0.000	1.740	0.20	0.19
700	395		0.40	12.119f	0.000	1.812	0.22	0.30
800	550		0.55	12.156f	0.000	1.883	0.24	0.45
900	732		0.73	12.187f	0.000	1.955	0.25	0.62
1000	940		0.94	12.212f	0.000	2.029	0.26	0.85
1100	1181		1.18	12.238f	0.000	2.101	0.28	1.14
1200	1459		1.46	12.265f	0.000	2.174	0.29	1.48
1300	1776		1.78	12.292f	0.000	2.245	0.30	1.87
1400	2132		2.13	12.319f	0.000	2.317	0.32	2.31
1500	2521		2.52	12.344f	0.000	2.388	0.31	2.79
1600	2940		2.94	12.365f	0.000	2.459	0.31	3.37
1700	3398		3.40	12.386f	0.000	2.531	0.32	4.03
1800	3898		3.90	12.408f	0.000	2.602	0.33	4.79
1900	4443		4.44	12.429f	0.000	2.673	0.34	5.65
2000	5035		5.04	12.452f	0.000	2.745	0.35	6.62
2100	5677		5.68	12.474f	0.000	2.817	0.37	7.70
2200	6369		6.37	12.498f	0.000	2.889	0.38	8.86
2300	7090		7.09	12.517f	0.000	2.960	0.36	10.01
2400	7857		7.86	12.536f	0.000	3.032	0.37	11.31
2500	8674		8.67	12.555f	0.000	3.103	0.38	12.69
2600	9543		9.54	12.575f	0.000	3.175	0.39	14.22
2700	10464		10.46	12.596f	0.000	3.247	0.40	15.89
2800	11441		11.44	12.617f	0.000	3.318	0.41	17.71
2900	12476		12.48	12.638f	0.000	3.390	0.42	19.70
3000	13569		13.57	12.659f	0.000	3.462	0.43	21.85
3100	14703		14.70	12.679f	0.000	3.534	0.41	23.98
3200	15884		15.88	12.697f	0.000	3.605	0.41	26.33
3300	17126		17.13	12.716f	0.000	3.677	0.42	28.84
3400	18428		18.43	12.736f	0.000	3.749	0.44	31.53
3500	19793		19.79	12.755f	0.000	3.821	0.45	34.39
3600	21222		21.22	12.775f	0.000	3.893	0.46	37.45
3700	22715		22.71	12.795f	0.000	3.966	0.47	40.74
3800	24276		24.28	12.816f	0.000	4.038	0.48	44.27
3900	25905		25.91	12.836f	0.000	4.110	0.49	47.95
4000	27592		27.59	12.856f	0.000	4.183	0.45	51.39
4100	29309		29.31	12.874f	0.000	4.254	0.44	55.20

Soundings in mm.-----Other distances in METERS.-----

FOREPEAK.C Reference Point: Long.= 13.475f Trans.= 0.000 Vert.= 1.344  
 (Zero Sounding is at the Reference Point.)

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

FOREPEAK - CENTRE

## TANK CHARACTERISTICS, continued

Trim: Fwd 0.500/24.200, No Heel

Tank: FOREPEAK.C, Contents: FRESH WATER at 1.000 Specific Gravity

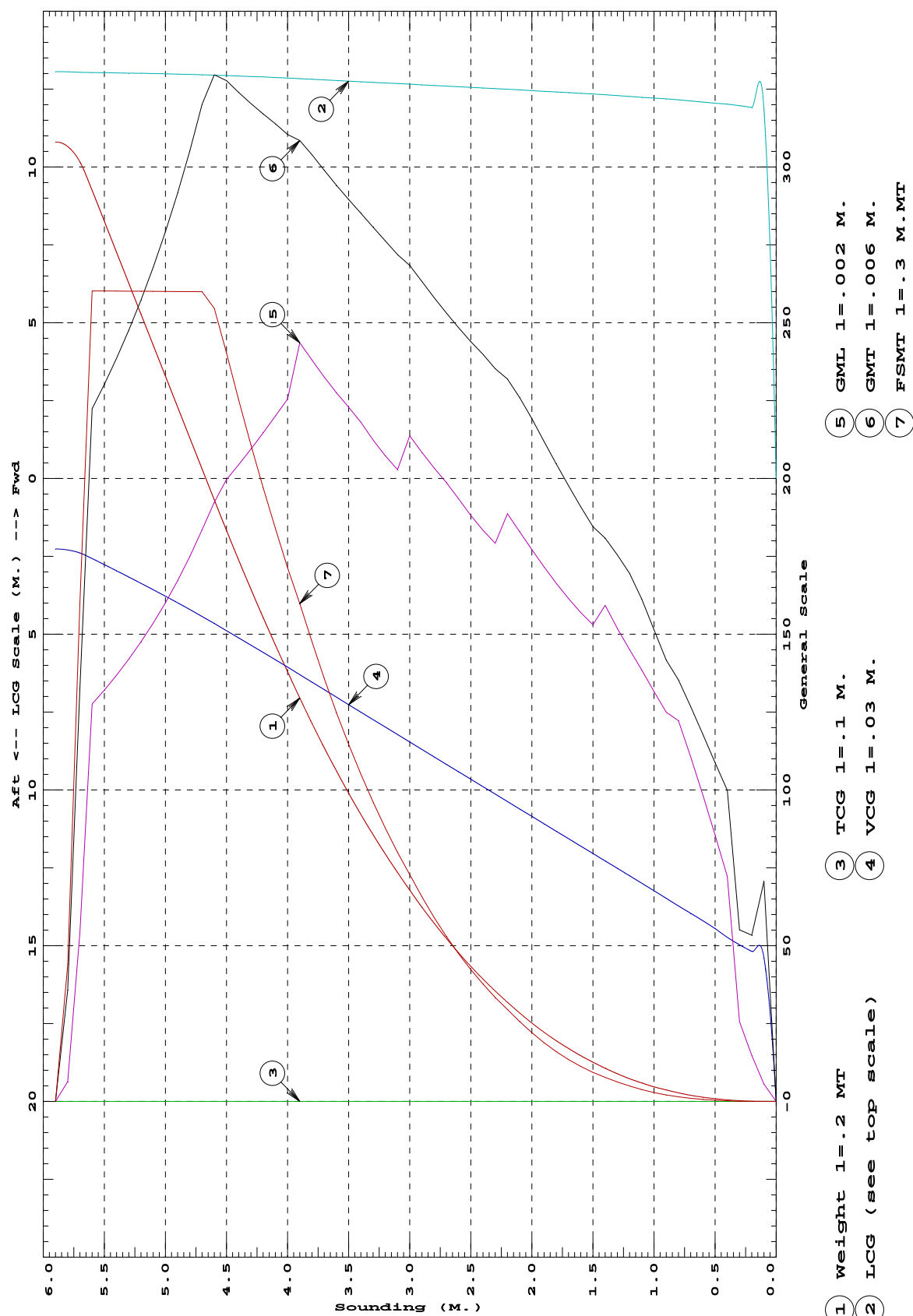
Snding	Volume		Weight		Center of Gravity			FSM m.-MT
	LITERS	METRIC	TON	LCG	TCG	VCG	GML	
4200	31076		31.08	12.890f	0.000	4.324	0.43	59.11
4300	32891		32.89	12.906f	0.000	4.395	0.42	63.22
4400	34754		34.75	12.921f	0.000	4.464	0.41	67.55
4500	36667		36.67	12.935f	0.000	4.534	0.40	72.10
4600	38622		38.62	12.948f	0.000	4.603	0.38	76.38
4700	40607		40.61	12.960f	0.000	4.671	0.37	77.99
4800	42594		42.59	12.971f	0.000	4.737	0.35	78.00
4900	44581		44.58	12.981f	0.000	4.802	0.33	78.01
5000	46569		46.57	12.990f	0.000	4.866	0.32	78.01
5100	48557		48.56	12.999f	0.000	4.928	0.31	78.02
5200	50545		50.54	13.007f	0.000	4.990	0.30	78.03
5300	52533		52.53	13.014f	0.000	5.051	0.28	78.04
5400	54521		54.52	13.020f	0.000	5.111	0.27	78.05
5500	56509		56.51	13.027f	0.000	5.170	0.26	78.06
5600	58498		58.50	13.032f	0.000	5.228	0.26	78.06
5700	60328		60.33	13.040f	0.000	5.282	0.11	48.06
5800	61313		61.31	13.054f	0.000	5.311	0.01	13.17
5900	61592		61.59	13.061f	0.000	5.321	0.00	0.00

Soundings in mm.-----Other distances in METERS.-----

FOREPEAK.C Reference Point: Long.= 13.475f Trans.= 0.000 Vert.= 1.344

(Zero Sounding is at the Reference Point.)

FOREPEAK.C  
TANK CHARACTERISTICS at 1.18 degrees FWD TRIM



FRESH WATER Specific Gravity = 1.000



GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

AFT PEAK - CENTRE

## TANK CHARACTERISTICS

Trim: Fwd 0.500/24.200, No Heel

Tank: AFTPEAK.C, Contents: FRESH WATER at 1.000 Specific Gravity

Snding	Volume	Weight	Center of Gravity			FSM	
	LITERS	METRIC TON	LCG	TCG	VCG		GML
0	1	0.00	12.410a	0.000	2.329	0.03	0.00
100	41	0.04	12.533a	0.000	2.394	0.15	0.10
200	150	0.15	12.600a	0.000	2.468	0.34	0.78
300	348	0.35	12.651a	0.000	2.539	0.38	2.62
400	666	0.67	12.700a	0.000	2.608	0.42	6.59
500	1113	1.11	12.747a	0.000	2.676	0.43	10.58
600	1602	1.60	12.770a	0.000	2.742	0.33	12.67
700	2188	2.19	12.799a	0.000	2.810	0.36	16.82
800	2873	2.87	12.832a	0.000	2.876	0.38	21.47
900	3664	3.66	12.867a	0.000	2.942	0.40	27.06
1000	4563	4.56	12.903a	0.000	3.008	0.43	33.34
1100	5522	5.52	12.931a	0.000	3.074	0.37	38.00
1200	6590	6.59	12.961a	0.000	3.141	0.42	45.32
1300	7780	7.78	12.993a	0.000	3.209	0.45	53.62
1400	9093	9.09	13.028a	0.000	3.277	0.48	62.50
1500	10533	10.53	13.064a	0.000	3.345	0.51	72.96
1600	12060	12.06	13.095a	0.000	3.412	0.46	80.11
1700	13697	13.70	13.127a	0.000	3.480	0.51	90.57
1800	15472	15.47	13.161a	0.000	3.549	0.54	100.90
1900	17371	17.37	13.196a	0.000	3.617	0.57	109.95
2000	19389	19.39	13.233a	0.000	3.685	0.60	117.40
2100	21462	21.46	13.267a	0.000	3.751	0.49	114.35
2200	23484	23.48	13.291a	0.000	3.813	0.45	114.35
2300	25506	25.51	13.312a	0.000	3.873	0.41	114.35
2400	27528	27.53	13.329a	0.000	3.932	0.38	114.35
2500	29550	29.55	13.344a	0.000	3.989	0.36	114.36
2600	31573	31.57	13.357a	0.000	4.046	0.33	114.36
2700	33595	33.59	13.369a	0.000	4.102	0.31	114.36
2800	35617	35.62	13.379a	0.000	4.157	0.30	114.36
2900	37639	37.64	13.388a	0.000	4.211	0.28	114.36
3000	39662	39.66	13.396a	0.000	4.265	0.27	114.36
3100	41684	41.68	13.404a	0.000	4.319	0.25	114.36
3200	43636	43.64	13.412a	0.000	4.371	0.13	83.62
3300	44666	44.67	13.428a	0.000	4.398	0.01	36.29
3400	44867	44.87	13.433a	0.000	4.406	0.00	0.00

Soundings in mm.-----Other distances in METERS.-----

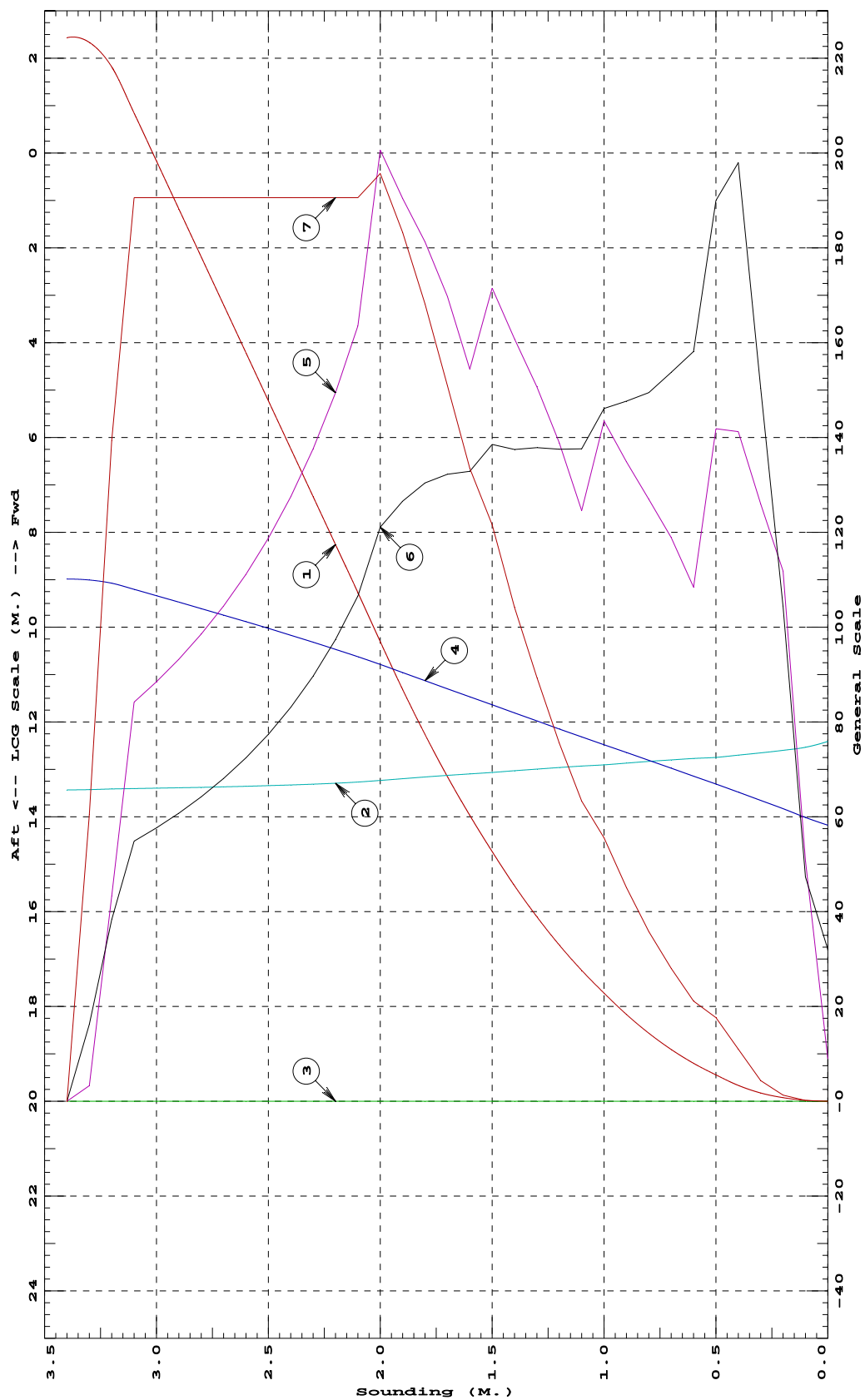
AFTPEAK.C Reference Point: Long.= 13.750a Trans.= 0.000 Vert.= 2.313

(Zero Sounding is at the Reference Point.)

GHS 11.56 SMIT-REBRAS RAMPARTS 3000 TUG - SMIT CRAO (HULL 323)

AFT PEAK - CENTRE

AFTPEAK.C  
TANK CHARACTERISTICS at 1.18 degrees FWD TRIM



- 1 Weight 1=.2 MT  
 2 LCG (see top scale)  
 3 TCG 1=.1 M.  
 4 VCG 1=.04 M.  
 5 GML 1=.003 M.  
 6 GMT 1=.05 M.  
 7 FSMT 1=.6 M.MT

FRESH WATER Specific Gravity = 1.000