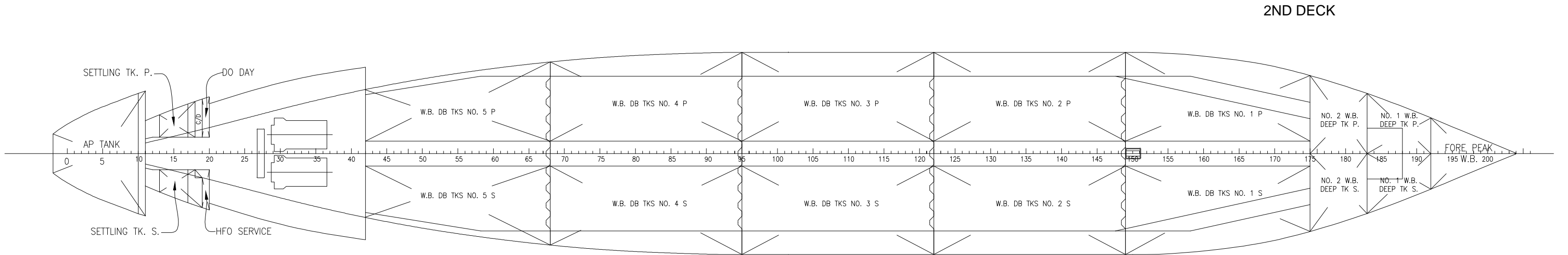
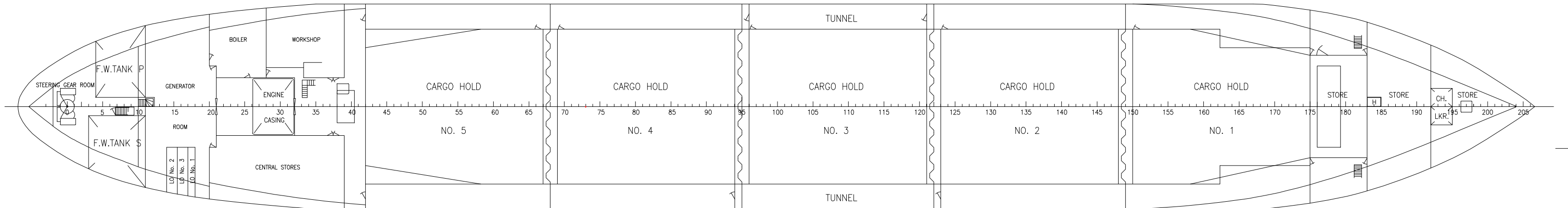
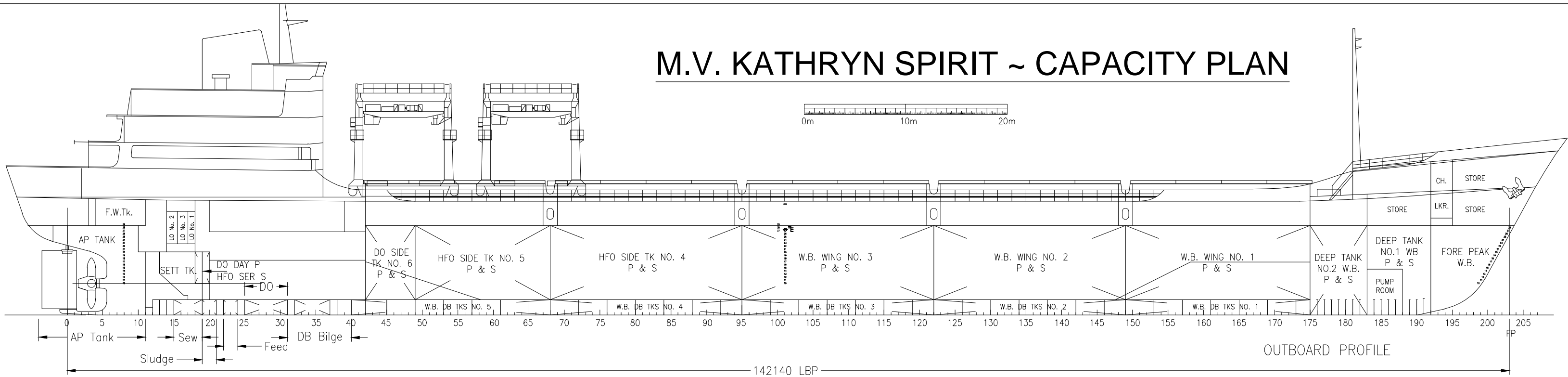


# M.V. KATHRYN SPIRIT ~ CAPACITY PLAN



## CARGO HOLDS

Cargo Tanks	Frames	Capacity		Centre of Gravity		Max. cargo @ 1.39 m³/ft (Tonnes)
		(m³)	(ft³)	Ab. Base (m)	Fwd AP (m)	
No. 1 Cargo Hold	149 ~ 175	2554	90190	7.33	112.81	1837
No. 2 Cargo Hold	122 ~ 149	3180	112297	7.08	94.72	2288
No. 3 Cargo Hold	95 ~ 122	3180	112297	7.08	75.82	2288
No. 4 Cargo Hold	68 ~ 95	3180	112297	7.08	56.92	2288
No. 5 Cargo Hold	42 ~ 68	3058	107988	7.18	38.35	2200
Total		15152	535068	7.14	74.49	10901

## BALLAST TANKS CAPACITIES

Ballast Tanks	Frames	Capacity		Centre of Gravity		FSM in SG = 1.0 (tonne-m)
		Cubic M³	S.W. (MT)	VCG ab. (m)	LCG fwd (m)	
Fore Peak	192 - Stem	98.0	100.5	6.144	136.630	50.1
Deep Tank No. 1 P	183 - 192	110.5	113.3	6.152	131.297	53.9
Deep Tank No. 1 S	183 - 192	153.8	157.6	5.345	130.815	59.5
Deep Tank No. 2 P & S	175 - 183	460.4	471.9	5.107	125.135	296.0
DB Tank No. 1 P & S	149 - 175	199.8	204.8	0.869	111.969	495.0
DB Tank No. 2 P & S	122 - 149	360.4	369.4	0.841	94.394	1585.4
DB Tank No. 3 P & S	95 - 122	411.6	421.9	0.837	75.918	2091.0
DB Tank No. 4 P & S	68 - 95	395.4	405.3	0.835	57.303	1902.6
DB Tank No. 5 P	40 - 68	149.0	152.7	0.838	38.889	494.4
DB Tank No. 5 S	40 - 68	148.1	151.8	0.837	38.952	483.4
Wing Tank No. 1 P & S	149 - 175	391.4	401.2	5.830	113.202	90.8
Wing Tank No. 2 P & S	122 - 149	623.4	639.0	5.330	94.447	47.4
Wing Tank No. 3 P & S	95 - 122	675.2	692.1	5.156	75.939	47.8
Aft Peak	B - 11	133.1	136.4	6.627	4.675	387.7
Total		4310.1	4417.9			

Note: no free-surface effect if ballast tanks are pressed full

## FRESH WAER TANKS CAPACITIES

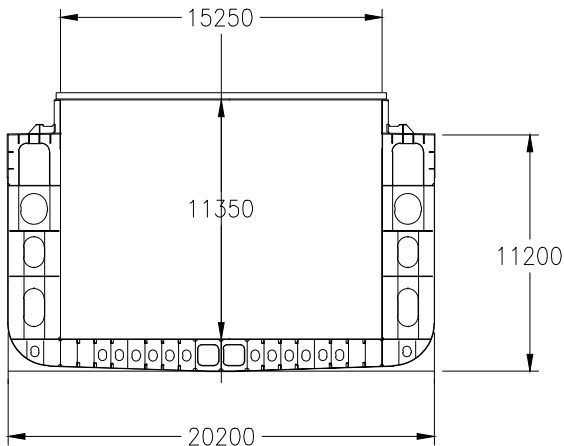
FW Tanks	Frames	Capacity		Centre of Gravity		FSM in SG = 1.0 (tonne-m)
		Cubic M³	(MT)	VCG ab. (m)	LCG fwd (m)	
Reserve Feed Water	22 ~ 24	11.1	11.1	0.860	16.114	29.1
Fresh Water Tank Port	4 ~ 11	53.7	53.7	10.127	5.390	64.2
Fresh Water Tank Stbd	3 ~ 11	59.6	59.6	10.127	5.099	69.8
Total		124.4	124.4			

## FUEL & LUBE OIL TANKS CAPACITIES

Heavy Fuel Oil	Frames	Capacity		Centre of Gravity		FSM in SG = 0.9 (tonne-m)
		Cubic M³	SG = 0.9 (MT)	VCG ab. (m)	LCG fwd (m)	
Wing Tank No. 4 Port	68 ~ 95	331.5	298.4	5.205	57.168	21.5
Wing Tank No. 4 Stbd	68 ~ 95	331.5	298.4	5.205	57.168	21.5
Wing Tank No. 5 Port	49 ~ 68	186.6	167.9	5.629	41.398	14.7
Wing Tank No. 5 Stbd	49 ~ 68	186.6	167.9	5.629	41.398	14.7
Day Tank Stbd	18 ~ 20	7.7	6.9	4.599	13.503	3.7
Settling Tank Port	13 ~ 18	18.5	16.7	4.794	11.176	5.8
Settling Tank Stbd	13 ~ 19	23.7	21.3	4.665	11.584	7.7
Total		1086.1	977.5			

Diesel Oil	Frames	Capacity		Centre of Gravity		FSM in SG = 0.86 (tonne-m)
		Cubic M³	SG = 0.86 (MT)	VCG ab. (m)	LCG fwd (m)	
Wing Tank No. 6 Port	42 ~ 49	50.0	43.0	5.876	31.931	4.2
Wing Tank No. 6 Stbd	42 ~ 49	50.0	43.0	5.876	31.931	4.2
DB Tank No. 7 Ctr	25 ~ 31	34.4	29.6	0.785	19.920	145.6
Day Tank Port	19 ~ 20	6.1	5.2	4.667	13.655	2.73
Total		140.5	120.8			

Lub & Misc. Oil Tanks	Frames	Capacity		Centre of Gravity		FSM Corresp SG (tonne-m)
		Cubic M³	(MT)	VCG ab. (m)	LCG fwd (m)	
LO - Fwd No. 1	17~18	7.7	6.9	8.926	12.254	4.0
LO - Aft No. 2	14~15.5	9.6	8.6	9.007	10.334	4.4
LO - Mid No. 3	15.5~17	10.7	9.6	8.959	11.384	5.3
DB Sludge Tank	19~21	9.0	9.0	0.891	14.019	16.1
DB Bilge No. 6	31 ~ 40	22.7	22.7	0.954	25.402	16.2
Sewage Holding Tank	15~19	7.7	7.7	0.893	12.621	10.1
Total		67.4	64.6			



## MIDSHIP SECTION

## PRINCIPAL PARTICULARS:

LENGTH OVERALL 153.38 m  
LENGTH B.P. 142.14 m  
BREADTH MLD. 20.20 m  
DEPTH MLD 11.20 m

OFFICIAL NUMBER 830871  
GROSS TONNAGE 9261  
PORT OF REGISTRY HAMILTON, ONTARIO  
HATCH CRANE 2 x 20T MUNCH GANTRY CRANES ON RAILS  
MAIN ENGINES 2 x 4000C.V. at 425 RPM

## DEADWEIGHT SCALE

DRAFT	DEADWEIGHT (t)		TPC S.W.	DRAFT
	F.W.	S.W.		
29	14000	14000		9M
28	13000	13000	25	
27	12000	12000		8M
26	11000	11000		
25	10000	10000	24	
24	9000	9000		7M
23	8000	8000		
22	7000	7000	23	6M
21	6000	6000		
20	5000	5000	22	5M
19	4000	4000		
18	3000	3000	21	4M
17	2000	2000		
16	1000	1000		3M
15	0	0		
14				
13				
12				
11				
10				
9				
Total			20	

LIGHTSHIP WEIGHT = 4782 TONNES  
DEADWEIGHT IN METRIC TONS OF 1,000 kg  
TO OBTAIN CARGO DEADWEIGHT, FUEL, FW, LO, SHIP STORES AND BALLAST MUST BE DEDUCTED

Revisions	Drawn	KY	Title	
	Checked	-	CAPACITY PLAN	
	Scale	N.T.S.	Sht.	Project
	Date	March, 2007		M.V. KATHRYN SPIRIT
	Dwg.no.	EN06287-02	Rev.0	Client
				McKeil Marine Ltd. Hamilton, ON