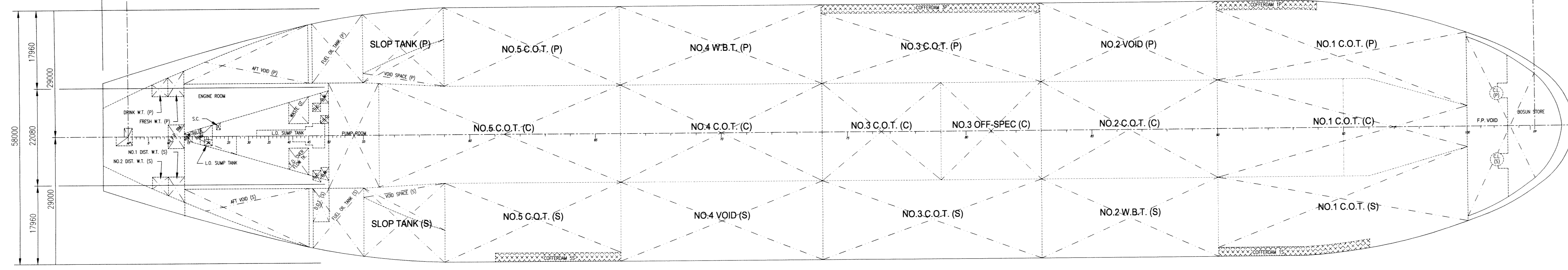


STARBOARD SIDE PROFILE

MIDSHIP SECTION (LOOKING AFT)



TANK LAYOUT PLAN

FUEL OIL / DIESEL OIL SG = 0.950

TANK DESCRIPTION	FRAME NO.	VOLUME 100% (m <sup>3</sup> )	VOLUME 98% (m <sup>3</sup> )	LCG (m-AP)	VCG (m-BL)	TCG (m-CL)	FS INERTIA
HFO/DIESEL OIL TK (P)	46-55	2,752	2,697	47.293F	21,317	18.473P	3,125
HFO/DIESEL OIL TK (S)	46-55	2,483	2,433	47.293F	21,317	18.473S	3,125
H.F.O. SETT. TANK (S)	54-54	58	57	49.480F	19,890	14.524S	397
H.F.O. SERV. TANK (S)	54-54	36	35	49.480F	19,710	14.488S	487
F.O. OVERFLOW TK (S)	40-45	43	42	38.370F	1,430	2.738S	148
DIESEL OIL TANK (S)	46-50	255	250	43.20F	25,51	-	-
D.O. SERV. TK. (S)	50-52	14	14	45.89F	21.99	-	-
<b>TOTALS</b>		<b>5,641</b>	<b>5,528</b>				

LUBRICATING OIL SG = 0.900

TANK DESCRIPTION	FRAME NO.	VOLUME 100% (m <sup>3</sup> )	VOLUME 98% (m <sup>3</sup> )	LCG (m-AP)	VCG (m-BL)	TCG (m-CL)	FS INERTIA
L.O. SUMP TANK	32-49	48.4	47.4	39.48F	1.88	-	-
L.O. SETT. TANK (S)	34-37	49.1	48.1	31.95F	23.81	-	-
L.O. STOR. TANK (S)	37-40	49.1	48.1	34.65F	23.81	-	-
NO. 1 CYL. O.S.T. (S)	40-45	81.8	80.2	38.25F	23.81	-	-
NO. 2 CYL. O.S.T. (S)	45-50	81.8	80.2	42.75F	23.81	-	-
<b>TOTALS</b>		<b>310.2</b>	<b>304</b>				

MISCELLANEOUS

TANK DESCRIPTION	FRAME NO.	VOLUME 100% (m <sup>3</sup> )	VOLUME 98% (m <sup>3</sup> )	LCG (m-AP)	VCG (m-BL)	TCG (m-CL)	FS INERTIA
BILGE TANK	14-27	59.2	58.0	47.590F	1.45	-	-
BILGE PRIM. TK. (P/A)	39-41	12.3	12.1	41.580F	17.14	-	-
BILGE PRIM. TK. (P/F)	41-43	12.3	12.1	35.190F	17.14	-	-
WASTE OIL TANK (P)	40-45	42.8	41.9	31.560F	1.43	-	-
WASTE OIL SETT. TK. (S)	30-32	9.6	9.4	24.050F	16.71	-	-
E.G.E. WASH D.T. (S)	18-26	52.2	51.2	19.790F	15.94	-	-
SLUDGE TANK (S)	46-49	7.8	7.6	19.790F	9.92	-	-
CASCADE TANK (S)	49-53	16.2	15.9	19.790F	15.80	-	-
STERN TUBE C.T.	11-16	17.1	16.6	19.790F	6.13	-	-
<b>TOTALS</b>		<b>229.5</b>	<b>224.8</b>				

CARGO OIL

TANK DESCRIPTION	FRAME NO.	VOLUME 100% (m <sup>3</sup> )	VOLUME 98% (m <sup>3</sup> )	VOLUME 98% (Bbls)	LCG (m-AP)	VCG (m-BL)	TCG (m-CL)	FS INERTIA
1 C.O.T. (C)	90-100	33,369	32,702	209,891	269.820F	15,532	0.000	33,153
1 C.O.T. (P)	90-100	25,306	24,800	159,175	271.868F	16,012	17.650P	20,745
1 C.O.T. (S)	90-100	24,422	23,934	153,614	272.005F	15,960	17.322S	18,449
2 C.O.T. (C)	83-90	26,611	26,079	167,383	224.625F	15,411	0.000	30,842
3 C.O.T. (C)	74-79	17,860	17,503	112,339	168.975F	15,411	0.000	20,705
3 C.O.T. (P)	74-83	23,562	23,091	148,205	180.275F	15,155	18.976P	23,570
3 C.O.T. (S)	74-83	26,441	25,912	166,314	180.275F	15,130	19.958S	35,248
4 C.O.T. (C)	66-74	30,402	29,794	191,229	133.100F	15,411	0.000	47,948
5 C.O.T. (C)	55-66	38,761	37,986	243,807	81.436F	15,501	0.000	17,386
5 C.O.T. (P)	59-66	19,352	18,965	121,724	91.314F	16,588	19.353P	14,871
5 C.O.T. (S)	59-66	18,211	17,847	114,547	90.942F	16,417	18.815S	17,624
<b>SUBTOTAL</b>		<b>284,297</b>	<b>278,611</b>	<b>1,788,228</b>				
3 OFF-SPEC (C)	79-83	15,203	14,899	95,627	193.550F	15,411	0.000	16,714
<b>SUBTOTAL</b>		<b>15,203</b>	<b>14,899</b>	<b>95,627</b>				
SLOP TANK (P)	55-59	6,315	6,189	39,721	62.279F	19,465	18.900P	6,829
SLOP TANK (S)	55-59	6,315	6,189	39,721	62.279F	19,465	18.900S	6,829
<b>SUBTOTAL</b>		<b>12,630</b>	<b>12,377</b>	<b>79,443</b>				
<b>NET TOTAL</b>		<b>312,130</b>	<b>305,887</b>	<b>1,963,298</b>				

WATER BALLAST SG = 1.025

TANK DESCRIPTION	FRAME NO.	VOLUME 100% (m <sup>3</sup> )	VOLUME 98% (m <sup>3</sup> )	LCG (m-AP)	VCG (m-BL)	TCG (m-CL)	FS INERTIA
2 W.B.T. (S)	83-90	21,259	20,834	224.603F	15,150	19.946P	18,937
4 W.B.T. (P)	66-74	24,223	23,739	133.258F	15,332	19.849P	21,506
<b>TOTALS</b>		<b>45,482</b>	<b>44,572</b>				

FRESH WATER SG = 1.000

TANK DESCRIPTION	FRAME NO.	VOLUME 100% (m <sup>3</sup> )	VOLUME 98% (m <sup>3</sup> )	LCG (m-AP)	VCG (m-BL)	TCG (m-CL)	FS INERTIA
FRESH WATER TK. (P)	10-14	174.0	170.5	10.86F	27.21	-	-
DRINK WATER TK. (P)	6-10	140.0	137.2	7.27F	27.36	-	-
1 DIST. W. TANK (S)	10-14	174.0	170.5	10.86F	27.21	-	-
2 DIST. W. TANK (S)	6-10	140.0	137.2	7.27F	27.36	-	-
<b>TOTALS</b>		<b>628.0</b>	<b>615.4</b>				

VOID

TANK DESCRIPTION	FRAME NO.	VOLUME 100% (m <sup>3</sup> )	VOLUME 98% (m <sup>3</sup> )	LCG (m-AP)	VCG (m-BL)	TCG (m-CL)	FS INERTIA
NO. 2 VOID (P)	83-90	21,259	20,834	224.603F	15,150	19.946P	18,937
NO. 4 VOID (S)	66-74	24,223	23,739	133.258F	15,332	19.849S	21,506
NO. 1 COFFERDAM (P)	90-94	1,212	1,188	255.438F	16,763	27.862P	11
NO. 3 COFFERDAM (P)	74-83	2,905	2,847	180.275F	14,924	27.994P	33
NO. 1 COFFERDAM (S)	90-96	2,139	2,096	260.922F	17,058	27.370S	48
NO. 5 COFFERDAM (S)	61-66	1,133	1,110	97.242F	19,326	27.929S	14
FORE PEAK VOID (C)	100-SF	10,204	10,000	306.694F	15,690	0.000	18,608
AFT PEAK VOID (C)	SR-14	1,532	1,501	5.880F	20,440	0.000	4,894
AFT VOID (P)	14-45	2,834	2,777	28.950F	24,041	17.173P	3,830
AFT VOID (S)	14-45	2,834	2,777	28.950F	24,041	17.173S	3,830
<b>TOTALS</b>		<b>70,275</b>	<b>68,870</b>				

PRINCIPAL PARTICULARS

LENGTH (O.A.)	330.000M
LENGTH (B.P.)	315.000M
BREADTH (MLD)	58.000M
DEPTH (MLD)	29.700M
SCANTLING DRAFT (MLD)	19.500M

PRELIMINARY FOR PROPOSAL 09 JUL 2008

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**MODEC**  
MODEC INTERNATIONAL LLC  
A Subsidiary of MODEC INC.  
Houston, Texas USA

CLIENT: **PETROBRAS**  
PROJECT: **FPSO - TUPI PILOT**  
TITLE: **TANK CAPACITY PLAN**

DATE: 24 JUNE 2008  
SCALE: 1:500  
MODEC DWG NO: 0262-MI20-001-0110-00-B.dwg  
REV: B