

LOADING PROGRAM FOR RIGS

Unit	JUPITER			LEG LENGTH [m]			121.6
Date	23-Aug-08			INTEGRAL TANKS FULL			NOT
Place	CONSTANTA			SPUD CANS FULL?			NOT
Loading conditions	5.1			Drilling derrick displacement [m]			0.000
Document no.	1238			NOTE: The derrick displacement to aft from transport position is considered positive.			
User	User						
Description	Weight [t]	LCG [m]	LM [mt]	TCG [m]	TM [mt]	VCG [m]	VM [mt]
Basic Hull & Equipment	5614.00	25.99	145930.32	0.00	11.23	10.54	59177.17
Cantilever	298.78	35.75	10681.39	0.00	1.20	9.59	2865.30
Subbase	73.29	36.60	2682.41	0.14	10.26	13.37	979.89
Drill floor	574.51	37.28	21417.73	-0.04	-22.98	26.46	15201.53
Legs+Auxiliary footings	3110.00	28.65	89101.50	0.00	0.00	42.89	133387.90
Subtotal Lightship Condition	9670.58	27.90	269813.35	0.00	-0.30	21.88	211611.80
Water in 4 auxiliary tanks	0.00	28.65	0.00	0.00	0.00	-2.76	0.00
Water in 4 integral footings	0.00	28.65	0.00	0.00	0.00	-0.23	0.00
Liquid Variables	745.16	16.73	12466.33	-0.04	-26.76	2.49	1852.22
Solid Variables	12.48	10.67	133.22	0.00	0.00	10.49	130.96
Lightship Additions	0.00	24.65	0.00	0.25	0.00	0.00	0.00
Afloat totals	10428.22	27.08	282412.90	0.00	-27.06	20.48	213594.98
Total Variable Load	757.64	16.63	12599.56	-0.04	-26.76	2.62	1983.18
Elevated totals	7318.22	26.42	193311.40	0.00	-27.06	10.96	80207.08

Displacement (t)	10428.22
Volume (m3)	10173.87
LCG [m]	27.08
TCG [m]	0.00
VCG [m]	20.48

TOW POS. 1

From Hydrostatic Tables

Mean Draft [m]	4.590
LCB	27.236
KML	46.185
KMT	33.132
Sum of FSM (Form No. 4)	1290.137
Free surface correction-FSC	0.124
Actual KG = VCG + FSC	20.606

Trim Calculation

Trim Lever = LCB-LCG	0.15	
GML =KML-Actual KG	25.58	
Trim = Trim Lever * 52.43/GML [m]	0.32	OK
Negativ trim indicates down by the stern/ must not exceed 0.46m before jacking		

Heel Calculation

Heel lever=TCG	0.00	
GMT = KMT - Actual KG	12.53	
Heel = Heel Lever X 40.84/GMT [m]	-0.01	OK
Negativ heel ind. down by portside/ must not exceed 0.40 m before jacking		

Leg length below keel for each tow position :

TP1	5.068 m
TP2	7.778 m
TP3	15.094 m
TP4	26.068 m
TP4P	29.726 m
TP5	37.042 m
TP5P	40.700 m
TP6	44.358 m

WIND SPEED [m/s] 10

STABILITY ANALYSIS OF AFLOAT RIG

Allowable KG [m]	20.68	
KG Margin [m]	0.07	OK

LEG LOAD ANALYSIS OF ELEVATED RIG

Load on leg no.1 (Sb - Fore) [t]	2042.176	OK
Load on leg no.2 (Ps - Fore) [t]	2043.085	OK
Load on leg no.3 (Sb - Aft) [t]	1616.117	OK
Load on leg no.4 (Ps - Aft) [t]	1616.836	OK

Load on leg must not exceed 2150 t.

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RIG "JUPITER" - CURRENT EFFECT OF LIQUID VARIABLES ON OVERALL STABILITY

	3		3		3
DENSITY	MT/M		MT/M		MT/M
fresh water	1.000	diesel oil	0.840	mud pit #1	1.100
sea water	1.025	reserve oil	0.900	mud pit #2	1.100
drilling water	1.000	bulk mud(barite)	1.918	mud pit #3	1.100
cooling water	1.000	bulk mud(bentonite)		mud pit #4	1.100
hydraulic oil	0.900	bulk cement	1.298	mud pit #5	1.100

TANK DESCRIPTION	SOUNDING	WEIGHT	LCG	L-MOM	TCG	T-MOM	VCG	V-MOM	FSM
	M	MT	M	M*MT	M	M*MT	M	M*MT	M*MT
SALT WATER									
SALT WATER SURGE NR.2	5.19	200.53	3.14	630.08	0.00	0.00	3.24	650.33	925.97
FORE BALLAST(PORT) NR.1	0.00	0.00	4.49	0.00	-13.48	0.00	0.00	0.00	0.00
FORE BALLAST(STBD) NR.3	0.00	0.00	4.49	0.00	13.48	0.00	0.00	0.00	0.00
AFT BALLAST(PORT) NR.9	0.00	0.00	47.85	0.00	-9.07	0.00	0.00	0.00	0.00
AFT BALLAST(STBD) NR.10	0.00	0.00	47.85	0.00	9.07	0.00	0.00	0.00	0.00
BALLAST TK(PORT) NR.20	0.00	0.00	38.41	0.00	-9.07	0.00	0.00	0.00	0.00
BALLAST TK(CENTRE) NR.15	0.00	0.00	38.41	0.00	0.00	0.00	0.00	0.00	0.00
BALLAST TK(STBD) NR.25	0.00	0.00	38.41	0.00	9.07	0.00	0.00	0.00	0.00
Subtotal Salt Water		200.53	3.14	630.08	0.00	0.00	3.24	650.33	925.97

DRILL WATER									
DRILL WATER(PORT) NR.7	0.00	0.00	38.41	0.00	-16.00	0.00	0.00	0.00	0.00
DRILL WATER(STBD) NR.8	0.00	0.00	38.41	0.00	16.00	0.00	0.00	0.00	0.00
Subtotal Drill Water		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

FRESH WATER									
POTABLE WATER PORT 6		101.00	17.68	1785.68	-13.93	-1406.93	3.80	383.58	153.62
POTABLE WATER STBD 6'		101.00	17.68	1785.68	13.93	1406.93	3.80	383.58	153.62
BRAKE COOLING WATER NR.11	1.50	47.02	44.50	2092.39	0.00	0.00	0.75	35.27	0.00
Subtotal Fresh Water		249.02	22.74	5663.75	0.00	0.00	3.22	802.42	307.24

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LIQUID MUD									
ACTIVE MUD (PORT) 1	0.00	0.00	31.09	0.00	-3.28	0.00	1.50	0.00	0.00
ACTIVE MUD (STBD) 2	0.00	0.00	31.09	0.00	3.28	0.00	1.50	0.00	0.00
RESERVE MUD (PORT) 3	0.00	0.00	25.80	0.00	-4.02	0.00	1.50	0.00	0.00
RESERVE MUD (STBD) 4	0.00	0.00	26.22	0.00	3.28	0.00	1.50	0.00	0.00
FLASH PIT 5	0.00	0.00	27.13	0.00	-1.64	0.00	1.50	0.00	0.00
Subtotal Liquid Mud	→	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

FUEL , LUBE & HYDRAULIC OIL+SLUDGE									
FUEL OIL (PORT) 4	1.50	106.51	18.90	2013.06	-16.00	-1704.18	0.75	79.88	0.00
FUEL OIL (STBD) 5	1.50	106.51	18.90	2013.08	16.00	1704.19	0.75	79.88	0.00
FUEL OIL FOR BOILER, TK. 56	1.19	0.96	5.56	5.32	9.30	8.90	4.16	3.98	
FUEL OIL DAY TANK 104	1.17	2.29	11.29	25.88	5.90	13.52	4.11	9.41	
FUEL OIL DAY TANK 105	1.17	2.29	13.12	30.07	5.90	13.52	4.11	9.41	
LUBE OIL NO.106(SCURG.COMB.)	1.30	1.13	13.12	14.80	4.92	5.54	0.65	0.73	
LUBE OIL NR.107(SCURG.SEP.COMB.)	1.20	1.24	13.73	17.04	4.92	6.10	0.60	0.74	
LUBE OIL NO.108(ULEI CURAT)	1.38	5.06	14.64	74.06	-5.73	-28.99	0.69	3.49	
LUBE OIL NO.109(ULEI UZAT)	1.38	5.06	15.86	80.23	-5.73	-28.99	0.69	3.49	
HYDRAULIC OIL TANK NR.111	1.20	24.21	30.48	737.92	-8.43	-204.09	2.10	50.84	0.00
HYDRAULIC OIL RESERVE NR.112	1.50	8.03	32.01	256.98	-7.80	-62.62	6.20	49.77	5.32
BILGE SEP.DISCHARGE TK.113	1.30	1.21	13.73	16.60	-4.92	-5.95	0.65	0.79	
BILGE WATER TK. 115	1.00	4.10	12.82	52.60	-4.92	-20.19	0.50	2.05	
EM.GEN.FUEL OIL TK. 165		15.00	27.15	407.25	12.03	180.45	5.16	77.40	
SLUGE TK 114		6.00	24.94	149.64	16.00	96.00	2.95	17.70	
POLLUTION TK 33		3.00	46.33	138.99	-3.278	-9.83	1.65	4.95	25.80
DIRTY WATER TK 34		3.00	46.33	138.99	3.28	9.83	1.65	4.95	25.80
Subtotal Fuel,Lube & Hydraulic Oil	→	295.60	20.88	6172.50	-0.09	-26.76	1.35	399.47	56.92

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COFFERDAMS & SPONSONS									
COFFERDAM CENTRE NO.12	0.00	0.00	9.45	0.00	0.00	0.00	0.00	0.00	
COFFERDAM CENTRE NO.13	0.00	0.00	18.90	0.00	0.00	0.00	0.00	0.00	
COFFERDAM CENTRE NO.14	0.00	0.00	28.64	0.00	0.00	0.00	0.00	0.00	
COFFERDAM SIDE NO.17	0.00	0.00	9.45	0.00	-9.07	0.00	0.00	0.00	
COFFERDAM SIDE NO.18	0.00	0.00	18.90	0.00	-9.07	0.00	0.00	0.00	
COFFERDAM SIDE NO.19	0.00	0.00	28.64	0.00	-9.07	0.00	0.00	0.00	
COFFERDAM SIDE NO.22	0.00	0.00	9.45	0.00	9.07	0.00	0.00	0.00	
COFFERDAM SIDE NO.23	0.00	0.00	18.90	0.00	9.07	0.00	0.00	0.00	
COFFERDAM SIDE NO.24	0.00	0.00	28.64	0.00	9.07	0.00	0.00	0.00	
COFFERDAM SIDE NO.21	0.00	0.00	28.64	0.00	-16.00	0.00	0.00	0.00	
COFFERDAM SIDE NO.26	0.00	0.00	28.64	0.00	16.00	0.00	0.00	0.00	
JACK HOUSE SPACE NO.27	0.00	0.00	9.45	0.00	-14.53	0.00	0.00	0.00	
JACK HOUSE SPACE NO.28	0.00	0.00	9.45	0.00	14.53	0.00	0.00	0.00	
JACK HOUSE SPACE NO.29	0.00	0.00	47.85	0.00	-14.53	0.00	0.00	0.00	
JACK HOUSE SPACE NO.30	0.00	0.00	47.85	0.00	14.53	0.00	0.00	0.00	
SPONSON #4 LEG, FORWARD				0.00		0.00		0.00	
SPONSON #4 LEG, AFT				0.00		0.00		0.00	
SPONSON #3 LEG, FORWARD				0.00		0.00		0.00	
SPONSON #3 LEG, AFT				0.00		0.00		0.00	
Subtotal Cofferdams & Sponsons		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL LIQUID VARIABLE	745.16	16.73	12466.33	-0.04	-26.76	2.49	1852.22	1290.14	
	MT	M	M*MT	M	M*MT	M	M*MT	M	
	CURRENT WEIGHT	LCG	L-MOM	TCG	T-MOM	VCG	V-MOM	FSM	

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MAIN DECK PIPE RACKS & STORAGE								
Maindeck								
vegetables store		0.00	15.50	0.00	15.00	0.00	8.10	0.00
geo barack		0.00	28.50	0.00	13.50	0.00	7.10	0.00
half-stuff rack		0.00	31.50	0.00	-12.00	0.00	7.20	0.00
office		0.00	35.00	0.00	13.00	0.00	6.80	0.00
comp ATS		0.00	27.50	0.00	17.50	0.00	2.40	0.00
welder store		0.00	16.00	0.00	-14.50	0.00	6.90	0.00
barack GSP		0.00	28.00	0.00	12.00	0.00	7.30	0.00
pompa auxiliara		0.00	34.00	0.00	7.00	0.00	7.20	0.00
steam boiler fw		0.00	9.76	0.00	9.90	0.00	3.90	0.00
steam boiler stern		0.00	11.84	0.00	9.90	0.00	3.90	0.00
boiler's water tank		0.00	11.99	0.00	7.30	0.00	2.87	0.00
steam condensor		0.00	12.60	0.00	7.17	0.00	4.70	0.00
fuel boiler's tank		0.00	5.60	0.00	9.54	0.00	4.10	0.00
water desilter no 1		0.00	17.18	0.00	18.62	0.00	4.50	0.00
water desilter no 2		0.00	20.50	0.00	17.45	0.00	4.50	0.00
air compressor no 1		0.00	22.90	0.00	14.40	0.00	3.00	0.00
air compressor no 2		0.00	22.90	0.00	16.90	0.00	3.00	0.00
air compressor no 3		0.00	21.90	0.00	19.20	0.00	3.00	0.00
boiler's exhaust pipe		0.00	11.69	0.00	11.22	0.00	11.80	0.00
boiler's exhaust pipe		0.00	17.40	0.00	9.40	0.00	5.23	0.00
steam boilers manifold		0.00	10.95	0.00	11.12	0.00	3.50	0.00
water desilters manifold		0.00	18.80	0.00	17.90	0.00	2.38	0.00
mud agitators		0.00	29.88	0.00	-1.00	0.00	4.50	0.00
compressor no 2		0.00	37.00	0.00	-13.90	0.00	2.00	0.00
compressor no3		0.00	37.00	0.00	-15.10	0.00	2.00	0.00
shale shakers compartment		0.00	42.60	0.00	9.50	0.00	9.00	0.00
king post no 1		0.00	17.50	0.00	17.90	0.00	27.40	0.00
king post no 2		0.00	17.50	0.00	-17.90	0.00	27.40	0.00
king post no 3		0.00	36.60	0.00	17.90	0.00	27.40	0.00
king post no 4		0.00	36.60	0.00	-17.90	0.00	27.40	0.00
jilip		0.00	37.00	0.00	0.00	0.00	6.80	0.00
cables bed for derrick		0.00	45.00	0.00	-9.00	0.00	9.20	0.00
cementing units		0.00	21.00	0.00	8.00	0.00	7.20	0.00
burner support starportside		0.00	36.60	0.00	18.20	0.00	7.40	0.00
burner support portside		0.00	36.60	0.00	-18.20	0.00	7.40	0.00
crown block		0.00	36.85	0.00	0.00	0.00	57.20	0.00
drawwork		0.00	42.36	0.00	0.50	0.00	12.90	0.00
IBOP		0.00	43.96	0.00	-3.40	0.00	12.90	0.00
ELMAGO (brake)		0.00	42.00	0.00	-1.20	0.00	12.90	0.00
upper derrick structure		0.00	36.85	0.00	0.00	0.00	28.00	0.00
DAAS		0.00	43.00	0.00	-0.80	0.00	12.50	0.00
travelling block		0.00	36.90	0.00	0.00	0.00	12.50	0.00
air tanks		0.00	43.20	0.00	4.40	0.00	11.40	0.00
prevention manifold		0.00	35.40	0.00	4.20	0.00	12.40	0.00
extensie cale rulare		0.00	54.00	0.00	0.00	0.00	6.20	0.00
Subtotal Main Deck Pipe Racks		0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL SOLID VARIABLE								
	12.48	10.67	133.22	0.00	0.00	10.49	130.96	
	MT	[M]	M*MT	M	M*MT	M	M*MT	
	CURRENT WEIGHT	LCG	L-MOM	TCG	T-MOM	VCG	V-MOM	