

DRY DOCK LIST ISSUED BY THE MASTER AND CHIEF ENGINEER OF THE ABOVE TUG.

SUITABLE CONTRACTOR FOR THE TASKS TO BE PERFORMED.

ALL CONTRACTORS TO PROVIDE OWN EQUIPMENT FOR THE WORK TO BE PERFORMED

SC	<u>Special Conditions</u>
	<u>Principal</u> Contractor to be on site all the time
SC1	Some of the planned work may be cancelled at TNPA discretion after inspection in dry dock
SC2	Additional work may be added subject to written quote and variation order (i.e.no quote no payment)
SC3	Contractor to allow for miscellaneous costs i.e.: scaffolding and rigging etc to complete the planned work
SC4	Scaffolding to be included for Voith Platforms
SC5	Contractor to submit SHE plan and Risk Assessment with Tender
SC6	Contractor to clean dry dock and dispose of waste. Environmental regulations apply
SC7	Contractor to supply TNPA with Certificates of Disposal for all waste disposed. (Mud, sludge, fuel, barnacle etc)
SC8	Contractors tools and equipment to pose no risk to TNPA assets or environment
NB!! SC9	Each item to be quoted for and grand total to be shown
SC10	All high pressure washing to be done with suitable equipment of min 350 bar
SC11	Contractor to submit proof or references of similar work carried out
SC12	Contractor to specify completion of work timeframe (Work completion estimated on 3 weeks Weather permitting)
SC13	Guarantee and warranty timeframe of work performed to be stipulated on quotation
SC14	Cover / plug all vents, breathers, air intakes, propeller seals and machinery etc, to prevent ingress of grit
SC15	Voith unit blades, echo sounder & anode studs to be masked off prior to painting.
SC16	Service reports to be submitted for all service work carried out.
SC17	TNPA will not be held liable for cost with regard to any unforeseen delays. (Travel etc)
SC18	Contractor to supply own O2 & H2S meter for tank readings
SC19	Tanks to be measured for O2 reading before entry and log to be kept
SC20	Controlled access is to be taken into consideration. Visitor register and signage to be displayed
SC21	Detailed layout of work to be projected in a project plan for allocated timeframe
SC22	If spraying application is to be used, ensure all windows are properly sealed off
SC23	Painting where applicable to be done with a airless spraygun
SC24	All required paint for completion of project to be supplied by TNPA
SC25	No job cards will be signed off until necessary reports are submitted
SC26	Contractor to submit SHE file with all necessary documents to SHEQ department within 5 days after tender award
SC27	Penalties will be incurred for major work delays by contractor due to negligent contractor planning
SC28	Travel expenses should reflect as one total
SC29	Sqm supplied is per coat.
SC30	Coded welder to be in possession of valid certification.

		DESCRIPTION OF WORK	NO.	PRICING
1. SERVICES REQUIRED	1.1	PROVISION OF FIRE WATCH MAN 2 DAYS	1	
	1.2	PROVISION OF HOT WORK PERMIT 2 DAYS	1	
	1.3	PROVISION OF X-RAY, CRACK AND THICKNESS TESTING WHERE NEEDED	1	
ENGINE ROOM WORK				
<u>GENERAL AREA</u>		<u>DESCRIPTION OF WORK</u>	NO CHARGE	
2. VALVES	2.1	BLACK WATER OVERBOARD VALVE 100 NB	1	
	2.2	SEWAGE PLANT OVERBOARD VALVE 25 NB	1	
	2.3	GREY WATER OVERBOARD VALVE 50 NB	1	
	2.4	A/C PLANT OVERBOARD VALVE 32 NB	1	
	2.5	GS PUMP ISOLATING VALVE 100NB	1	
	2.6	AFT GS OVERBOARD DISCHARGE VALVE 80 NB	2	
	2.7	FRD GS OVERBOARD DISCHARGE VALVE 80 NB	1	
	2.8	OWS OVERBOARD VALVE 25 NB	1	
	2.9	GALLEY OVERBOARD VALVE 50 NB	1	
	2.10	STBD FIRE PUMP ISOL V/V (BUTTERFLY V/V TO BE CLEANED IN PLACE.) 303 NB	1	
	2.11	PORT FIRE PUMP ISOL V/V (BUTTERFLY V/V TO BE CLEANED IN PLACE.) 303 NB	1	
	2.12	MAIN SEA CHEST VENT VALVES 50 NB	1	

	2.13	VOITH VENT VALVES 25 NB	2	
	2.14	FUEL TRANSFER VALVE BANK 25NB	2	
	2.15	OVERHAUL MISCELLANEOUS VALVES AS PER REQUEST 80NB	4	
	2.16	SERVICE HYDRAULIC FUEL DROP VALVES	4	
3. PIPING	3.1	ER SW PIPING TO RENEW WHOLE PIPING SYSTEM SUBJECT TO CONDITION,	2m X ϕ 50mm	
(QUOTE ON SCHEDULE 40 FOR ALL)	3.2	ER LO PIPING TO RENEW SUBJECT TO CONDITION	2m X ϕ 50mm	
	3.3	ER FW PIPING TO RENEW SUBJECT TO CONDITION	2m X ϕ 50mm	
	3.4	ER BILGE PIPING TO RENEW SUBJECT TO CONDITION	2m X ϕ 50mm	
	3.5	ER HYDRAULIC PIPING TO RENEW SUBJECT TO CONDITION	2m X ϕ 50mm	
	3.6	ER SEWERAGE PIPING TO RENEW SUBJECT TO CONDITION	2m X ϕ 50mm	
	3.7	ER COMPRESSED AIR PIPING TO RENEW SUBJECT TO CONDITION	2m X ϕ 50mm	
	3.8	ER FUEL PIPING TO RENEW SUBJECT TO CONDION	2m X ϕ 50mm	
4. BILGES	4.1	ENTIRE ER BILGES TO BE WASHED AND CLEANED	10m ²	
	4.2	BILGES TO BE PUMPED OUT AFTER CLEANED (SC7) X 2	10m ²	
5. FIRE PUMP STRUM BOXES & STRAINERS	5.1	FIRE PUMP STRUM BOXES TO BE OPENED, HP CLEANED & INSPECTED	2	
	5.2	RENEW STRUM BOX ANODES (x2)	2	
	5.3	REMOVE STRAINER & HP WASH	2	
	5.4	HOIST UP STRAINER HOUSING TO ACCESS BUTTERFLY VALVE, IF NECESSARY	2	
	5.5	STRUM BOX & STRAINERS TO BE PAINTED WITH COAT OF ANTIFOULING (SEAQUANTUM RED)	2	
	5.6	STRUM BOXES WITH STRAINERS TO BE BOXED UP AFTER COMPLETION	2	
	5.7	NEW GASKETS TO BE FITTED (5MM NEOPRENE)	2	
6. BOX COOLERS	6.1	REMOVE/REFIT PIPING & ELECTRICAL FITTINGS IN WAY OF COOLERS	4	
	6.2	LIGHT SCRAPPING TO REMOVAL MARINE GROWTH OFF COOLERS	4	
	6.3	PRESSURIZE SYSTEM IN SITU TO CHECK FOR LEAKS (15 MINS)	4	
7. VARIOUS BRACKETS	7.1	BRACKETS IN ER TO BE RENEWED AS PER CHIEF ENGINEERS INSTRUCTIONS (200MM x 50MM MS)	10	
	7.2	BRACKETS ON DECK TO BE RENEWED AS PER MASTERS INSTRUCTIONS (200MM x 50MM MS)	10	
<u>ALTERNATOR WORK</u>				
<u>GENERAL AREA</u>		<u>DESCRIPTION OF WORK</u>	NO CHARGE	
8. KEEL COOLERS	8.1	FLUSH THROUGH KEEL COOLERS AND REFILL	2	
	8.2	REPLACE ANODES (3kg) (Replacement Anodes supplied by TNPA)	4	
	8.3	LIGHT SCRAPPING TO REMOVAL MARINE GROWTH OFF KEEL COOLERS	2	
<u>UNDERWATER WORK</u>				
<u>GENERAL AREA</u>		<u>DESCRIPTION OF WORK</u>	NO CHARGE	
9. HULL CLEANING	9.1	BARNICLES TO BE SCRAPED OFF ENTIRE HULL	50m ²	
	9.2	ENTIRE HULL TO BE PRESSURE WASHED (350bar)	1200m ²	
	9.3	PORT & STBD BOX COOLERS SEACHEST X2	4	
	9.4	PORT & STBD MAIN SEACHEST X2	2	
	9.5	PORT & STBD KEEL COOLERS	2	
	9.6	SWEEP BLAST ENTIRE EXTERIOR HULL INCLUDING INNER AND OUTER GUNNEL	1200m ²	
	9.7	ENTIRE EXTERIOR HULL INCLUDING INNER AND OUTER GUNNEL TO BE PRESSURE WASHED (350bar)	1200m ²	
	9.8	REMOVE SEA CHEST GRATINGS FOR CLEANING, BLASTING AND LATER REPLACED (REMOVE PRIOR BLASTING)	22	
	9.9	CLEAN DOCK, BARNICLES, PAINT FLAKES & BLASTING DEBRIS TO BE DISPOSED OF (SC7)	350m ²	
10. ANODES	10.1	REMOVE EXISTING ANODES (64 X HULL + 20 VSP UNITS + 4 X SEA STRAINERS . TOTAL 100)	100	
	10.2	REPLACE ANODES WITH NEW (100) AFTER PAINT APPLICATION	100	
11. PORT & STBD VOITH UNITS	11.1	REMOVE VOITH INSPECTIONS COVERS	2	
	11.2	HP WASH ROTOR CASINGS	2	

	11.3	CUT OUT DOCKING PLATFORM FOR DROPPING OF BLADES	4	
	11.4	DESCALE VOITH ROTOR WELLS, ROTOR TABLE SIDES & TABLE TOPS	2	
	11.5	DEGREASE & HP WASH VOITH ROTOR WELLS AND TABLES (AFTER REPAIRS)	2	
	11.6	PAINT VOITH ROTOR WELLS & TABLES (1 X PRIMER, 1 X UNDERCOAT)	2	
	11.7	PAINT ROTOR CASINGS (SEAQUANTUM ULTRA DARK RED) (2 X COATS ANTIFOULING)	2	
	11.8	REWELD DOCKING PLATFORM AFTER VOITH REPAIRS	4	
	11.9	CRACK DETECTING TESTS TO BE DONE ON ALL WELDS FOR THE PLATFORM REPAIRS (SUBMIT REPORT)	1	
	11.10	REFIT VOITH INSPECTION COVERS, FIT NEW GASKETS (GASKETS SUPPLIED BY TNPA)	2	
	11.11	MECHANICALLY CLEAN VOITH BLADES (X10)	10	
12. DOCKING PLATFORM STRUTS	12.1	CRACK DETECTING TESTS TO BE DONE ON ALL WELDS (SUBMIT REPORT)	2	
	12.2	REPAIRS TO BE DONE ON WELDS	6	
13. SKEG	13.1	LOWER PLUG ON SKEG TO BE REMOVED AND CHECK FOR WATER	1	
	13.2	REFIT PLUG & RENEW TEFLON PLUG WASHER IF NECESSARY	1	
14. DOCKING GUARD	14.1	REMOVE LOWER PLUG AND CHECK FOR WATER	1	
	14.2	REFIT PLUG & RENEW TEFLON PLUG WASHER IF NECESSARY	1	
15. FENDERS	15.1	REMOVE ALL TYRE FENDERS AND LAND ON DOCK FLOOR	16	
	15.2	REFIT TYRE FENDERS ON COMPLETION OF PAINTING	16	
WHEELHOUSE				
GENERAL AREA		DESCRIPTION OF WORK	NO CHARGE	
16. WHEELHOUSE	16.1	REMOVE SLIDING WINDOWS	8	
	16.2	MECHANICALLY DESCALE AFFECTED AREAS OF FRAMES	2m²	
	16.3	REPAIR FRAMES (3190MM x 825MM)	8	
	16.4	PAINT AS PER WHEELHOUSE PAINT SPEC	2m²	
	16.5	INSTALL RUBBERS (TNPA SUPPLY)	6m²	
	16.6	REFIT LOCKING MECHANISMS	12	
SUPERSTRUCTURE PREPARATION WORK				
GENERAL AREA		DESCRIPTION OF WORK	NO CHARGE	
17. MAST, WHEELHOUSE &	17.1	CHEMICALLY CLEAN	400m²	
SUPERSTRUCTURE		CLEANING AGENT FOR CHEMICALLY CLEAN TO BE PROVIDED BY CONTRACTOR	NO CHARGE	
(INC. YARDARMS, LADDERS & RAILINGS)		MDS INFORMATION TO BE PROVIDED FOR CHEMICALS	NO CHARGE	
	17.2	MECHANICALLY DESCALE AFFECTED AREAS	10m²	
	17.3	RENEW CORRODED STEELWORK (50KG)	10m²	
	17.4	HP WASH AFTER MECHANICAL DESCALE	400m²	
18. MONKEY ISLAND & BRIDGE DECK	18.1	CHEMICALLY CLEAN	200m²	
(INC. LADDERS,RAILINGS & VENTS)		CLEANING AGENT FOR CHEMICALLY CLEAN TO BE PROVIDED BY CONTRACTOR	NO CHARGE	
		MDS INFORMATION TO BE PROVIDED FOR CHEMICALS	NO CHARGE	
	18.2	MECHANICALLY DESCALE AFFECTED AREAS	10m²	
	18.3	HP WASH AFTER MECHANICAL DESCALE	200m²	
19. MAIN DECK.	19.1	CHEMICALLY CLEAN	200m²	
(INCLUDING BITS, CRUCIFORM,	19.2	CLEANING AGENT FOR CHEMICALLY CLEAN TO BE PROVIDED BY CONTRACTOR	NO CHARGE	
WINCH PLATFORM)		MDS INFORMATION TO BE PROVIDED FOR CHEMICALS	NO CHARGE	
	19.3	MECHANICALLY DESCALE AFFECTED AREAS	10m²	
	19.4	HP WASH AFTER MECHANICAL DESCALE	200m²	
20. WATER LINE TO GUNNNEL	20.1	CHEMICALLY CLEAN	200m²	
(INCLUDING INSIDE BULWORKS)		CLEANING AGENT FOR CHEMICALLY CLEAN TO BE PROVIDED BY CONTRACTOR	NO CHARGE	
		MDS INFORMATION TO BE PROVIDED FOR CHEMICALS	NO CHARGE	

	20.2	MECHANICALLY DESCALE AFFECTED AREAS	10m²	
	20.3	HP WASH AFTER MECHANICAL DESCALE	450m²	
21. EXHAUST FUNNELS	21.1	WASH DOWN EXHAUST FUNNELS TO REMOVE SALT (X2)	35m²	
	21.2	REMOVE HEAT SHIELD & MECHANICALLY DESCALE AFFECTED AREAS OF EXHAUST FUNNEL & HEAT SHIELD	10m²	
	21.3	WASH OUT/DEGREASE ENTIRE INNER SPACE OF EXHAUST FUNNELS (x 2)	35m²	
	21.4	RETIGHTENED ALL BOLTS & NUTS ON ALL FLANGES, MOUNTINGS AND SHOCK DAMPERS. (TOP & BOTTOM SPACES)	2	
PAINTING				
GENERAL AREA		DESCRIPTION OF WORK	NO CHARGE	
22. MAST, WHEELHOUSE & SUPERSTRUCTURE	22.1	PRIME AFFECTED AREAS (SMARTPACK RED) FIRST COAT	10m²	
(INC. YARDARMS, LADDERS & RAILINGS)	22.2	PRIME AFFECTED AREAS (SMARTPACK GREY) SECOND COAT	10m²	
	22.3	APPLY TOP COAT AS PER PAINT SPEC (HARDTOP AS WHITE) COMPLETE (2 COATS)	400m²	
23. MONKEY ISLAND & BRIDGE DECK	23.1	PRIME AFFECTED AREAS (SMARTPACK RED) FIRST COAT	10m²	
(INC. LADDERS,RAILINGS & VENTS)	23.2	PRIME AFFECTED AREAS (SMARTPACK GREY) SECOND COAT	10m²	
	23.3	APPLY TOP COAT AS PER PAINT SPEC (HARDTOP AS GREEN) COMPLETE (2 COATS)	200m²	
24. MAIN DECK.	24.1	PRIME AFFECTED AREAS (SMARTPACK RED) FIRST COAT	10m²	
(INCLUDING BITS, CRUCIFORM, WINCH PLATFORM)	24.2	PRIME AFFECTED AREAS (SMARTPACK GREY) SECOND COAT	10m²	
	24.3	APPLY TOP COAT AS PER PAINT SPEC (HARDTOP AS GREEN) COMPLETE (2 COATS)	200m²	
25. WATER LINE TO GUNNEL	25.1	PRIME AFFECTED AREAS (SMARTPACK RED) FIRST COAT	450m²	
(INCLUDING INSIDE BULWARKS)	25.2	UNDERCOAT AFFECTED AREAS (SMARTPACK GREY) SECOND COAT	450m²	
	25.3	APPLY TOP COAT AS PER PAINT SPEC (HARDTOP AS BLACK) COMPLETE (INCLUDING INSIDE BULWARKS) (2 COATS)	450m²	
26. HULL (INCLUDING SEA CHESTS)	26.1	APPLY PRIMER AS PER PAINT SPEC (80 ALUMINIUM RED TONE)	750m²	
	26.2	APPLY UNDERCOAT AS PER PAINT SPEC (SAFEGUARD UNIVERSAL FS GREY)	750m²	
	26.3	APPLY ANTIFOULING AS PER PAINT SPEC (SEAQUANTUM ULTRA RED)	750m²	
	26.4	APPLY ANTIFOULING AS PER PAINT SPEC (SEAQUANTUM ULTRA DARK RED)	750m²	
	26.5	DRAUGHT AND PLIMSOL MARKS TO BE PAINTED	6m²	
27. EXHAUST FUNNELS	27.1	APPLY FULL COAT AS PER PAINT SPEC (1000C ALUMINIUM)	35m²	
	27.2	APPLY FULL COAT AS PER PAINT SPEC (SOLVALITT BLACK)	35m²	
28.ENGINE ROOM FAN SPACES	28.3.1	MECHANICALLY DESCALE AFFECTED AREA	4m²	
	28.3.2	PRIME AFFECTED AREAS AS PER PAINT SPEC	4m²	
	28.3.3	APPLY TOP COAT AS PER PAINT SPEC (HARDTOP AS WHITE) COMPLETE (2 COATS)	10m²	
29. EXTRA'S	29.1	REMOVAL OF DEBRIS	0.5m²	
TANKS				
GENERAL AREA		DESCRIPTION OF WORK	NO CHARGE	
		Contractor to provide for gas free certificate where required.	NO CHARGE	
		ALL WATER TANKS & VOID SPACE PLUGS TO BE OPENED & REPLACED ON COMPLETION	4	
		ALL WATER TANKS & VOID SPACE PLUGS TEFLON PLUG WASHERS TO BE REPLACED	4	
30. FW TANK	30.1	FW TANK TO BE DRAINED	1	
	30.2	OPEN FW TANK AND VENTILATE	1	
		O² READINGS TO BE TAKEN ON EVERY ENTRY	NO CHARGE	
	30.3	FW TANK TO BE HP CLEANED	38m²	
	30.4	FW TANK TO BE MECHANICALLY DESCALED AND PRIMED (1 COAT PRIMER)	10m²	
	30.5	FW TANK TO BE TOUCHED UP AS REQUIRED (1 COAT TANKGUARD WHITE)	10m²	
	30.6	NEW GASKETS TO BE MADE UP	2	
	30.7	FW MANHOLE COVERS TO BE REFITTED	2	
	30.8	INSPECT CONDITION OF ECHO SOUNDER CABLE CONDUIT INSIDE TANK	1	
31. FOREPEAK TANK	31.1	FOREPEAK TANK TO BE DRAINED	1	

	31.2	OPEN FOREPEAK TANK AND VENTILATE	1	
		O ² READINGS TO BE TAKEN ON EVERY ENTRY	NO CHARGE	
	31.3	FOREPEAK TANK TO BE CLEANED	50m ²	
	31.4	FOREPEAK TO BE MECHANICALLY DESCALED AND PRIMED (1 COAT PRIMER)	10m ²	
	31.5	FOREPEAK TO BE TOUCHED UP AS REQUIRED (1 COAT TANKGUARD WHITE)	10m ²	
	31.6	NEW GASKETS TO BE MADE UP	1	
	31.7	FOREPEAK TANK MANHOLE COVER TO BE REFITTED	1	
32. AFTPEAK TANK	32.1	AFTPEAK TANK TO BE DRAINED	1	
	32.2	OPEN AFTPEAK TANK AND VENTILATE	1	
		O ² READINGS TO BE TAKEN ON EVERY ENTRY	NO CHARGE	
	32.3	AFTPEAK TANK TO BE CLEANED	40m ²	
	32.4	AFTPEAK TANK TO BE MECHANICALLY DESCALED AND PRIMED (1 COAT PRIMER)	10m ²	
	32.5	AFTPEAK TANK TO BE TOUCHED UP AS REQUIRED (1 COAT TANKGUARD WHITE)	10m ²	
	32.6	NEW GASKETS TO BE MADE UP	1	
	32.7	AFTPEAK TANK MANHOLE COVER TO BE REFITTED	1	
34. PORT & STBD DB FUEL TANKS		FUEL TO BE TRANSFERRED BETWEEN TANKS FOR CLEANING (TNPA STAFF)	NO CHARGE	
	33.1	OPEN DB FUEL TANKS AND VENTILATE	2	
		GAS FREE CERTIFICATE TO BE ISSUED BEFORE ENTRY	NO CHARGE	
	33.2	DB FUEL TANKS TO BE CLEANED (X2)	68m ²	
	33.3	NEW GASKETS TO BE MADE UP	2	
	33.4	DB FUEL TANKS MANHOLE COVERS TO BE REFITTED	2	
35. DIRTY OIL TANKS	34.1	DIRTY OIL TANKS TO BE PUMPED OUT & DISPOSED (CERTIFICATE OF DISPOSAL TO BE SUPPLIED)	5m ²	
	34.2	OPEN DIRTY OIL TANKS AND VENTILATE	2	
		GAS FREE CERTIFICATE TO BE ISSUED BEFORE ENTRY	NO CHARGE	
	34.3	DIRTY OIL TANKS TO BE CLEANED	16m ²	
	34.4	DIRTY OIL TANKS TO BE MECHANICALLY DESCALED AND PRIMED (1 COAT PRIMER)	4m ²	
	34.5	DIRTY OIL TANKS TO BE TOUCHED UP AS REQUIRED (1 COAT TANKGUARD WHITE)	4m ²	
	34.6	NEW GASKETS TO BE MADE UP	2	
	34.7	DIRTY OIL TANK MANHOLE COVERS TO BE REFITTED	2	
36. VOID SPACE	35.1	OPEN VOID SPACE TANK AND VENTILATE	1	
		O ² READINGS TO BE TAKEN ON EVERY ENTRY	NO CHARGE	
	35.2	VOID SPACE TANK TO BE CLEANED	10m ²	
	35.3	VOID SPACE TANK TO BE MECHANICALLY DESCALED AND PRIMED (1 COAT PRIMER)	4m ²	
	35.4	VOID SPACE TANK TO BE TOUCHED UP AS REQUIRED (1 COAT TANKGUARD WHITE)	4m ²	
	35.5	NEW GASKETS TO BE MADE UP	2	
	35.6	VOID SPACE TANK MANHOLE COVER TO BE REFITTED	2	
	35.7	RENEW FLEXI HOSES (Ø120 x 150MM, 5MM WALL) & HEAVY DUTY CLAMPS ON KEEL COOLER INSIDE TANK	4	
36. FOAM TANK	36.1	SUPPLY CLEAN TANK/S TO STORE FOAM DURING TANK CLEANING (PUMPING INCLUDED)	14m ²	
	36.2	PUMPING OF FOAM TO & FROM SHORESIDE STORAGE TANK (DISCARD ANY NON-USABLE FOAM)	10m ²	
	36.3	OPEN FOAM TANK AND VENTILATE	2	
	36.4	GAS FREE CERTIFICATE TO BE ISSUED BEFORE ENTRY	NO CHARGE	
	36.5	FOAM TANK TO BE MECHANICALLY DESCALED AND PRIMED (1 COAT PRIMER)	4m ²	
	36.6	FOAM TANK TO BE TOUCHED UP AS REQUIRED (1 COAT TANKGUARD WHITE)	4m ²	
	36.7	NEW GASKETS TO BE MADE UP	2	
	36.8	FOAM TANK MANHOLE COVER TO BE REFITTED	2	
ANCHOR AND CHAIN				

<u>GENERAL AREA</u>		<u>DESCRIPTION OF WORK</u>	NO CHARGE	
38. ANCHOR AND CHAIN	37.1	ANCHOR AND CHAIN TO BE DROPPED AND RANGED	1	
	37.2	ANCHOR AND CHAIN TO BE MECHANICALLY DESCALE IF REQUIRED	1	
	37.3	ANCHOR AND CHAIN TO BE HIGH PRESSURE CLEANED	1	
	37.4	FREE UP ANCHOR CHAIN SWIVEL	1	
	37.5	CHAIN THICKNESS MEASUREMENTS TO BE TAKEN (SUBMIT REPORT) (5 SPOTS PER SHACKLE- 4 SHACKLES)	20	
	37.6	ANCHOR TO BE PAINTED (1 COAT "NO RUST")	1	
	37.7	ENTIRE CHAIN TO BE PAINTED WITH BOILED LINSEED OIL (2 COATS)	1	
		ALLOW FOR ADEQUATE DRYING TIME BETWEEN COATS	NO CHARGE	
	37.8	CHAIN TO BE REMARKED (RED & WHITE PAINT)	1	
	37.9	CHAIN AND ANCHOR TO BE RESTOWED	1	
<u>CHAIN LOCKER</u>				
<u>GENERAL AREA</u>		<u>DESCRIPTION OF WORK</u>	NO CHARGE	
38. CHAIN LOCKER	38.1	MANHOLE COVER TO BE REMOVED	1	
	38.2	MANHOLE COVER TO BE MECHANICALLY DESCALED	0,5m²	
	38.3	MANHOLE COVER TO BE WASHED AND PAINTED (SMARTPACK RED)	1m²	
	38.4	MUD TO BE REMOVED AND DISPOSED OF	1m²	
	38.5	CHAIN LOCKER TO BE HP WASHED	4m²	
	38.6	CHAIN LOCKER TO BE MECHANICALLY DESCALED	1m²	
	38.7	CHAIN LOCKER TO BE PAINTED COMPLETE (SMARTPACK RED)	4m²	
	38.8	GRIDS TO BE REMOVED, HP WASHED AND PAINTED (SMARTPACK RED) THEN REFITTED	4	
	38.9	MANHOLE COVER TO BE REFITTED WITH NEW GASKET	1	
<u>DECK WORK</u>				
<u>GENERAL AREA</u>		<u>DESCRIPTION OF WORK</u>	NO CHARGE	
40. DECK	39.1	ANCHOR WINDLASS	1	
	39.1.1	MECHANICALLY DESCALE AFFECTED AREAS	1m²	
	39.1.2	APPLY PRIMER AS PER PAINT SPEC (1 COAT SMARTPACK RED, 1 COAT SMARTPACK GREY)	2m²	
	39.1.3	APPLY TOP COAT AS PER PAINT SPEC (1 COAT HARDTOP AS GREEN/BLACK)	1m²	
	39.1.4	RENEW ALL HYDRAULIC PIPES & FITTINGS AS NECESSARY	4	
	39.1.5	SERVICE HYDRAULIC MOTOR ON DECK (PAY SPECIAL ATTENTION TO COUPLING)	1	
	39.1.6	SERVICE HYDRAULIC POWER PACK (PAY SPECIAL ATTENTION TO COUPLING)	1	
	39.1.7	SERVICE CONTROL VALVE	1	
	39.2	PORT HOLES	7	
	39.2.1	MECHANICALLY DESCALE AFFECTED AREAS	1m²	
	39.2.2	REPAIR SEALING SURFACE IF NECESSARY	7	
	39.2.3	PAINT SEALING SURFACE & WINDOW BOXES AS PER WHEELHOUSE PAINT SPEC	1m²	
	39.2.4	RENEW RUBBERS IF NECESSARY	7	
	39.3	DAVIT CRANE	NO CHARGE	
	39.3.1	SPOT BLAST AFFECTED AREAS	0,5m²	
	39.3.2	APPLY PRIMER AS PER PAINT SPEC (1 COAT SMARTPACK RED, 1 COAT SMARTPACK GREY)	2m²	
	39.3.3	APPLY TOP COAT AS PER PAINT SPEC (1 COAT HARDTOP AS WHITE)	2m²	
	39.3.4	LOAD TEST & SUPPLY CERTIFICATION (INCLUDING HOOK)	1	
	39.4	DECK CRANE	NO CHARGE	
	39.4.1	SPOT BLAST AFFECTED AREAS	2m²	
	39.4.2	APPLY PRIMER (RED OXIDE)	2m²	
	39.4.3	APPLY TOP COAT TO ENTIRE CRANE (BLUE) (PAINT SUPPLIED BY TNPA)	2m²	
	39.4.6	REPAIR BOTTOM DUST COVER FRAME & REPLACE RUBBER	1	

	39.4.7	RENEW ALL MOUNTING CAPHEAD BOLTS & NUTS	8	
	39.4.9	LOAD TEST & SUPPLY CERTIFICATION (INCLUDING HOOK & D-SHACKLE)	1	
	39.5	WINCH	NO CHARGE	
	39.5.1	DERUST & PAINT SHAFT, INSPECT DRUM & PINION GEARS, TREAT WITH OPEN GEAR GREASE	1	
	39.5.2	REMOVE & RENEW BRAKE LINING, RENEW SPRINGS x 6, RENEW WHEELS X 3	1	
	39.5.3	SERVICE BRAKE CYLINDER, SUPPLY & FIT NEW H/P PIPING & TEST	1	
	39.5.4	RENEW HYDRAULIC CYLINDER ON CLUTCH INCLUDING FITTINGS, VALVE & H/P PIPING	1	
	39.5.5	RENEW SERVO PUMP EMERGENCY STOP ON AFT DECK	1	
	39.5.6	TEST & CALIBRATE SERVO SYSTEM (SETTINGS TO OEM RECOMMENDATIONS AS PER MANUAL)	1	
	39.5.7	MECHANICALLY DESCALE & PAINT AS PER MAIN DECK PAINT SPEC	4m²	
	39.6	AFT GOOSENECK VENT	NO CHARGE	
	39.6.1	DECK PLATING TO BE CUT OUT	1m²	
	39.6.2	FABRICATE NEW DECK PLATING AND TO BE WELDED WITH DOUBLER FLANGE	1	
	39.6.3	GOOSE NECK TO BE FLANGED AND BOLTED TO DOUBLER FLANGE	1	
	39.6.4	PIPING IN COMPRESSOR FLAT TO BE FLANGED, BOLTED TO DOUBLER AND LINED UP WITH EXACTOR FAN	1	
	39.6.5	FIT ALL PIPING WITH SUITABLE GASKETS	2	
WATERTIGHT DOORS	39.7	WATERTIGHT DOORS	NO CHARGE	
	39.7.1	MECHANICALLY DESCALE ALL HATCH COAMINGS & WATERTIGHT DOORS FOR RUST, PRIME & PAINT	6	
	39.7.2	RENEW ALL RUBBERS	6	
ENGINE ROOM WORK				
GENERAL AREA		DESCRIPTION OF WORK	NO CHARGE	
40. ENGINE ROOM	40.1	MAIN FIRE PUMP	NO CHARGE	
(ALL PUMPS TO BE COMMISSIONED ONCE AFLOAT)	40.1.1	REPACK GLANDS & TEST WHEN AFLOAT (16MM GRAPHITE PACKING)	1	
	40.2	LUB OIL COOLERS	NO CHARGE	
	40.2.1	VOITH COOLERS x 2 & WINCH COOLER x 1 TO BE REMOVED	3	
	40.2.2	COOLERS TO BE CLEANED & PRESSURE TESTED	3	
	40.2.3	COOLERS TO BE REFITTED WITH NEW GASKETS	3	
	40.3.	FUEL TRANSFER ATTACHED PUMPS (MAN 8L 27/38)		
	40.3.1	SERVICE ATTACHED PUMPS & RENEW DEFECTIVES PARTS AS NECESSARY	2	
	40.4	HT & LT MAIN ENGINE ATTACHED PUMPS (MAN 8L 27/38)		
	40.4.1	SERVICE ATTACHED PUMPS & RENEW DEFECTIVES PARTS AS NECESSARY	4	
	40.5	STANDBY L/O PUMPS (GP 185-125 G200)	NO CHARGE	
	40.5.1	SERVICE PUMPS x 2 & ELECTRIC MOTORS x 2	2	
	40.5.2	RENEW PUMP COUPLINGS AND LOCTITE (TNPA TO SUPPLY COUPLINGS)	2	
	40.6	STANDBY HT & LT FRESH WATER PUMPS (STORK CB50-160)	NO CHARGE	
	40.6.1	SERVICE PUMPS x 2 & ELECTRIC MOTORS x 2	2	
	40.7	GENERAL SERVICE PUMPS	NO CHARGE	
	40.7	SERVICE PUMPS x 2 & ELECTRIC MOTORS x 2 - RENEW DEFECTIVE PARTS AS NECESSARY	2	
MISCELLANEOUS WORK				
GENERAL AREA		DESCRIPTION OF WORK	NO CHARGE	
41. MISCELLANEOUS WORK	41.1	BUDGET R100 000 FOR UNPLANNED WORK IDENTIFIED AFTER INSPECTION	NO CHARGE	
	41.2	BUDGET FOR SKILLED LABOUR 1 X 20 HOURS	20 HRS	
	41.3	BUDGET FOR SEMI-SKILLED LABOUR 1 X 20 HOURS	20 HRS	
	41.4	BUDGET FOR MACHINE SHOP COST 1 X 20 HOURS	20 HRS	
	41.5	BUDGET FOR MISCELLANEOUS COSTS (TRAVEL, ACCOMODATION, CAR, FOOD, ETC)	31 DAYS	
	41.6	ASSIST CME0 AND VOITH TECHNICIAN WITH VOITH HEATH CHECK (2X 2 DAYS X 4 HRS)	2 DAYS	
	41.7	SCAFFOLDING	7 DAYS	
	41.8	BUDGET FOR 2 X SKILLED LABOUR OVERTIME FOR THREE SATURDAYS AND THREE SUNDAYS (4HRS PER DAY)	3 DAYS	

	41.9	PROVIDE SEMI SKILLED LABOUR (2 X 8 HRS X 10 DAYS) FOR CLEANING OF BILGES & ASSISTING TNPA ENGINE ROOM STAFF	10 DAYS	
	41.10	SHE FILE	1	
42. METAL WORK	42.1	QUOTE ON 0,5 TON OF METAL	0,5 ton	
			Sub Total	
			15% VAT (if applicable)	
			Total	