

## ANNEXURE A

### SCOPE OF WORK AND PRICING SCHEDULE

BOTH MAIN ENGINES DETAILS AS FOLLOWS:

MAN 8L 27/38 - 21113-01-11 (PORT)

MAN 8L 27/38 – 21112-01-11 (STARBOARD)

TURBOCHARGER ABB TYPE TC K20-40021

SPARES REQUIRED FOR THE 18000 HOUR SERVICE AS FOLLOWS:

ITEM:	PART NO:	DESCRIPTION:	QTY:
12	P11014-03	VITON: O - RING	32
4	P11014-03	VITON: O - RING	4
8	P11014-03	VITON: O – RING 316.87 X7.0	2
16	P11014-03	VITON: O- RING 471.96 X 7.0	2
2	P11014-03	VITON: O - RING	32
4	P11620-01	VITON: O - RING	16
7	P11812-01	VITON: O - RING	16
A5	P11812-01	GASKET	2
A9	P11812-01	O – RING. SILICONE	2
A3	P11812-01	GASKET	2
K1	P12088-01	KIT INSPECTION OF FUEL VALVE	16
A1	P12018-02	FUEL NOZZLE	16
B27	P12014-01	MDO FILTER	4
B28	P12014-01	GASKET	4

N.B SUPPLY OF SPARES SHOULD ALL BE ORIGINAL MAN SPARES

#### **SCOPE:**

- To carry out the 18000 hour as per the scope of work as per manufacturer's recommendations inclusive of spares and required tools to perform the job
- To service both turbochargers as required and provide any tools or spares.
- Include the calibration of all fuel pumps on both main engines.
- Service of Port and starboard Governors on the main engines
- Service Port and starboard starter motors

- Restore remote speed operation and local operation and test over speed set to correct RPM's.
- Report any abnormalities or defects not included to Marine Technical Manager as soon as detected.

## **BILL OF QUANTITIES:**

### **SERVICE OF MAIN ENGINES AND TURBOCHARGERS AND SUPPLY OF ENGINE SPARES FOR THE TUGBOAT LILANI IN THE PORT OF RICHARDS BAY**

SUPPLIER TO SUPPLY THE FOLLOWING SPARES:

	DESCRIPTION	PART NO:	QUANTIT Y	UNIT PRICE	TOTAL PRICE
01	VITON: O - RING	P11014-03 ITEM NO:12	32		
02	VITON: O - RING	P11014-03 ITEM NO:4	04		
03	VITON: O – RING 316.87 X7.0	P11014-03 ITEM NO:8	02		
04	VITON: O- RING 471.96 X 7.0	P11014-03 ITEM NO:16	02		
05	VITON: O - RING	P11014-03 ITEM NO:2	32		
06	VITON: O - RING	P11620-01 ITEM NO:4	16		
07	VITON: O - RING	P11812-01 ITEM NO:7	16		
08	GASKET	P11812-01 ITEM NO:A5	02		
09	O-RING SILICONE	P11812-01 ITEM NO:A9	02		
10	GASKET	P11812-01 ITEM NO:A3	02		
11	KIT INSPECTION OF FUEL VALVE	P12088-01 ITEM NO: K1	16		
12	FUEL NOZZLE	P12018-02 ITEM NO: A1	16		
13	MDO FILTER	P12014-01 ITEM NO: B27	04		
14	GASKET	P12014-01 ITEM NO: B28	04		

SUPPLIER TO PERFORM THE FOLLOWING SERVICES:

	DESCRIPTION	TOTAL PRICE
01	18000 HOUR SERVICE AS PER ORIGINAL MANUFACTURERS RECOMMENDATIONS INCLUSIVE OF SPARES AND TOOLS REQUIRED	
02	SERVICE BOTH TURBOCHARGERS WITH ALL SPARES AND TOOLS REQUIRED	
03	CALIBRATION OF ALL FUEL PUMPS FOR BOTH ENGINES	
04	SERVICE OF PORT AND STARBOARD GOVERNORS	
05	SERVICE OF PORT AND STARBOARD STARTER MOTORS	
06	RESTORE REMOTE SPEED OPERATION AND LOCAL OPERATION	
07	TEST OVERSPEED AND CALIBRATE BOTH ENGINES RPM'S	
08	TWO SPARE FUEL PUMPS TO BE SUPPLIED TO CRAFT	
09	TWO OIL MIST DETECTOR SERVICE KITS TO BE SUPPLIED TO CRAFT	
10	TRANSPORTATION /ACCOMMODATION TO AND FROM RICHARDS BAY	
11	OTHERS COSTS: MUST BE SPECIFIED	