



NORTHERN LIGHTS 068703F - GENSET

Sample No: VPA047219

Oil Type: SHELL ROTELLA T4 15W40

SAMPLE INFORMAT	TION			
Sample Number		VPA047219	 	
Sample Date		03 Sep 2023	 	
Machine Hours		890	 	
Oil Hours		290	 	
Oil Changed		Changed	 	
Sample Status		NORMAL	 	
OIL CONDITION				
OIL CONDITION				
Visc @ 100°C	cSt	■13.8	 	
Base Number (BN)	mg KOH/g	7.6	 	
Oxidation (PA)	%	62	 	
CONTAMINATION				
Soot %	%	0.1	 	
Nitration (PA)	%	58	 	
Sulfation (PA)	%	54	 	
Glycol	%	NEG	 	
Fuel	%	<1.0	 	
Silicon	ppm	15	 	
Sodium	ppm	162	 	
Potassium	ppm	■16	 	
	pp			
WEAR METALS				
Iron	ppm	■34	 	
Copper	ppm	11	 	
Lead	ppm	■ 3	 	
Tin	ppm	■<1	 	
Aluminum	ppm	■ 5	 	
Chromium	ppm	1	 	
Molybdenum	ppm	■3	 	
Nickel	ppm	■ 0	 	
Titanium	ppm	<1	 	
Silver	ppm	■ <1	 	
Manganese	ppm	■<1	 	
Vanadium	ppm	<1	 	
ADDITIVES				
Calcium	ppm	2179	 	
Magnesium	ppm	80	 	
Zinc	ppm	1213	 	
Phosphorus	ppm	913	 	
Barium	ppm	■0	 	
Boron	ppm	224	 	
	- P			

GRAND BANKS

450 SW SALEM RD STUART, FL US 34994 Contact: ROBERT ANTONA roberta@gbmarinegroup.com T: (609)384-5290 F:

Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Depot:VP531377Unique No:10642222Signed:Doug BogartReport Date:12 Sep 2023

OIL ANALYSIS REPORT



