## **OIL ANALYSIS REPORT**

### DANIEL LOEB DANIEL LOEB (S/N NOT GIVEN) - STARBOARD DIESEL ENGINE

Sample No: VPA036743

Oil Type: SHELL ROTELLA T 15W40

#### SAMPLE INFORMATION

Zinc

Barium

Boron

Phosphorus

ppm

ppm

ppm

ppm

1180

1011

0 🔲

84

Sample Number		VPA036743	 	
Sample Date		15 Jan 2024	 	
Machine Hours		113	 	
Oil Hours		113	 	
Oil Changed		Changed	 	
Sample Status		ATTENTION	 	
OIL CONDITION				
Visc @ 100°C	cSt	<b>11.3</b>	 	
Base Number (BN)	mg KOH/g	7.5	 	
Oxidation (PA)	%	52	 	
CONTAMINATION				
Water	%	NEG	 	
Soot %	%	0.6	 	
Nitration (PA)	%	72	 	
Sulfation (PA)	%	52	 	
Glycol	%	NEG	 	
Fuel	%	1.8	 	
Silicon	ppm	<b>4</b> 4	 	
Sodium	ppm	<b>4</b>	 	
Potassium	ppm	5	 	
WEAR METALS				
Iron	ppm	23	 	
Copper	ppm	34	 	
Lead	ppm	3	 	
Tin	ppm	2	 	
Aluminum	ppm	3	 	
Chromium	ppm		 	
Molybdenum	ppm	<b>77</b>	 	
Nickel	ppm	<1	 	
Titanium	ppm	0	 	
Silver	ppm	0	 	
Manganese	ppm	<b>1</b>	 	
Vanadium	ppm	<1	 	
ADDITIVES				
Calcium	ppm	2253	 	
Magnesium	ppm	31	 	
	PPIII			

Larry's Lighthouse Marina 1250 AQUEBOGUE, NY US 11931 Contact: MAX FUHLBRUGGE info@lighthousemarina.com T: x: F: x:

#### Diagnosis

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. Fuel content negligible. Elemental level of silicon (Si) above normal indicating ingress of seal material. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.



Contact/Location: MAX FUHLBRUGGE - VP610438

VP610438

10843043

Don Baldridge

25 Jan 2024

Depot:

Signed:

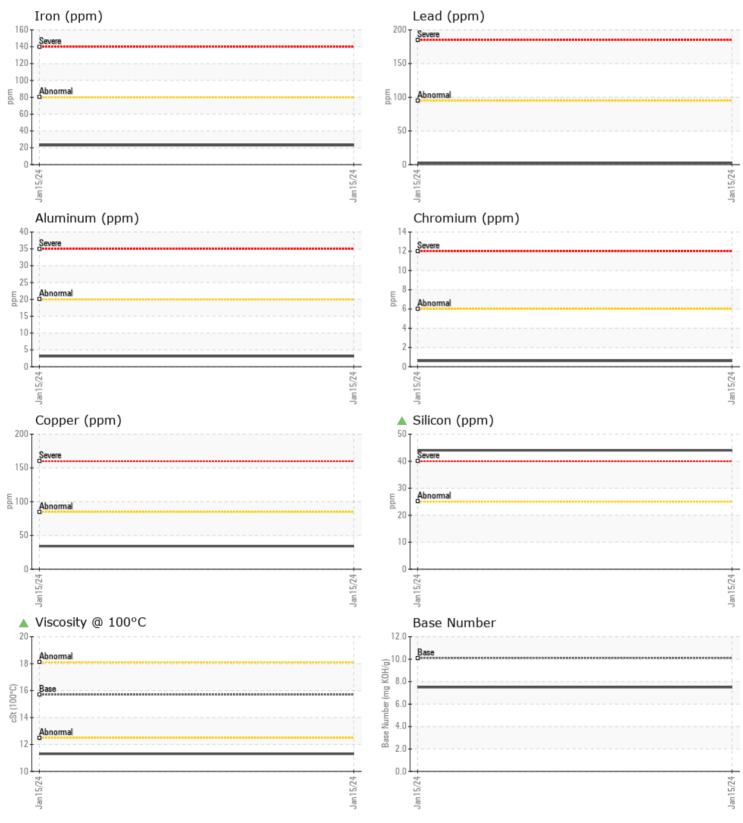
Unique No:

Report Date:

# **OIL ANALYSIS REPORT**



#### GRAPHS



Report Id: VP610438 [WUSCAR] 06066366 (Generated: 01/26/2024 01:29:13) Rev: 1

Contact/Location: MAX FUHLBRUGGE - VP610438