## **OIL ANALYSIS REPORT**

### JMADRA NORTHERN LIGHTS JMADRA (S/N NOT GIVEN) - GENSET

Sample No: VPA036390

**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

Sample Number		VPA036390	 	
Sample Date		15 Nov 2023	 	
Machine Hours		501	 	
Dil Hours		0	 	
Dil Changed		Changed	 	
Sample Status		ABNORMAL	 	
OIL CONDITION				
/isc @ 100°C	cSt	<b>12.4</b>	 	
Base Number (BN)		9.5	 	
Dxidation (PA)	%	63	 	
CONTAMINATION				
Water	%	NEG	 	
Soot %	%	<b>0.1</b>	 	
Nitration (PA)	%	60	 	
Sulfation (PA)	%	52	 	
Glycol	%	NEG	 	
Fuel	%	▲ 4.4	 	
Silicon		<b>—</b> 4.4	 	
Sodium	ppm	□ ′ □ 1	 	
Potassium	ppm ppm	18	 	
otassiam	ррпп	0		
WEAR METALS				
ron	ppm	7	 	
Copper	ppm	<b>12</b>	 	
ead	ppm	2	 	
<b>Tin</b>	ppm	0	 	
Aluminum	ppm	2	 	
Chromium	ppm	<b>■</b> <1	 	
Molybdenum	ppm	56	 	
Nickel	ppm	<b>■</b> <1	 	
Titanium	ppm	<1	 	
ilver	ppm	0	 	
Manganese	ppm	<b></b> <1	 	
/anadium	ppm	0	 	
ADDITIVES				
alcium	ppm	<b>1446</b>	 	
/lagnesium	ppm	550	 	
	ppm	1031	 	
	PPIII		 	
linc	nnm	876	 	
Zinc Phosphorus Barium	ppm ppm	876 9	 	

Report Date:

VP1298996

10752367

Jonathan Hester

24 Nov 2023

Report Id: VP1298996 [WUSCAR] 06013223 (Generated: 11/24/2023 12:09:13) Rev: 1

#### L KEEL MARINE SERVICES LEGION AVE

APOLIS, MD 21401 tact: Service Manager KEELMARINESERIVES@GMAIL.COM 10)507-3542

#### gnosis

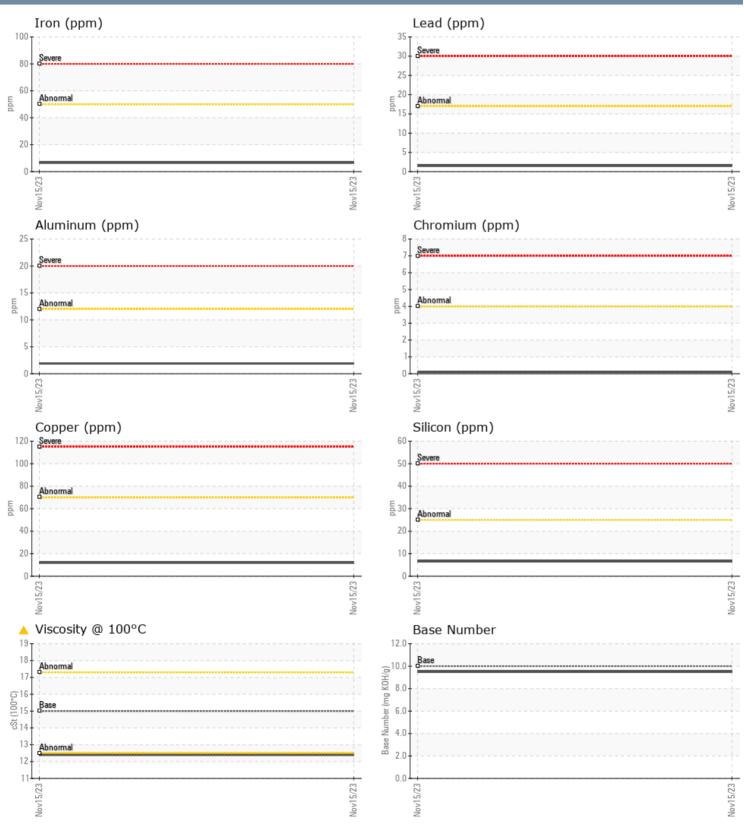
advise that you check the fuel ction system. Oil and filter change he time of sampling has been ed. Resample at the next service erval to monitor.All component ar rates are normal. There is a derate amount of fuel present in oil. Fuel is present in the oil and is ering the viscosity. The BN result icates that there is suitable alinity remaining in the oil.



# **OIL ANALYSIS REPORT**



#### GRAPHS



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Contact/Location: Service Manager - VP1298996