



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area  
**D. BOMAR**  
 Machine Id  
**NORTHERN LIGHTS K05508**  
 Component  
**Genset**  
 Fluid  
**SHELL ROTELLA T 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VPA056850	---	---
Sample Date		Client Info		11 Apr 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				NORMAL	---	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	12	---	---
Chromium	ppm	ASTM D5185m	>4	0	---	---
Nickel	ppm	ASTM D5185m	>2	0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m	>5	0	---	---
Aluminum	ppm	ASTM D5185m	>12	1	---	---
Lead	ppm	ASTM D5185m	>17	<1	---	---
Copper	ppm	ASTM D5185m	>70	2	---	---
Tin	ppm	ASTM D5185m	>15	1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

**CONTAMINATION**

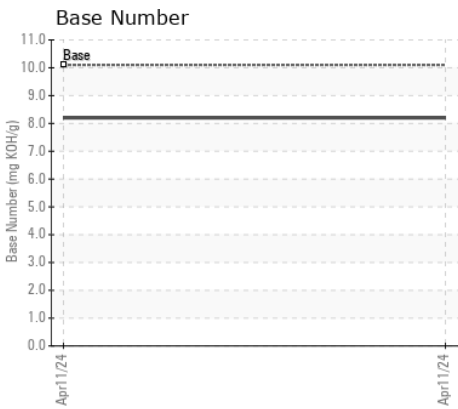
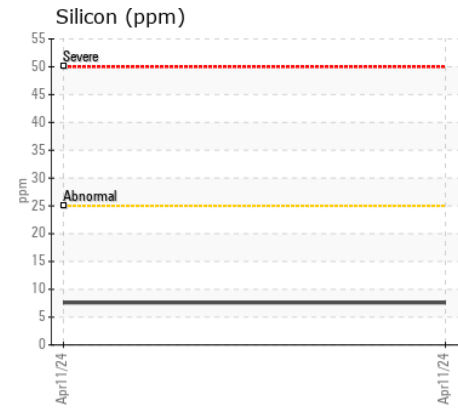
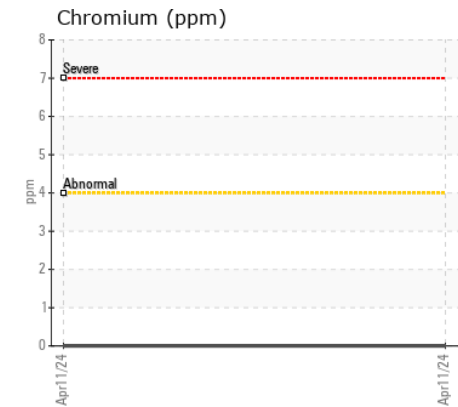
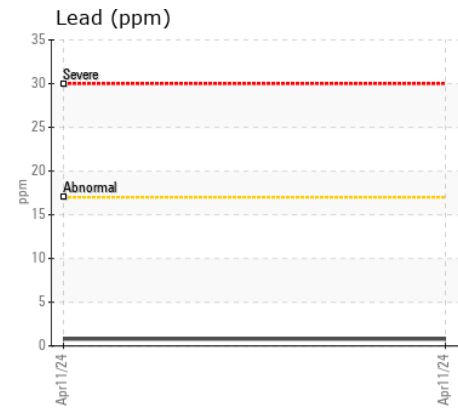
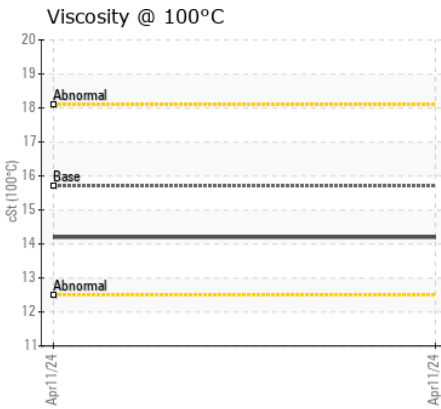
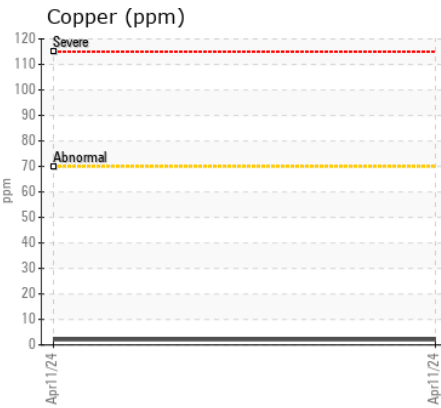
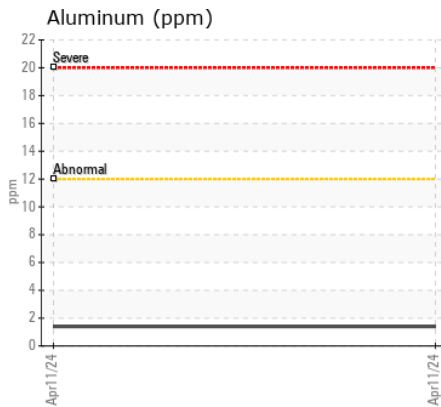
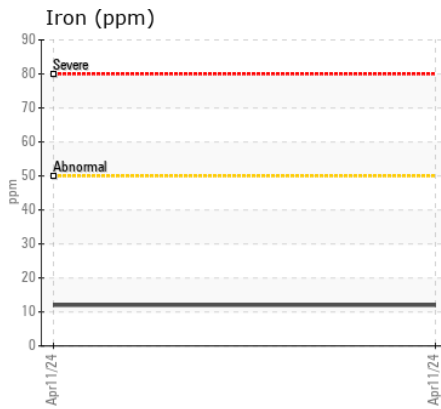
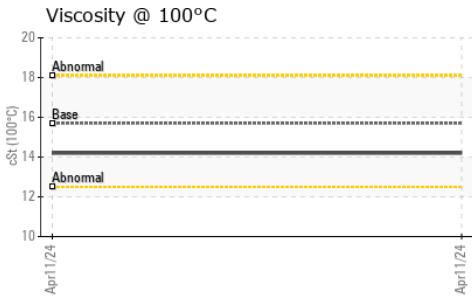
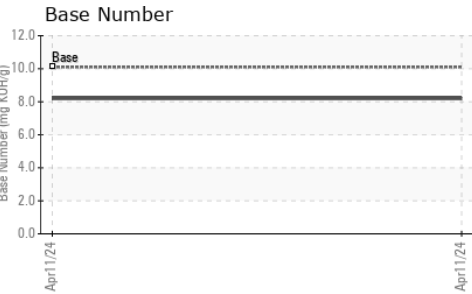
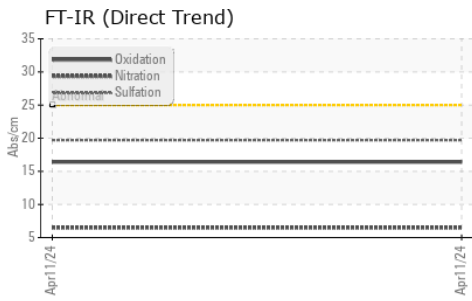
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	8	---	---
Potassium	ppm	ASTM D5185m	>20	6	---	---
Fuel		WC Method	>4.0	<1.0	---	---
Water		WC Method	>0.1	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844		0.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	6.5	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.7	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---	---

**FLUID CONDITION**

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.

Sodium	ppm	ASTM D5185m		2	---	---
Boron	ppm	ASTM D5185m	316	211	---	---
Barium	ppm	ASTM D5185m	0.0	0	---	---
Molybdenum	ppm	ASTM D5185m	1.2	8	---	---
Manganese	ppm	ASTM D5185m		0	---	---
Magnesium	ppm	ASTM D5185m	24	49	---	---
Calcium	ppm	ASTM D5185m	2292	2191	---	---
Phosphorus	ppm	ASTM D5185m	1064	863	---	---
Zinc	ppm	ASTM D5185m	1160	1128	---	---
Sulfur	ppm	ASTM D5185m	4996	3842	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.4	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	8.2	---	---
Visc @ 100°C	cSt	ASTM D445	15.7	14.2	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : VPA056850

**Lab Number** : 06150133

**Unique Number** : 10980211

**Test Package** : MOB 1 ( Additional Tests: TBN )

**Received** : 16 Apr 2024

**Tested** : 17 Apr 2024

**Diagnosed** : 18 Apr 2024 - Don Baldrige

**Aqua Yacht Harbor Marina**

3832 Hwy. 25 North, 3832 Hwy. 25 North

IUKA, MS

US 38852

Contact: DENNIS KANIZAI

dkanizai@shmarinas.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

T:

F: