



**POWER SYSTEMS**  
**SYSTÈMES DE PUISSANCE**

**OIL ANALYSIS REPORT**

WEAR	<b>MARGINAL</b>
CONTAMINATION	<b>ABNORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area

**[01-26758]**

Machine Id

**45588214**

Component

**Port Diesel Engine**

Fluid

**VALVOLINE 15W40 (--- GAL)**

**RECOMMENDATION**

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We recommend that you drain the oil from the component if this has not already been done. We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WA0021268</b>	---	---
Sample Date		Client Info		<b>01 May 2024</b>	---	---
Machine Age	hrs	Client Info		<b>1656</b>	---	---
Oil Age	hrs	Client Info		<b>250</b>	---	---
Filter Age	hrs	Client Info		<b>250</b>	---	---
Oil Changed		Client Info		<b>Not Changed</b>	---	---
Filter Changed		Client Info		<b>Not Changed</b>	---	---
Sample Status				<b>ABNORMAL</b>	---	---

**WEAR**

Nickel ppm levels are marginal. All other component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>90	<b>42</b>	---	---
Chromium	ppm	ASTM D5185(m)	>20	<b>2</b>	---	---
Nickel	ppm	ASTM D5185(m)	>2	<b>▲ 2</b>	---	---
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	---	---
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>20	<b>3</b>	---	---
Lead	ppm	ASTM D5185(m)	>40	<b>27</b>	---	---
Copper	ppm	ASTM D5185(m)	>330	<b>8</b>	---	---
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---	---

**CONTAMINATION**

There is a moderate concentration of dirt present in the oil.

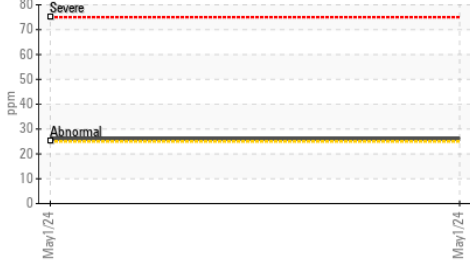
Silicon	ppm	ASTM D5185(m)	>25	<b>▲ 26</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	---	---
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Glycol		WC Method		<b>NEG</b>	---	---
Soot %	%	ASTM D7844*	>6	<b>0.3</b>	---	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>13.5</b>	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>25.0</b>	---	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	---	---

**FLUID CONDITION**

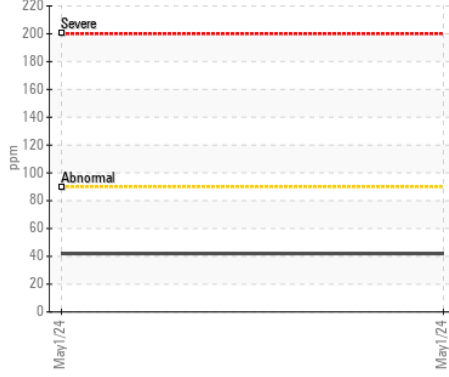
The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		<b>5</b>	---	---
Boron	ppm	ASTM D5185(m)	39	<b>64</b>	---	---
Barium	ppm	ASTM D5185(m)	1	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m)	49	<b>68</b>	---	---
Manganese	ppm	ASTM D5185(m)	1	<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185(m)	616	<b>791</b>	---	---
Calcium	ppm	ASTM D5185(m)	1554	<b>1390</b>	---	---
Phosphorus	ppm	ASTM D5185(m)	899	<b>749</b>	---	---
Zinc	ppm	ASTM D5185(m)	1069	<b>859</b>	---	---
Sulfur	ppm	ASTM D5185(m)	2624	<b>1957</b>	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>26.9</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896*	6.9	<b>8.26</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	13.6	<b>14.3</b>	---	---

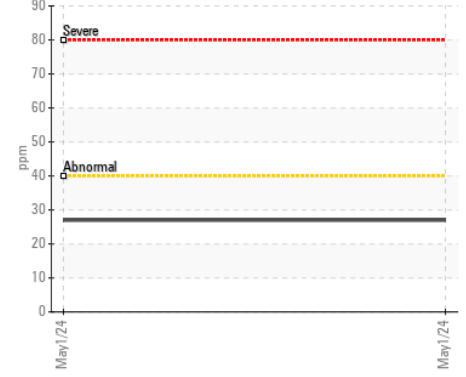
▲ Silicon (ppm)



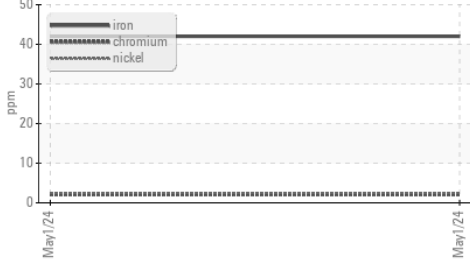
Iron (ppm)



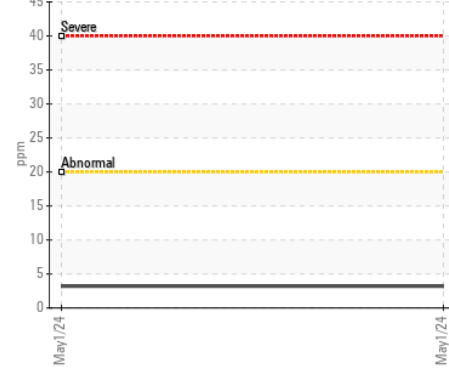
Lead (ppm)



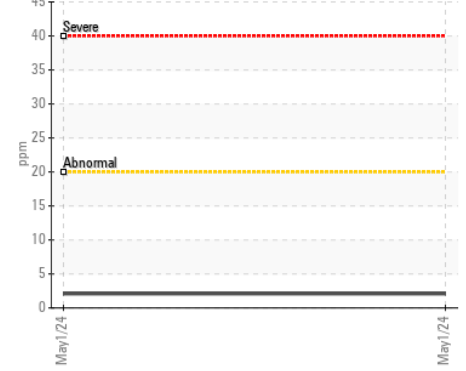
▲ Ferrous Alloys



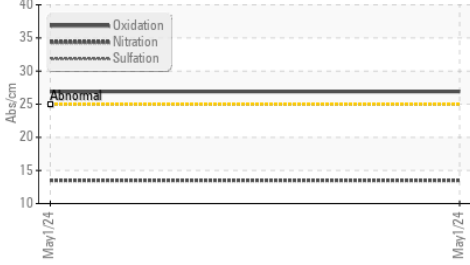
Aluminum (ppm)



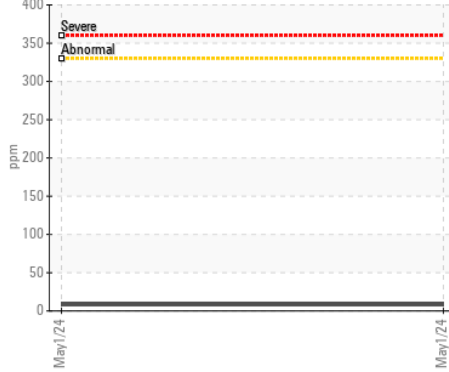
Chromium (ppm)



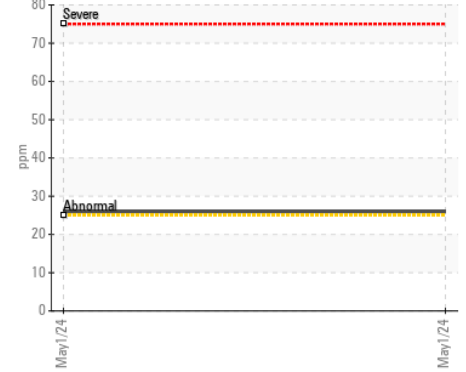
FT-IR (Direct Trend)



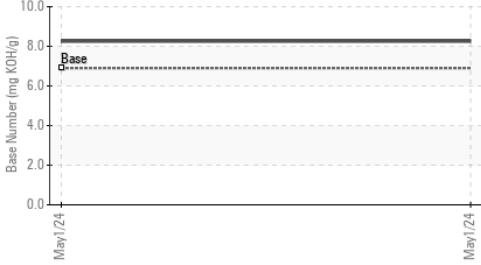
Copper (ppm)



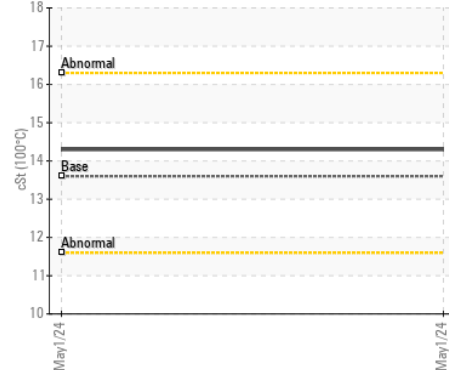
▲ Silicon (ppm)



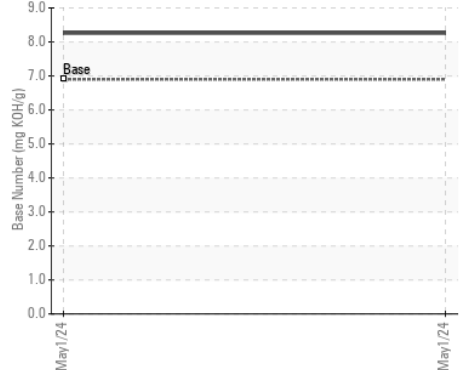
Base Number



Viscosity @ 100°C



Base Number



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WA0021268  
**Lab Number** : 02633463  
**Unique Number** : 5774616  
**Test Package** : MOB 2  
**Received** : 06 May 2024  
**Tested** : 07 May 2024  
**Diagnosed** : 07 May 2024 - Kevin Marson

**CHANTIER BLYACHT**  
 1225 BOUL. CHAMPLAIN  
 QUEBEC, QC  
 CA G1K 0A2  
 Contact: Service Manager  
 rboulet@chantierblyacht.com  
 T: (514)961-2206  
 F:

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.