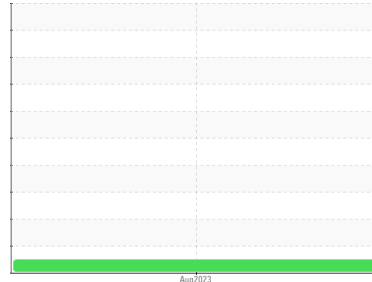




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**NO UNIT GFL0088944**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 40. Please confirm. Please specify the component make and model with your next sample.

### Wear

All component wear rates are normal.

### Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

### Fluid Condition

The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>GFL0088944</b>	---	---
Sample Date	Client Info	<b>28 Aug 2023</b>	---	---
Machine Age	hrs Client Info	<b>0</b>	---	---
Oil Age	hrs Client Info	<b>0</b>	---	---
Oil Changed	Client Info	<b>N/A</b>	---	---
Sample Status		<b>NORMAL</b>	---	---

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<b>&lt;1.0</b>	---	---
Glycol	WC Method	<b>NEG</b>	---	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >100	<b>18</b>	---	---
Chromium	ppm ASTM D5185(m) >20	<b>&lt;1</b>	---	---
Nickel	ppm ASTM D5185(m) >4	<b>0</b>	---	---
Titanium	ppm ASTM D5185(m)	<b>0</b>	---	---
Silver	ppm ASTM D5185(m) >3	<b>0</b>	---	---
Aluminum	ppm ASTM D5185(m) >20	<b>5</b>	---	---
Lead	ppm ASTM D5185(m) >40	<b>0</b>	---	---
Copper	ppm ASTM D5185(m) >330	<b>&lt;1</b>	---	---
Tin	ppm ASTM D5185(m) >15	<b>0</b>	---	---
Antimony	ppm ASTM D5185(m)	<b>0</b>	---	---
Vanadium	ppm ASTM D5185(m)	<b>0</b>	---	---
Beryllium	ppm ASTM D5185(m)	<b>0</b>	---	---
Cadmium	ppm ASTM D5185(m)	<b>0</b>	---	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 250	<b>6</b>	---	---
Barium	ppm ASTM D5185(m) 10	<b>0</b>	---	---
Molybdenum	ppm ASTM D5185(m) 100	<b>61</b>	---	---
Manganese	ppm ASTM D5185(m)	<b>&lt;1</b>	---	---
Magnesium	ppm ASTM D5185(m) 450	<b>985</b>	---	---
Calcium	ppm ASTM D5185(m) 3000	<b>1088</b>	---	---
Phosphorus	ppm ASTM D5185(m) 1150	<b>1067</b>	---	---
Zinc	ppm ASTM D5185(m) 1350	<b>1221</b>	---	---
Sulfur	ppm ASTM D5185(m) 4250	<b>2546</b>	---	---
Lithium	ppm ASTM D5185(m)	<b>&lt;1</b>	---	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >25	<b>4</b>	---	---
Sodium	ppm ASTM D5185(m) >216	<b>7</b>	---	---
Potassium	ppm ASTM D5185(m) >20	<b>13</b>	---	---

## INFRA-RED

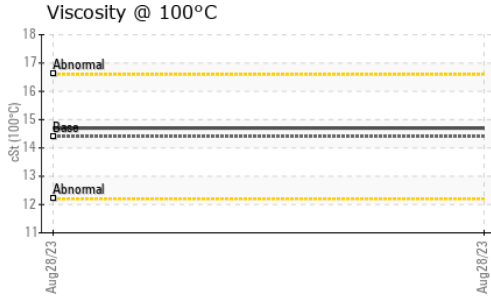
method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	<b>0.5</b>	---	---
Nitration	Abs/cm ASTM D7624* >20	<b>8.4</b>	---	---
Sulfation	Abs/.1mm ASTM D7415* >30	<b>21.2</b>	---	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm ASTM D7414* >25	<b>15.5</b>	---	---



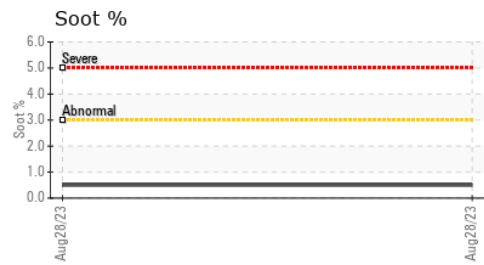
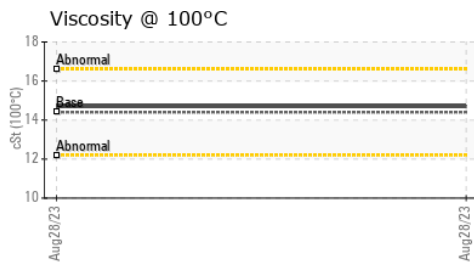
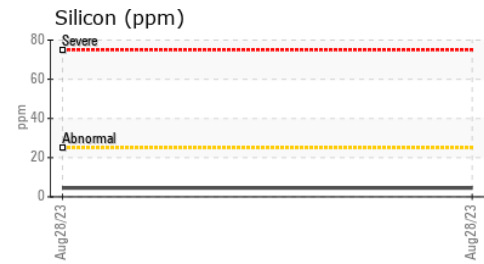
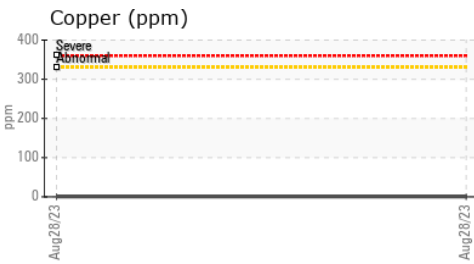
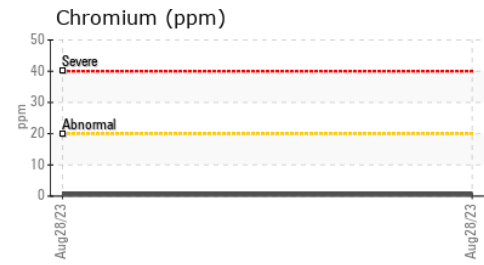
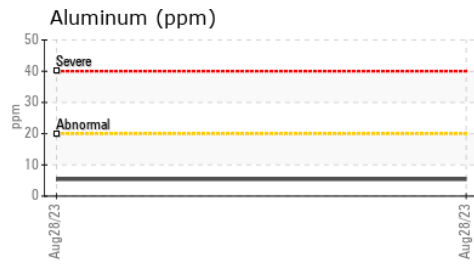
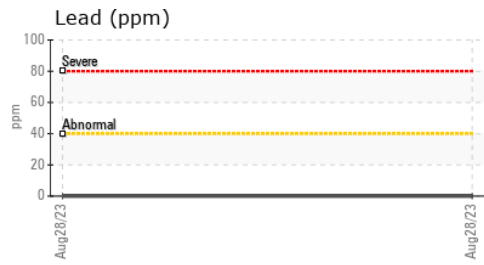
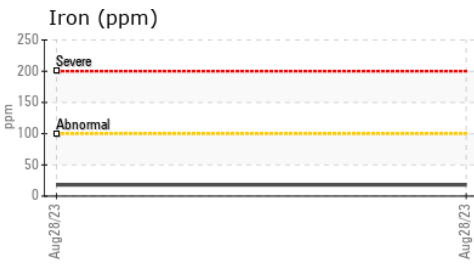
# OIL ANALYSIS REPORT



PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	---	---
Precipitate	scalar	Visual*	NONE	---	---
Silt	scalar	Visual*	NONE	---	---
Debris	scalar	Visual*	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	---	---
Appearance	scalar	Visual*	NORML	---	---
Odor	scalar	Visual*	NORML	---	---
Emulsified Water	scalar	Visual*	>0.2	---	---
Free Water	scalar	Visual*	---	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	<b>14.7</b>	---	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0088944     **Received** : 29 Aug 2023  
**Lab Number** : **02579066**     **Diagnosed** : 29 Aug 2023  
**Unique Number** : 5632126     **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: Visual )

**Canadian Coast Guard**  
 CCGS Vincent Massey, 101 Boul. Champlain  
 Quebec, QC  
 CA G1K 7Y7  
 Contact: Vincent Massey  
 vincentmasseyse@ccgs-ngcc.gc.ca  
 T: (418)573-7423  
 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.