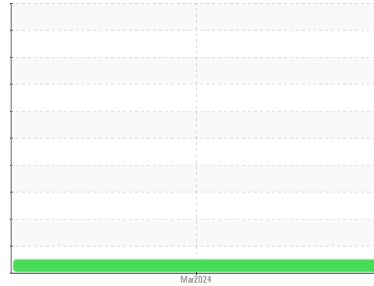




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**COAST GUARD [1346025]**  
 Machine Id  
**GELIGET**  
 Component  
**Starboard Diesel Engine**  
 Fluid  
**{not provided} (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.  
 Please specify the brand, type, and viscosity of the oil on your next sample.

### Wear

All component wear rates are normal.

### Contamination

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>CU0023088</b>	---	---
Sample Date	Client Info			<b>17 Mar 2024</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>	---	---
Water	WC Method	>0.2		<b>NEG</b>	---	---
Glycol	WC Method			<b>NEG</b>	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	<b>16</b>	---	---
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185(m)	>4	<b>1</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>3</b>	---	---
Lead	ppm	ASTM D5185(m)	>40	<b>2</b>	---	---
Copper	ppm	ASTM D5185(m)	>330	<b>22</b>	---	---
Tin	ppm	ASTM D5185(m)	>15	<b>1</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>	---	---

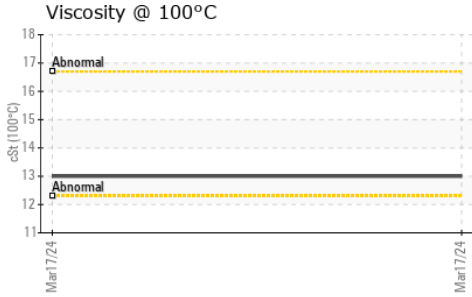
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<b>34</b>	---	---
Barium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m)		<b>47</b>	---	---
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185(m)		<b>773</b>	---	---
Calcium	ppm	ASTM D5185(m)		<b>1214</b>	---	---
Phosphorus	ppm	ASTM D5185(m)		<b>726</b>	---	---
Zinc	ppm	ASTM D5185(m)		<b>804</b>	---	---
Sulfur	ppm	ASTM D5185(m)		<b>2067</b>	---	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	<b>7</b>	---	---
Sodium	ppm	ASTM D5185(m)		<b>9</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	---	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	<b>0.5</b>	---	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.3</b>	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>21.2</b>	---	---



# OIL ANALYSIS REPORT



FLUID DEGRADATION		method	limit/base	current	history1	history2
-------------------	--	--------	------------	---------	----------	----------

Oxidation	Abs./1mm	ASTM D7414*	>25	<b>17.7</b>	---	---
-----------	----------	-------------	-----	-------------	-----	-----

VISUAL		method	limit/base	current	history1	history2
--------	--	--------	------------	---------	----------	----------

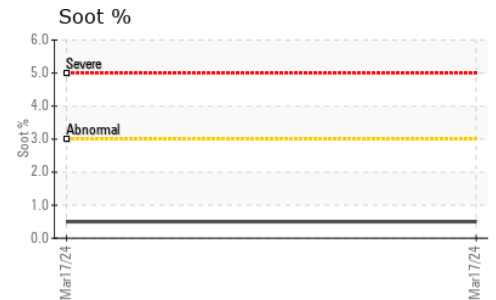
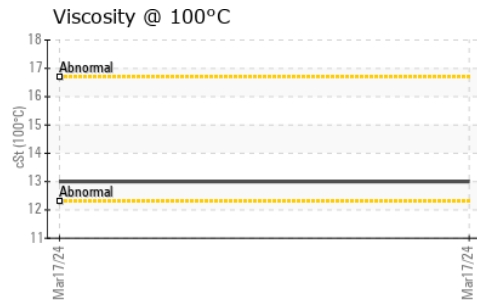
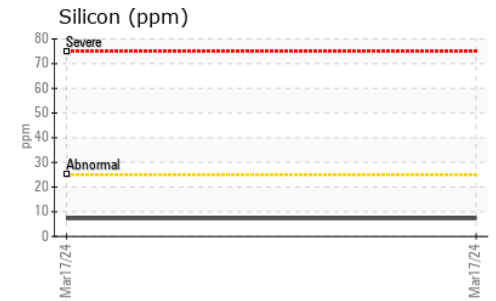
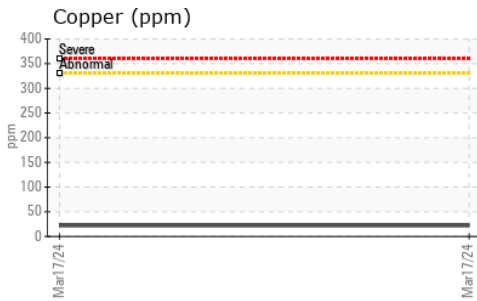
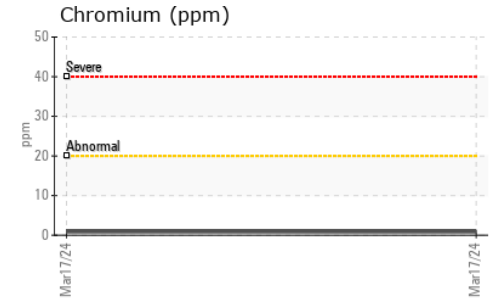
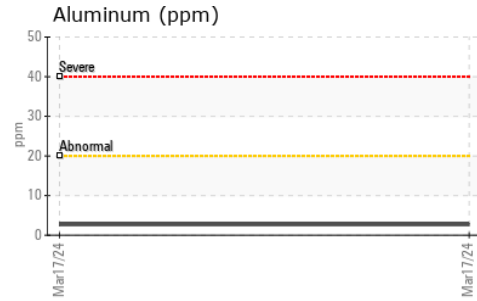
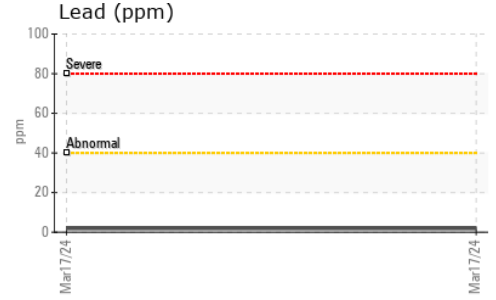
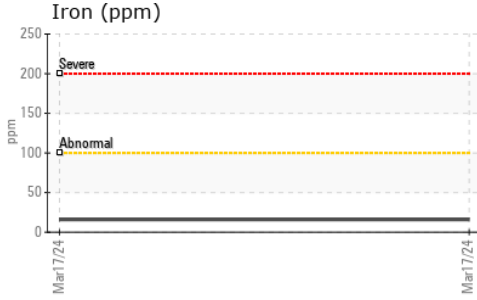
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	---	---
------------------	--------	---------	------	------------	-----	-----

Free Water	scalar	Visual*		<b>NEG</b>	---	---
------------	--------	---------	--	------------	-----	-----

FLUID PROPERTIES		method	limit/base	current	history1	history2
------------------	--	--------	------------	---------	----------	----------

Visc @ 100°C	cSt	ASTM D7279(m)		<b>13.0</b>	---	---
--------------	-----	---------------	--	-------------	-----	-----

## GRAPHS



<b>Laboratory</b> : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9	<b>Received</b> : 18 Mar 2024	<b>CUMMINS CANADA ULC - GENERATOR DIVISION</b>
<b>Sample No.</b> : CU0023088	<b>Tested</b> : 18 Mar 2024	7175 PACIFIC CIRCLE
<b>Lab Number</b> : 02622611	<b>Diagnosed</b> : 18 Mar 2024 - Wes Davis	MISSISSAUGA, ON
<b>Unique Number</b> : 5747730		CA L5T 2A5
<b>Test Package</b> : MOB 1		Contact: Elisia Johnson

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.

elisia.johnson@cummins.com  
 T: (905)795-0050  
 F: (905)795-9252