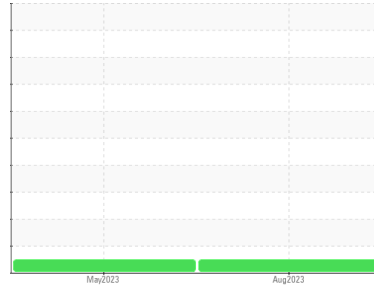


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**DIESEL GENERATING UNITS**  
Machine Id  
**CUMMINS AUXILIARY GENERATOR #1 (CAL007) (S/N 33217103)**  
Component  
**Auxiliary Engine**  
Fluid  
**MOBIL DELVAC 1300 SUPER15W40 (500 LTR)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### 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>PC0010706</b>	PC0011646	---
Sample Date	Client Info			<b>09 Aug 2023</b>	01 May 2023	---
Machine Age	hrs	Client Info		<b>5789</b>	5157	---
Oil Age	hrs	Client Info		<b>5789</b>	236	---
Oil Changed	Client Info			<b>N/A</b>	Not Changd	---
Sample Status				<b>NORMAL</b>	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>4.0		<b>&lt;1.0</b>	<1.0	---
Water	WC Method	>0.1		<b>NEG</b>	NEG	---
Glycol	WC Method			<b>NEG</b>	NEG	---

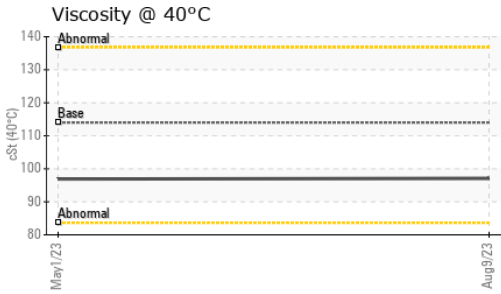
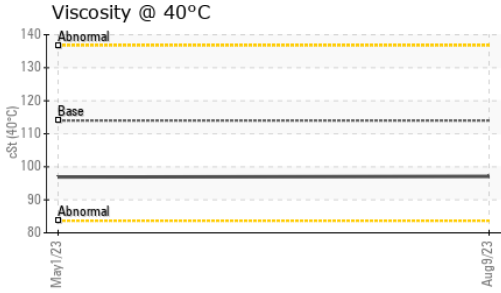
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	<b>3</b>	2	---
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	---
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	---
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	---
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	---
Aluminum	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	---
Lead	ppm	ASTM D5185(m)	>40	<b>3</b>	<1	---
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;1</b>	<1	---
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	---
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	<b>46</b>	51	---
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	---
Molybdenum	ppm	ASTM D5185(m)	0	<b>43</b>	42	---
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185(m)	0	<b>564</b>	556	---
Calcium	ppm	ASTM D5185(m)		<b>1708</b>	1670	---
Phosphorus	ppm	ASTM D5185(m)		<b>766</b>	836	---
Zinc	ppm	ASTM D5185(m)		<b>923</b>	888	---
Sulfur	ppm	ASTM D5185(m)		<b>2172</b>	2248	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	<b>5</b>	6	---
Sodium	ppm	ASTM D5185(m)		<b>2</b>	2	---
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		<b>0</b>	0	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.4</b>	6.0	---
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>21.9</b>	21.6	---

# OIL ANALYSIS REPORT

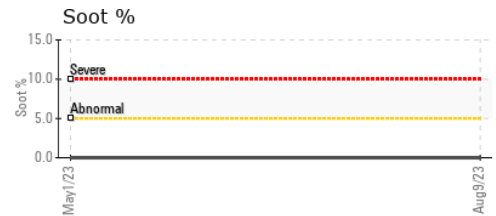
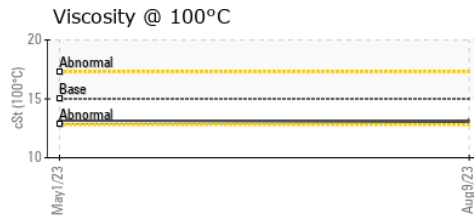
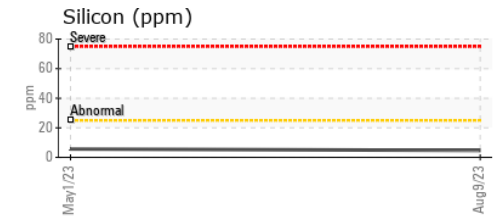
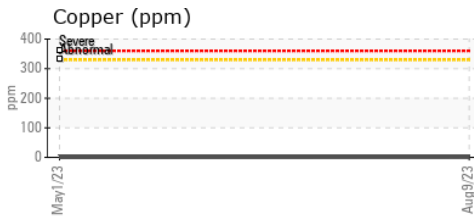
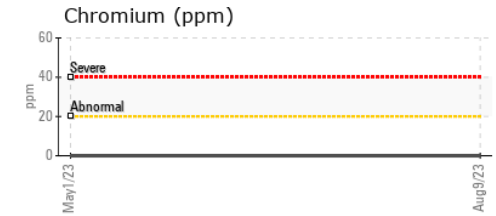
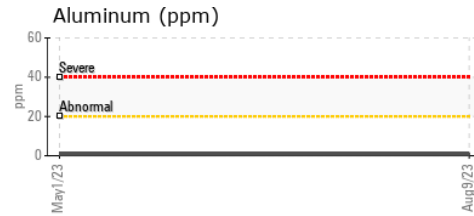
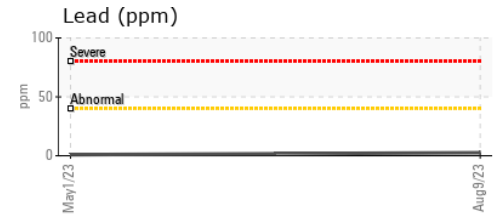
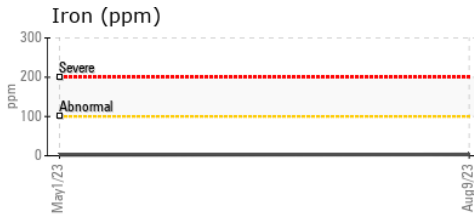


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>20.4</b>	19.3	---

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	---	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	Visual*	>0.1	<b>NEG</b>	NEG	---
Free Water	scalar	Visual*		<b>NEG</b>	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	114	<b>97.1</b>	96.9	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.0	<b>13.1</b>	13.0	---
Viscosity Index (VI)	Scale	ASTM D2270*	137	<b>132</b>	131	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **Ocean Choice International - MV Calvert**  
**Sample No.** : PC0010706 **Received** : 18 Dec 2023 1315 Topsail Rd, P.O. Box 8190  
**Lab Number** : **02603688** **Diagnosed** : 18 Dec 2023 St. John's, NL  
**Unique Number** : 5696773 **Diagnostician** : Wes Davis CA A1B 3N4  
**Test Package** : MOB 1 ( Additional Tests: KV40, VI, Visual )  
 Contact: Calvert Engine Control Room  
 calvertengine@oceanchoice.com

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.