



# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**UNASSIGNED [104695]**

Machine Id  
**46490605**

Component  
**Starboard Diesel Engine**

Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- 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 15W40. Please confirm.

### 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>CU0021026</b>	---	---
Sample Date	Client Info			<b>11 Jun 2024</b>	---	---
Machine Age	hrs	Client Info		<b>1087</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	>3.0		<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)	>90	<b>15</b>	---	---
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	---	---
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</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>1</b>	---	---
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	---	---
Copper	ppm	ASTM D5185(m)	>330	<b>2</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>	---	---

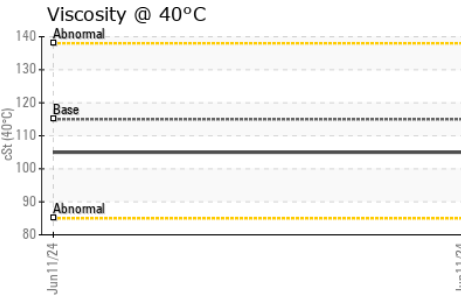
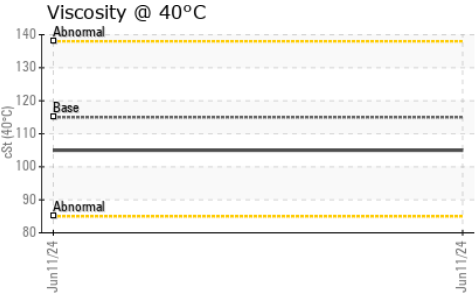
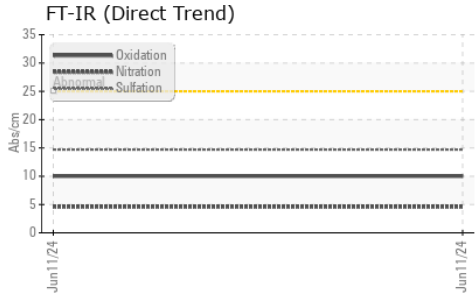
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	<b>15</b>	---	---
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m)	100	<b>61</b>	---	---
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185(m)	450	<b>906</b>	---	---
Calcium	ppm	ASTM D5185(m)	3000	<b>1156</b>	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1039</b>	---	---
Zinc	ppm	ASTM D5185(m)	1350	<b>1210</b>	---	---
Sulfur	ppm	ASTM D5185(m)	4250	<b>2675</b>	---	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	<b>3</b>	---	---
Sodium	ppm	ASTM D5185(m)	>158	<b>1</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	---	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	<b>0</b>	---	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>4.6</b>	---	---
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>14.7</b>	---	---



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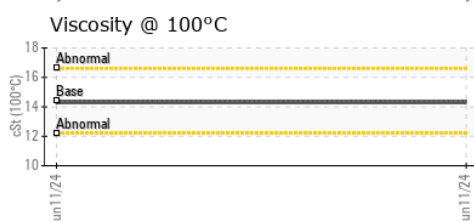
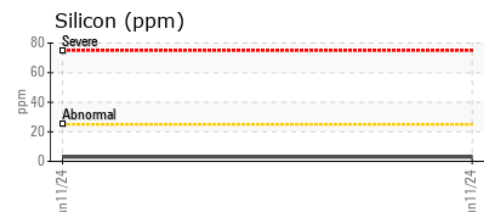
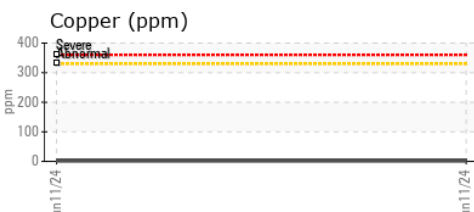
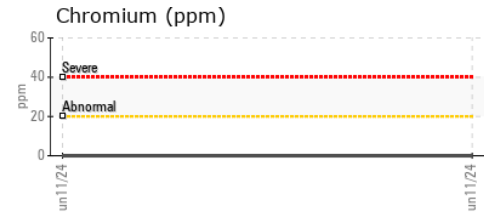
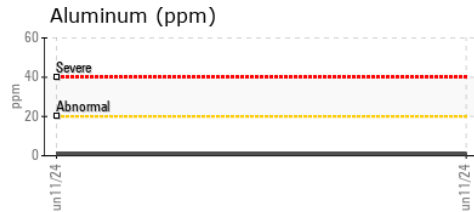
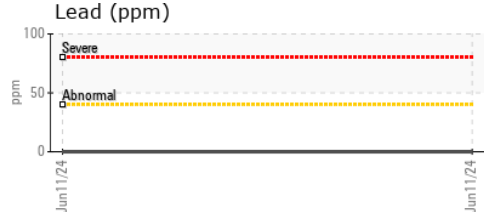
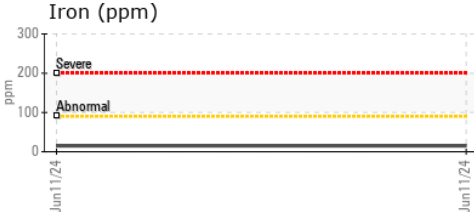


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>10.0</b>	---	---

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>	---	---
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 @ 40°C	cSt	ASTM D7279(m)	115	<b>105</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	<b>14.3</b>	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	126	<b>139</b>	---	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : CU0021026      **Received** : 13 Jun 2024  
**Lab Number** : **02641563**      **Tested** : 14 Jun 2024  
**Unique Number** : 5799102      **Diagnosed** : 14 Jun 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: KV40, VI, Visual )

**CUMMINS EASTERN CANADA LP**  
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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.