



OIL ANALYSIS REPORT

Sample Rating Trend

GLYCOL



Area
ENTREPRISES ST MAUFOIZE
 Machine Id
V76
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

DIAGNOSIS

▲ Recommendation

Check for low coolant level. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 40. Please confirm.

▲ Wear

Aluminum ppm levels are abnormal. Piston wear is indicated.

▲ Contamination

Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative.

▲ Fluid Condition

The oil is no longer serviceable as a result of the abnormal and/or severe wear. The condition of the oil is acceptable for the time in service (see recommendation).

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	CU0021564	---	---
Sample Date	Client Info	23 Oct 2023	---	---
Machine Age	hrs Client Info	0	---	---
Oil Age	hrs Client Info	0	---	---
Oil Changed	Client Info	N/A	---	---
Sample Status		ABNORMAL	---	---

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >3.0	<1.0	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >90	87	---	---
Chromium	ppm ASTM D5185(m) >20	3	---	---
Nickel	ppm ASTM D5185(m) >2	0	---	---
Titanium	ppm ASTM D5185(m) >2	0	---	---
Silver	ppm ASTM D5185(m) >2	<1	---	---
Aluminum	ppm ASTM D5185(m) >20	▲ 31	---	---
Lead	ppm ASTM D5185(m) >40	5	---	---
Copper	ppm ASTM D5185(m) >330	3	---	---
Tin	ppm ASTM D5185(m) >15	4	---	---
Antimony	ppm ASTM D5185(m)	0	---	---
Vanadium	ppm ASTM D5185(m)	0	---	---
Beryllium	ppm ASTM D5185(m)	0	---	---
Cadmium	ppm ASTM D5185(m)	0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 250	9	---	---
Barium	ppm ASTM D5185(m) 10	0	---	---
Molybdenum	ppm ASTM D5185(m) 100	149	---	---
Manganese	ppm ASTM D5185(m)	1	---	---
Magnesium	ppm ASTM D5185(m) 450	942	---	---
Calcium	ppm ASTM D5185(m) 3000	1133	---	---
Phosphorus	ppm ASTM D5185(m) 1150	925	---	---
Zinc	ppm ASTM D5185(m) 1350	1242	---	---
Sulfur	ppm ASTM D5185(m) 4250	2611	---	---
Lithium	ppm ASTM D5185(m)	<1	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >25	15	---	---
Sodium	ppm ASTM D5185(m) >216	▲ 1083	---	---
Potassium	ppm ASTM D5185(m) >20	▲ 514	---	---
Glycol	% ASTM D7922*	0.0	---	---

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >6	1.7	---	---
Nitration	Abs/cm ASTM D7624* >20	13.7	---	---
Sulfation	Abs/.1mm ASTM D7415* >30	27.3	---	---

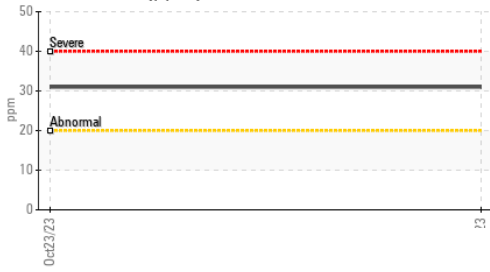
FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm ASTM D7414* >25	17.6	---	---



OIL ANALYSIS REPORT

▲ Aluminum (ppm)

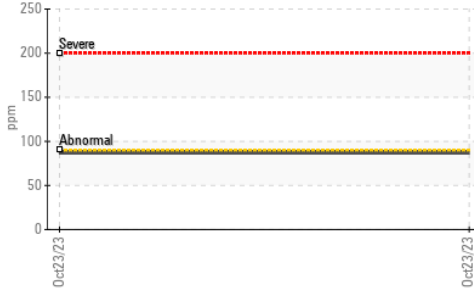


VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	---
Free Water	scalar	Visual*		NEG	---

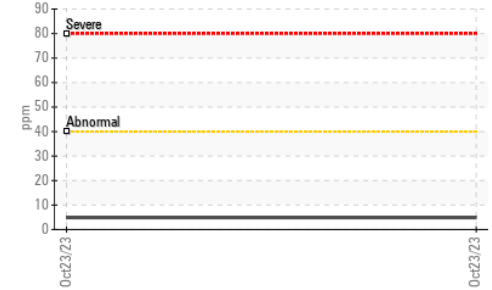
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.1	---

GRAPHS

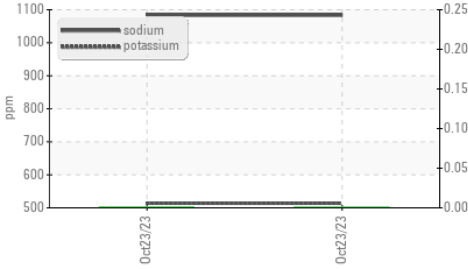
▲ Iron (ppm)



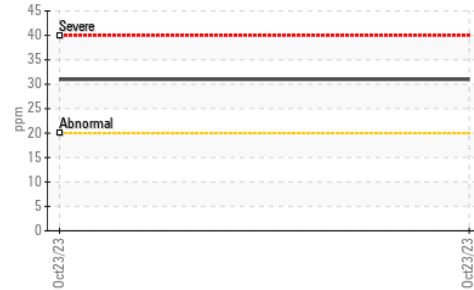
▲ Lead (ppm)



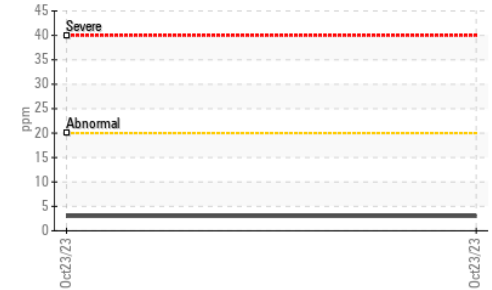
Glycol Contamination



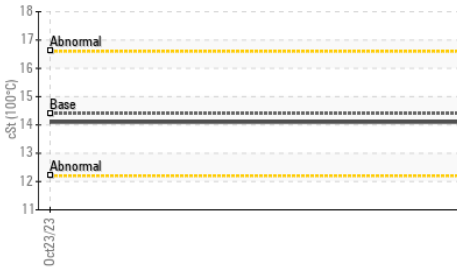
▲ Aluminum (ppm)



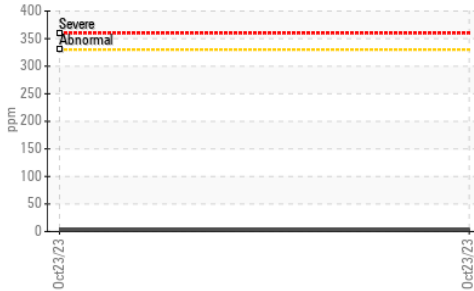
▲ Chromium (ppm)



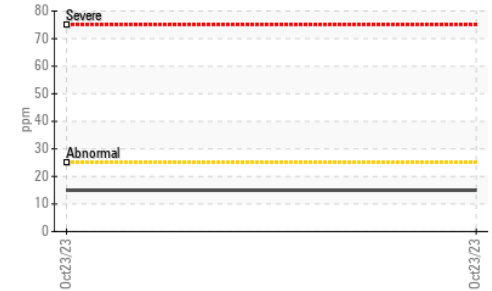
Viscosity @ 100°C



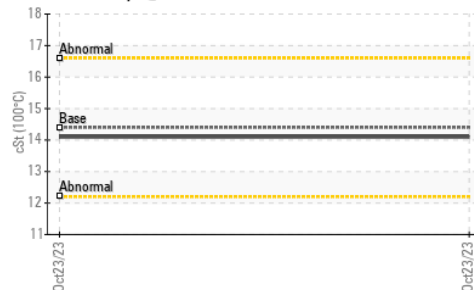
▲ Copper (ppm)



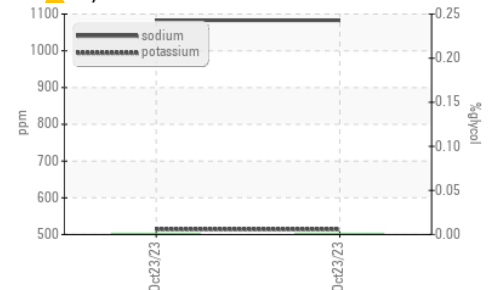
▲ Silicon (ppm)



Viscosity @ 100°C



▲ Glycol Contamination



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : CU0021564 **Received** : 24 Oct 2023
Lab Number : 02591259 **Diagnosed** : 24 Oct 2023
Unique Number : 5668338 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: Glycol)

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.

CUMMINS DIESEL
 2400 AV WATT
 Quebec City, QC
 CA G1P 3T3
 Contact: Jean Verret
 verret.jean@cummins.com
 T: (418)651-2911
 F: (418)651-3157