



# OIL ANALYSIS REPORT

WEAR  
CONTAMINATION  
FLUID CONDITION

**ABNORMAL**  
**MARGINAL**  
**NORMAL**

Area

[411510]

Machine Id

80083303

Component

Diesel Engine

Fluid

DIESEL ENGINE OIL SAE 15W40 (--- LTR)

## RECOMMENDATION

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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		CU0022577	---	---
Sample Date		Client Info		16 Jan 2024	---	---
Machine Age	kms	Client Info		863884	---	---
Oil Age	kms	Client Info		0	---	---
Filter Age	kms	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

## WEAR

Iron ppm levels are abnormal. Cylinder, crank, or cam shaft wear is indicated.

PQ		ASTM D8184*		0	---	---
Iron	ppm	ASTM D5185(m)	>90	▲ 138	---	---
Chromium	ppm	ASTM D5185(m)	>20	4	---	---
Nickel	ppm	ASTM D5185(m)	>2	<1	---	---
Titanium	ppm	ASTM D5185(m)	>2	0	---	---
Silver	ppm	ASTM D5185(m)	>2	0	---	---
Aluminum	ppm	ASTM D5185(m)	>20	7	---	---
Lead	ppm	ASTM D5185(m)	>40	7	---	---
Copper	ppm	ASTM D5185(m)	>330	3	---	---
Tin	ppm	ASTM D5185(m)	>15	<1	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---

## CONTAMINATION

Light fuel dilution occurring. No other contaminants were detected in the oil.

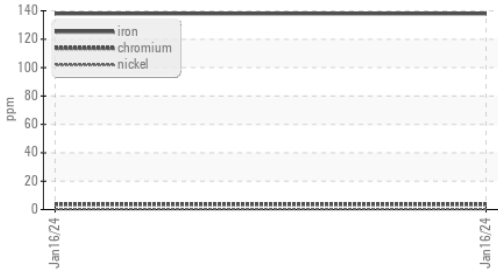
Silicon	ppm	ASTM D5185(m)	>25	8	---	---
Potassium	ppm	ASTM D5185(m)	>20	5	---	---
Fuel	%	ASTM D7593*	>3.0	▲ 1.6	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*	>6	1	---	---
Nitration	Abs/cm	ASTM D7624*	>20	13.8	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	35.3	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---

## FLUID CONDITION

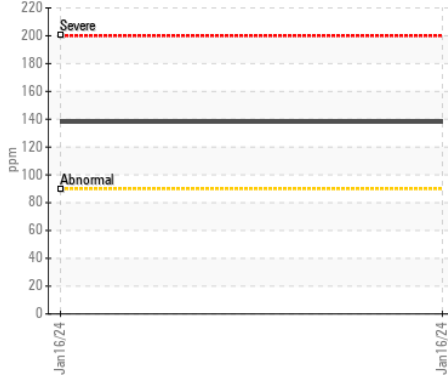
The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185(m)	>158	2	---	---
Boron	ppm	ASTM D5185(m)	250	23	---	---
Barium	ppm	ASTM D5185(m)	10	0	---	---
Molybdenum	ppm	ASTM D5185(m)	100	15	---	---
Manganese	ppm	ASTM D5185(m)		1	---	---
Magnesium	ppm	ASTM D5185(m)	450	65	---	---
Calcium	ppm	ASTM D5185(m)	3000	2503	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	1108	---	---
Zinc	ppm	ASTM D5185(m)	1350	1354	---	---
Sulfur	ppm	ASTM D5185(m)	4250	3188	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	31.0	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	12.9	---	---

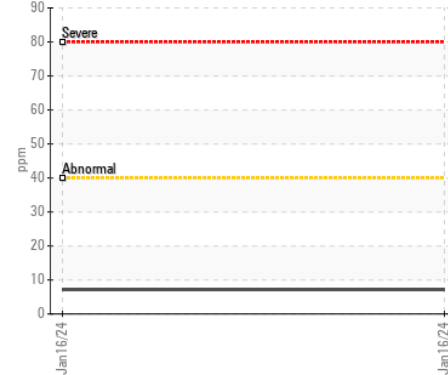
▲ Ferrous Alloys



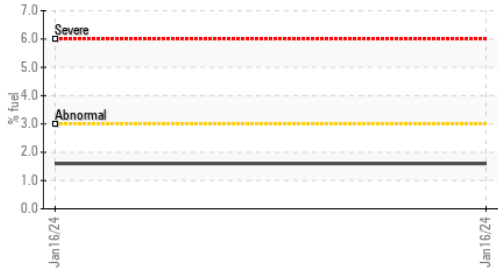
▲ Iron (ppm)



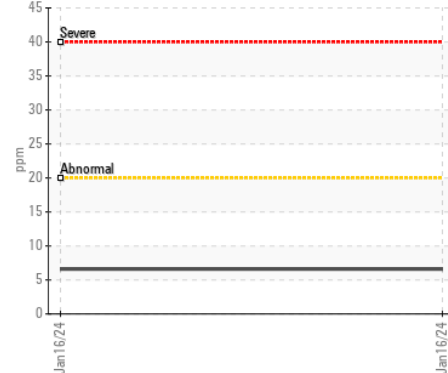
Lead (ppm)



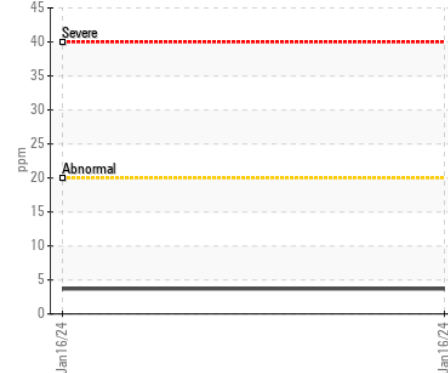
▲ Fuel Dilution



Aluminum (ppm)



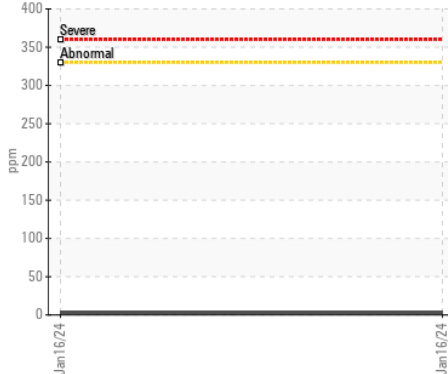
Chromium (ppm)



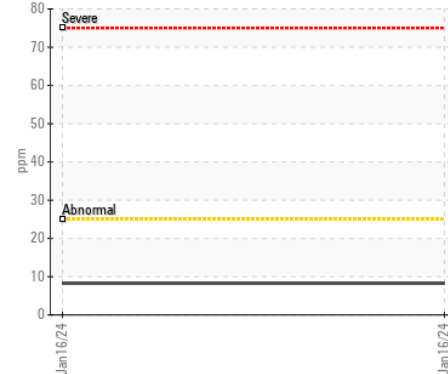
Viscosity @ 100°C



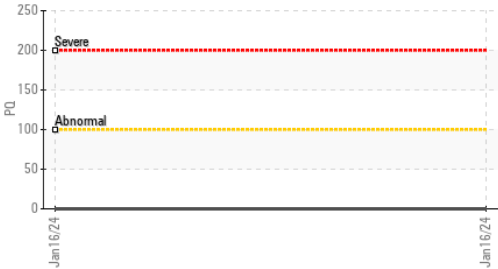
Copper (ppm)



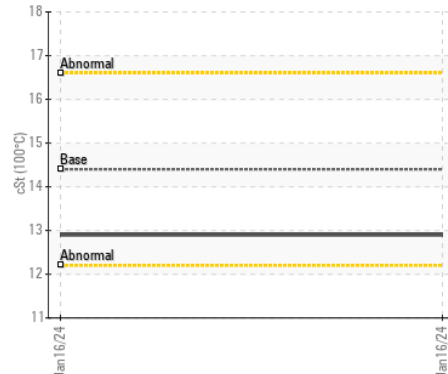
Silicon (ppm)



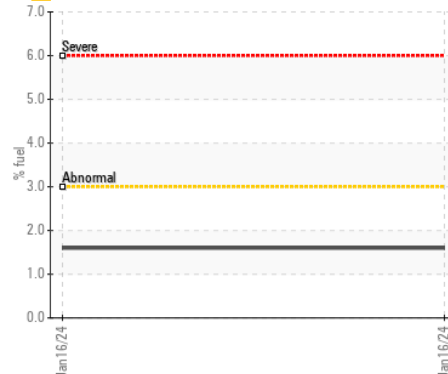
PQ



Viscosity @ 100°C



▲ Fuel Dilution



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : CU0022577 **Received** : 17 Jan 2024  
**Lab Number** : 02609258 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 5710344 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: FUELDILUTION, PercentFuel, PQ )

**9454-4012 QUEBEC INC**  
 60 RUE PICHE  
 CAP-SANTE, QC  
 CA G0A 1L0  
 Contact: Service Manager

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.

T:  
F: