



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[310413]
 Machine Id
16-343
 Component
Diesel Engine
 Fluid
{not provided} (--- GAL)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0665961	WC0560995	---
Sample Date		Client Info		13 May 2022	07 Feb 2022	---
Machine Age	kms	Client Info		96302	8532	---
Oil Age	kms	Client Info		0	0	---
Filter Age	kms	Client Info		0	0	---
Oil Changed		Client Info		N/A	Changed	---
Filter Changed		Client Info		N/A	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>90	66	83	---
Chromium	ppm	ASTM D5185(m)	>20	2	4	---
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	---
Titanium	ppm	ASTM D5185(m)	>2	0	0	---
Silver	ppm	ASTM D5185(m)	>2	0	0	---
Aluminum	ppm	ASTM D5185(m)	>20	21	42	---
Lead	ppm	ASTM D5185(m)	>40	<1	<1	---
Copper	ppm	ASTM D5185(m)	>330	2	2	---
Tin	ppm	ASTM D5185(m)	>15	0	<1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---

CONTAMINATION

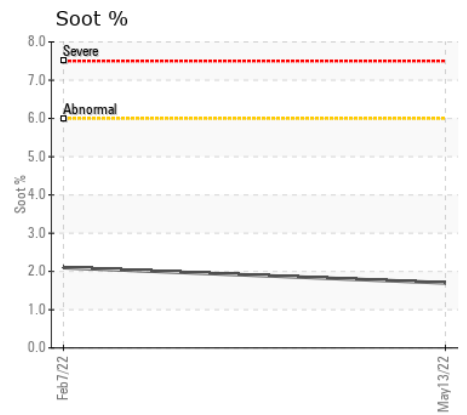
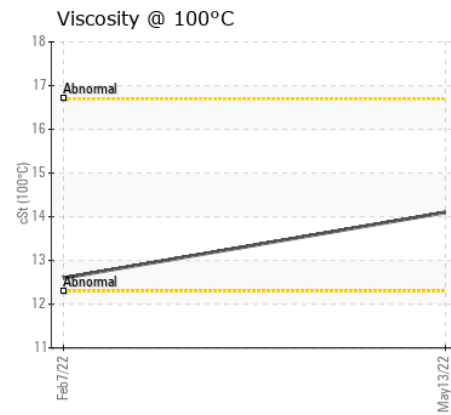
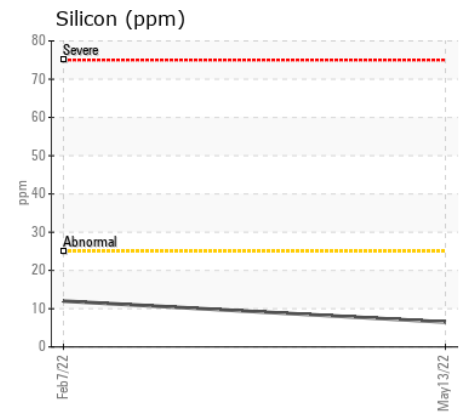
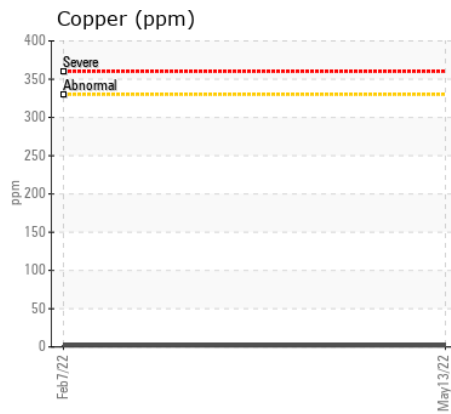
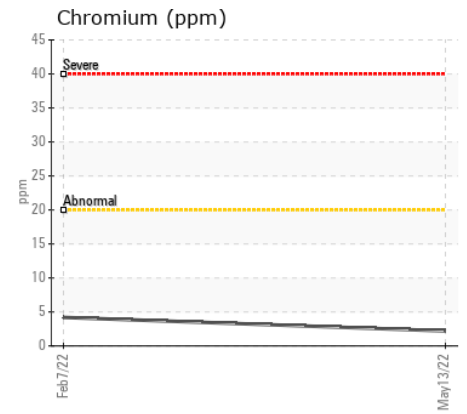
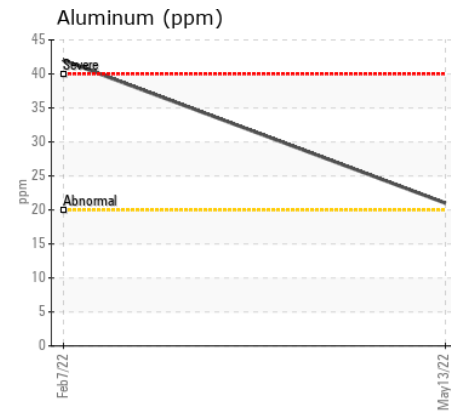
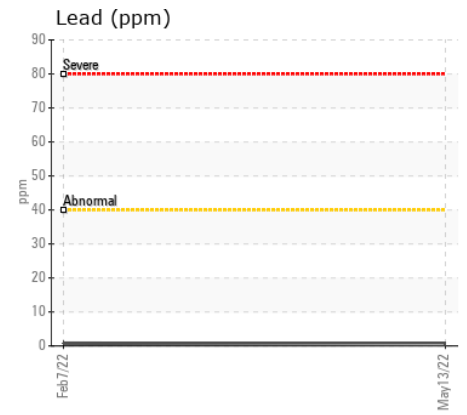
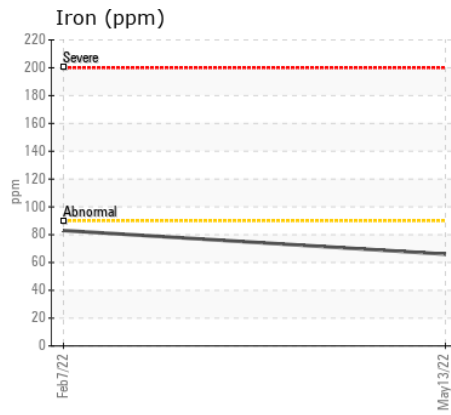
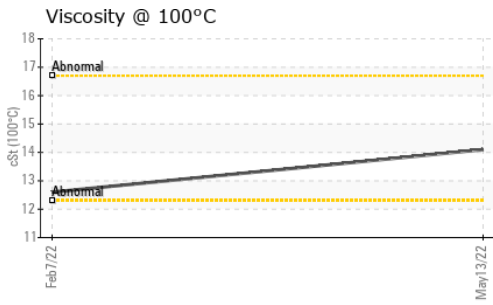
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	6	12	---
Potassium	ppm	ASTM D5185(m)	>20	46	76	---
Fuel		WC Method	>3.0	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	ASTM D7844*	>6	1.7	2.1	---
Nitration	Abs/cm	ASTM D7624*	>20	13.9	14.3	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	26.6	29.4	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		10	10	---
Boron	ppm	ASTM D5185(m)		19	18	---
Barium	ppm	ASTM D5185(m)		0	0	---
Molybdenum	ppm	ASTM D5185(m)		60	58	---
Manganese	ppm	ASTM D5185(m)		<1	<1	---
Magnesium	ppm	ASTM D5185(m)		1114	1138	---
Calcium	ppm	ASTM D5185(m)		848	859	---
Phosphorus	ppm	ASTM D5185(m)		999	1040	---
Zinc	ppm	ASTM D5185(m)		1190	1227	---
Sulfur	ppm	ASTM D5185(m)		2762	2624	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	22.5	25.7	---
Visc @ 100°C	cSt	ASTM D7279(m)		14.1	12.6	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **THE CORP/CITY OF SAULT STE MARIE**
Sample No. : WC0665961 **Recieved** : 12 Jan 2024 **PUBLIC WORKS - STORES, 128 SACKVILLE ROAD**
Lab Number : 02608431 **Diagnosed** : 12 Jan 2024 **SAULT STE. MARIE, ON**
Unique Number : 5709517 **Diagnostician** : Wes Davis **CA P6B 4T6**
Test Package : MOB 1 **Contact: Jeff Morden**

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.

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