



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
350539
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (20 LTR)

RECOMMENDATION

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC956165	WC958658	---
Sample Date		Client Info		21 Feb 2024	25 Feb 2023	---
Machine Age	kms	Client Info		372041	332268	---
Oil Age	kms	Client Info		0	0	---
Filter Age	kms	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				SEVERE	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>90	73	26	---
Chromium	ppm	ASTM D5185(m)	>20	3	<1	---
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	---
Titanium	ppm	ASTM D5185(m)	>2	0	<1	---
Silver	ppm	ASTM D5185(m)	>2	0	0	---
Aluminum	ppm	ASTM D5185(m)	>20	7	4	---
Lead	ppm	ASTM D5185(m)	>40	<1	0	---
Copper	ppm	ASTM D5185(m)	>330	1	<1	---
Tin	ppm	ASTM D5185(m)	>15	0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---

CONTAMINATION

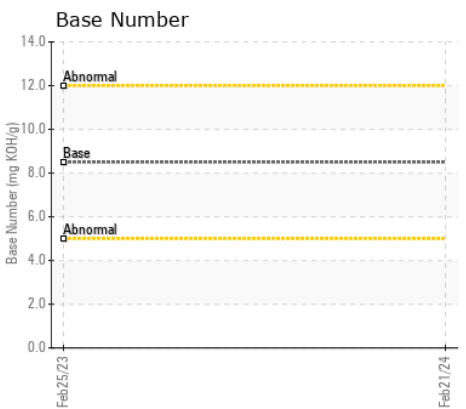
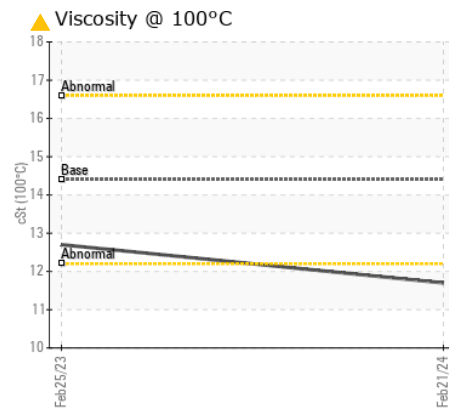
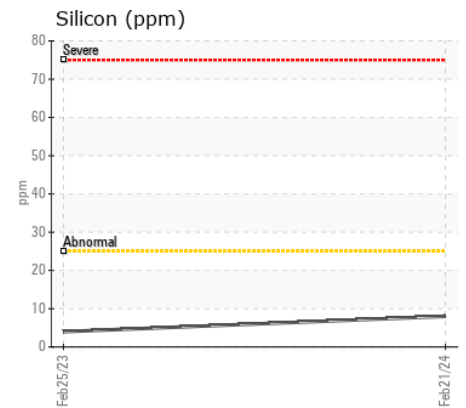
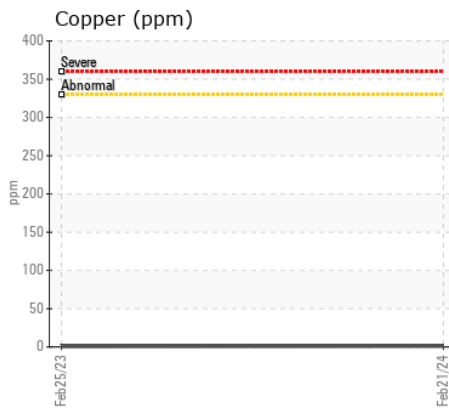
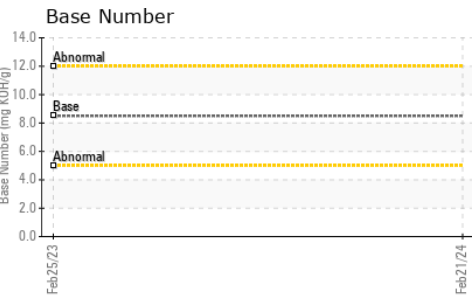
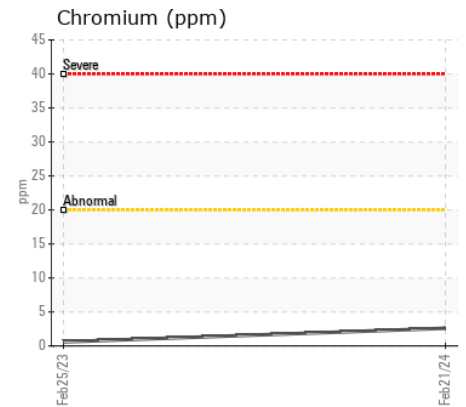
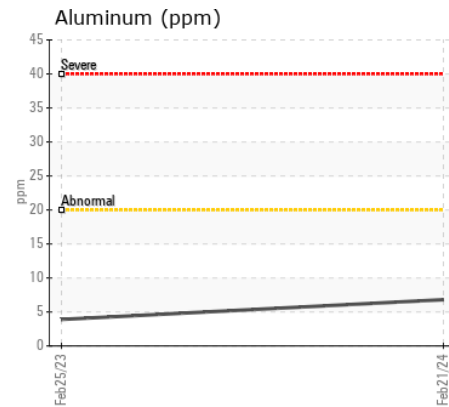
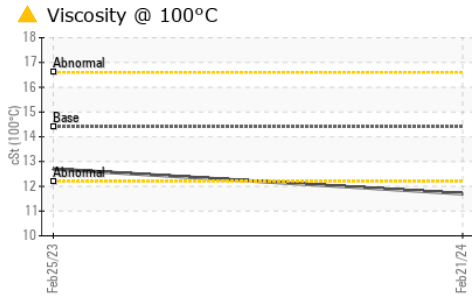
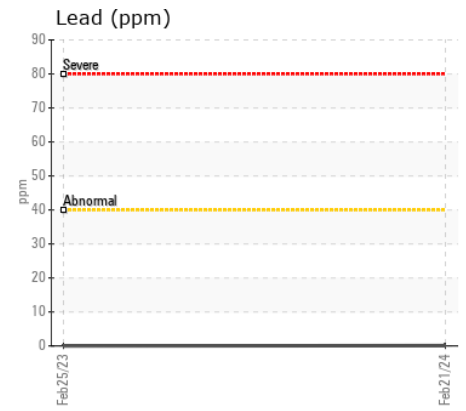
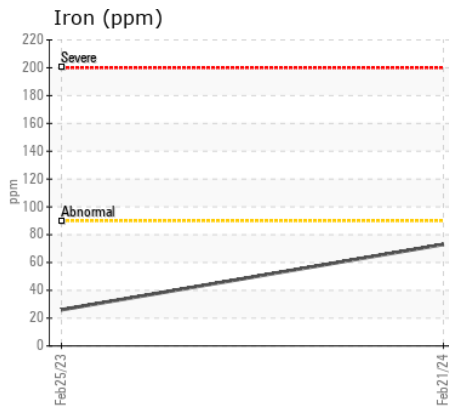
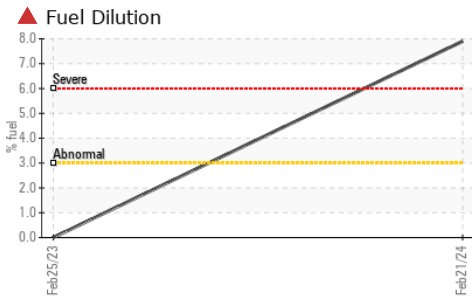
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>25	8	4	---
Potassium	ppm	ASTM D5185(m)	>20	5	2	---
Fuel	%	ASTM D7593*	>3.0	▲ 7.9	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	ASTM D7844*	>6	0.4	0	---
Nitration	Abs/cm	ASTM D7624*	>20	12.9	8.4	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.2	20.0	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)	>158	2	2	---
Boron	ppm	ASTM D5185(m)	250	2	2	---
Barium	ppm	ASTM D5185(m)	10	0	0	---
Molybdenum	ppm	ASTM D5185(m)	100	56	58	---
Manganese	ppm	ASTM D5185(m)		0	<1	---
Magnesium	ppm	ASTM D5185(m)	450	894	947	---
Calcium	ppm	ASTM D5185(m)	3000	989	1099	---
Phosphorus	ppm	ASTM D5185(m)	1150	933	1091	---
Zinc	ppm	ASTM D5185(m)	1350	1095	1191	---
Sulfur	ppm	ASTM D5185(m)	4250	2361	2713	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	22.1	15.6	---
Base Number (BN)	mg KOH/g	ASTM D2896*	8.5	8.22	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	▲ 11.7	12.7	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC956165 **Received** : 29 Feb 2024
Lab Number : 02618922 **Tested** : 01 Mar 2024
Unique Number : 5736032 **Diagnosed** : 01 Mar 2024 - Wes Davis
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

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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.