



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>SEVERE</b>
FLUID CONDITION	<b>ABNORMAL</b>

Area

[84549]

Machine Id

20 CORK ST, GUELPH BELL CANADA 5362004816

Component

Right Diesel Engine

Fluid

ESSO XD-3 EXTRA 15W40 (5 LTR)

**RECOMMENDATION**

We advise that you check the fuel injection system. 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		<b>PN0005826</b>	PN0004467	PN0001589
Sample Date		Client Info		<b>22 Feb 2024</b>	07 Mar 2023	28 Sep 2020
Machine Age	hrs	Client Info		<b>366</b>	352	285
Oil Age	hrs	Client Info		<b>13</b>	0	22
Filter Age	hrs	Client Info		<b>13</b>	0	22
Oil Changed		Client Info		<b>Not Chngd</b>	Changed	Not Chngd
Filter Changed		Client Info		<b>Changed</b>	Changed	Not Chngd
Sample Status				<b>SEVERE</b>	ABNORMAL	ABNORMAL

**WEAR**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	<b>4</b>	4	2
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	2	<1
Lead	ppm	ASTM D5185(m)	>40	<b>3</b>	2	1
Copper	ppm	ASTM D5185(m)	>330	<b>5</b>	4	2
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

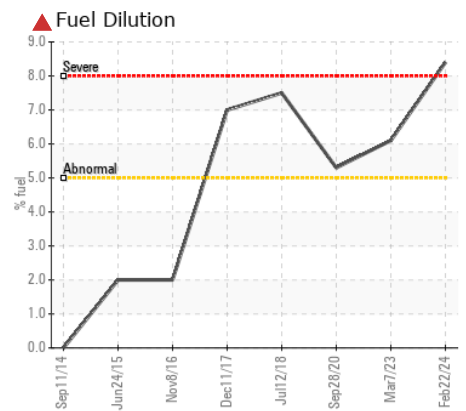
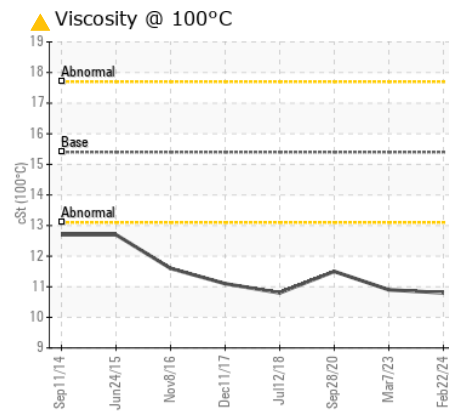
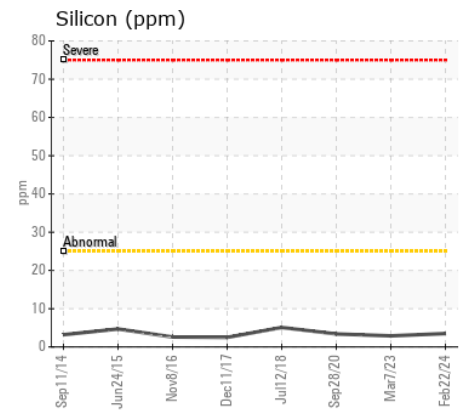
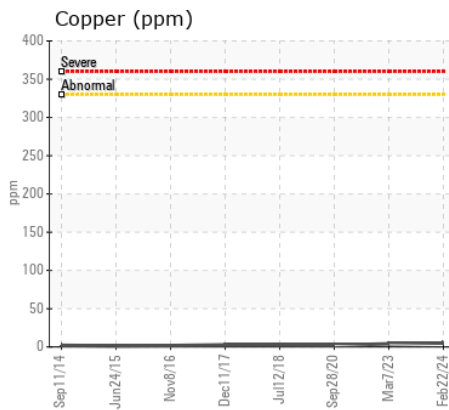
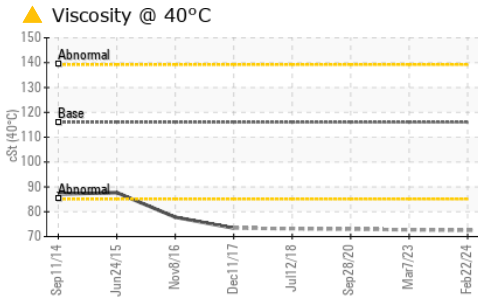
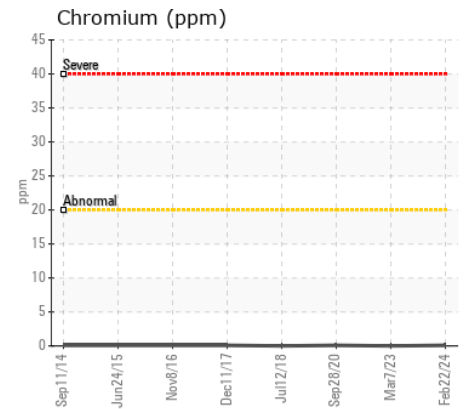
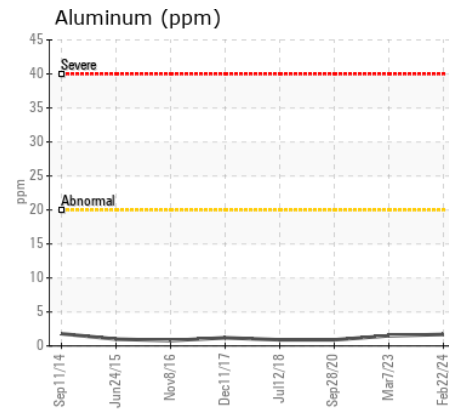
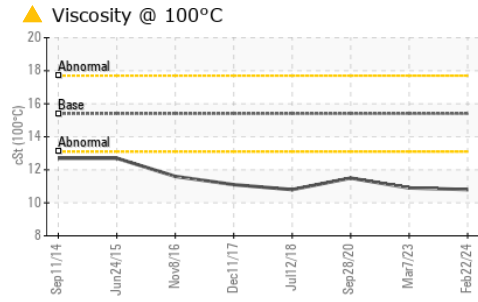
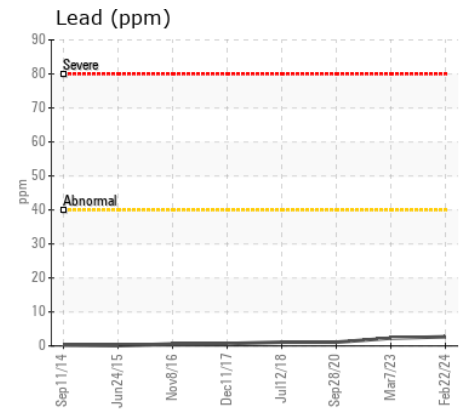
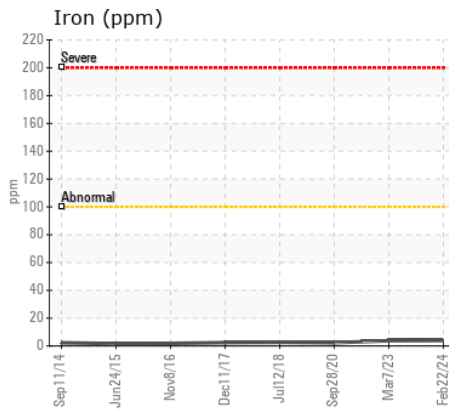
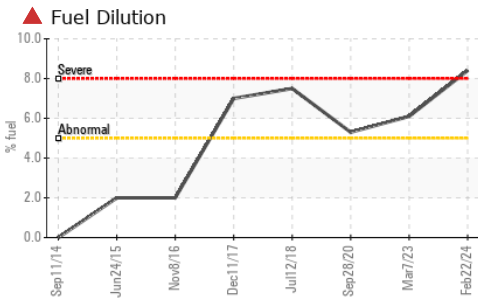
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	3	3
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	<1
Fuel	%	ASTM D7593*	>5	<b>▲ 8.4</b>	▲ 6.1	▲ 5.3
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.1</b>	7.3	5.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.7</b>	22.3	20.6
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)	>192	<b>4</b>	5	4
Boron	ppm	ASTM D5185(m)		<b>44</b>	51	54
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>43</b>	42	37
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)		<b>461</b>	417	496
Calcium	ppm	ASTM D5185(m)	3780	<b>1573</b>	1688	1552
Phosphorus	ppm	ASTM D5185(m)	1370	<b>788</b>	816	752
Zinc	ppm	ASTM D5185(m)	1500	<b>866</b>	853	860
Sulfur	ppm	ASTM D5185(m)	3800	<b>2357</b>	2230	2184
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>19.1</b>	19.4	18.6
Visc @ 40°C	cSt	ASTM D7279(m)	116	<b>▲ 72.5</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>▲ 10.8</b>	▲ 10.9	▲ 11.5
Viscosity Index (VI)	Scale	ASTM D2270*	140	<b>137</b>	---	---



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PN0005826  
**Lab Number** : 02618930  
**Unique Number** : 5736040  
**Test Package** : MOB 1 ( Additional Tests: KV40, PercentFuel, VI )

**Received** : 29 Feb 2024  
**Tested** : 01 Mar 2024  
**Diagnosed** : 01 Mar 2024 - Kevin Marson

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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