

Area  
**SHARP BUS LINES**  
Machine Id  
**IC 1214**

Component  
**Diesel Engine**  
Fluid

**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**



**DIAGNOSIS**

**Recommendation**

We advise that you check the fuel injection system. The oil is near the end of its useful service life, recommend schedule an oil change. We recommend an early resample to monitor this condition.

**Wear**

All component wear rates are normal.

**Contamination**

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

**Fluid Condition**

Calcium ppm levels are abnormally low. Visc @ 100°C is abnormally low. Visc @ 40°C is abnormally low. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

**SAMPLE INFORMATION** method limit/base current history1 history2

Sample Number	Client Info	<b>PC0081459</b>	---	---
Sample Date	Client Info	<b>18 Jul 2023</b>	---	---
Machine Age	kms Client Info	<b>237587</b>	---	---
Oil Age	kms Client Info	<b>7015</b>	---	---
Oil Changed	Client Info	<b>Not Chngd</b>	---	---
Sample Status		<b>SEVERE</b>	---	---

**CONTAMINATION** method limit/base current history1 history2

Glycol	WC Method	<b>NEG</b>	---	---
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**WEAR METALS** method limit/base current history1 history2

Iron	ppm	ASTM D5185(m)	>100	<b>26</b>	---	---
Chromium	ppm	ASTM D5185(m)	>20	<b>2</b>	---	---
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>20	<b>17</b>	---	---
Lead	ppm	ASTM D5185(m)	>40	<b>1</b>	---	---
Copper	ppm	ASTM D5185(m)	>330	<b>1</b>	---	---
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	---	---
Antimony	ppm	ASTM D5185(m)		<b>0</b>	---	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	---	---

**ADDITIVES** method limit/base current history1 history2

Boron	ppm	ASTM D5185(m)	250	<b>1</b>	---	---
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m)	100	<b>53</b>	---	---
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185(m)	450	<b>859</b>	---	---
Calcium	ppm	ASTM D5185(m)	3000	<b>889</b>	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	<b>937</b>	---	---
Zinc	ppm	ASTM D5185(m)	1350	<b>1038</b>	---	---
Sulfur	ppm	ASTM D5185(m)	4250	<b>2294</b>	---	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---

**CONTAMINANTS** method limit/base current history1 history2

Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	---	---
Sodium	ppm	ASTM D5185(m)	>158	<b>2</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	---	---
Fuel	%	ASTM D7593*	>5	<b>11</b>	---	---

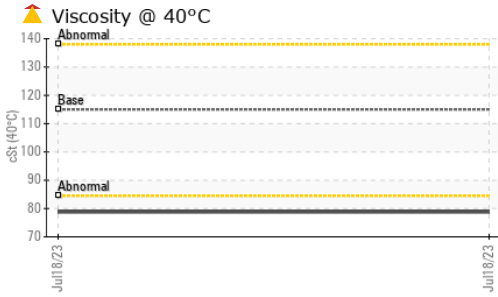
**INFRA-RED** method limit/base current history1 history2

Soot %	%	ASTM D7844*	>3	<b>1.1</b>	---	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>10.9</b>	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>22.0</b>	---	---

**FLUID DEGRADATION** method limit/base current history1 history2

Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>17.0</b>	---	---
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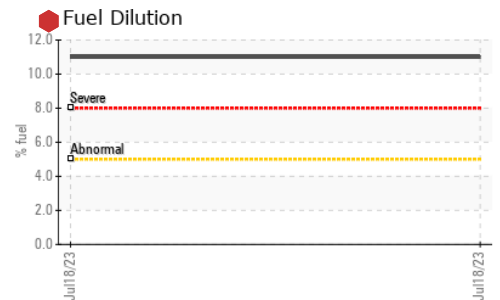
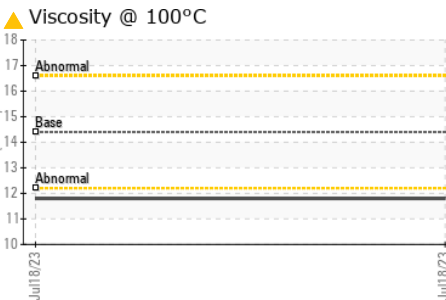
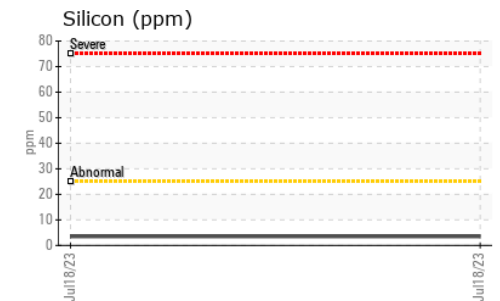
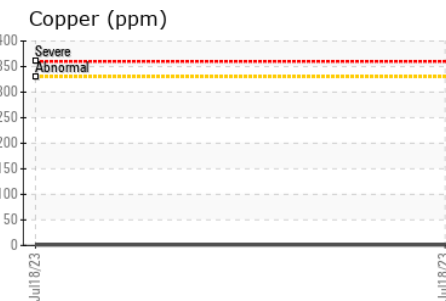
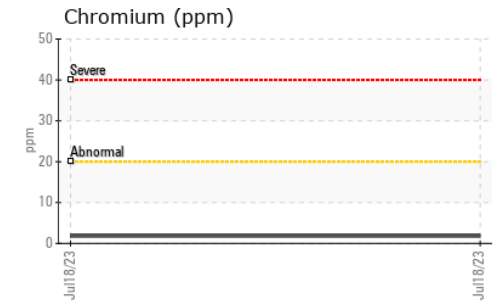
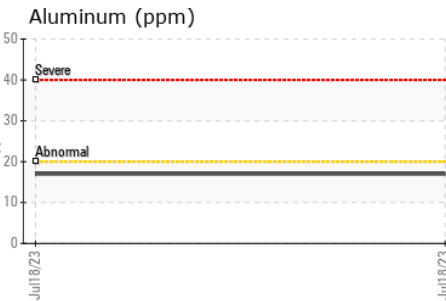
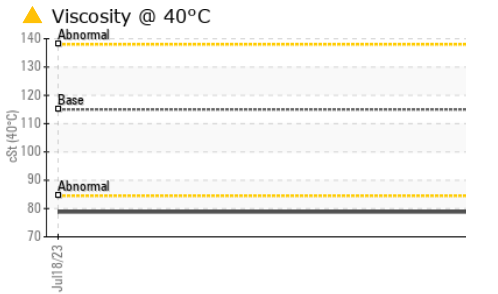
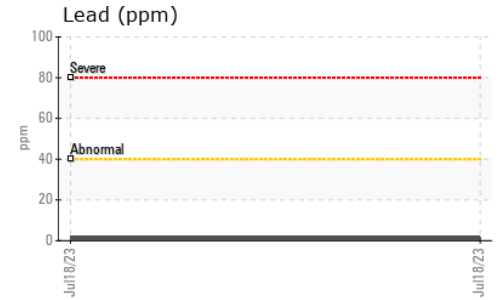
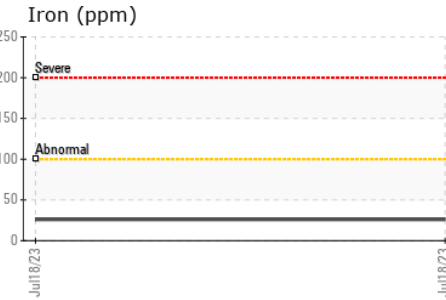
# OIL ANALYSIS REPORT



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 @ 40°C	cSt	ASTM D7279(m)	115	78.8	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	11.8	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	126	143	---	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0081459 **Received** : 23 Aug 2023  
**Lab Number** : 02577643 **Diagnosed** : 24 Aug 2023  
**Unique Number** : 5630703 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, KV40, PercentFuel, VI )

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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.