



Machine Id  
**MANITOU NO UNIT PC0075949**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 5W40 (--- GAL)**

**RECOMMENDATION**

We advise that you check for the source of the coolant leak. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 5W40. Please confirm.

**WEAR**

All component wear rates are normal.

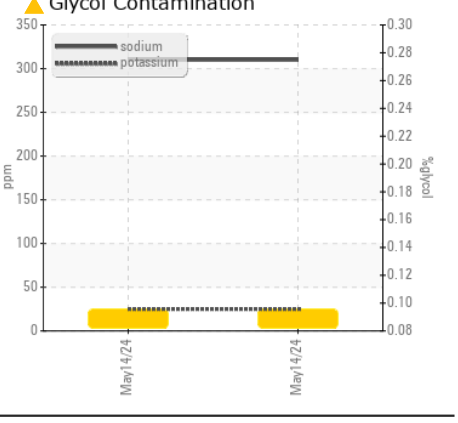
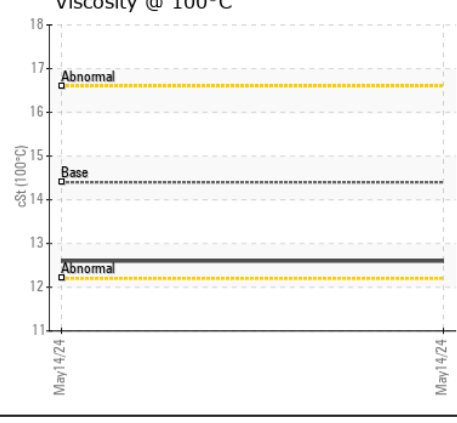
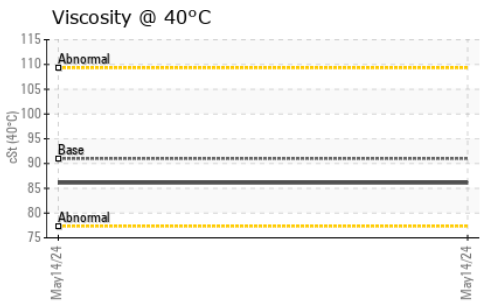
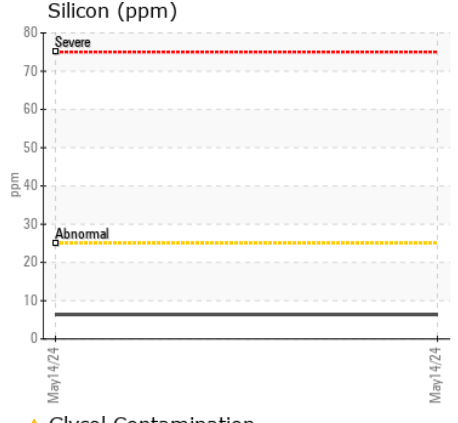
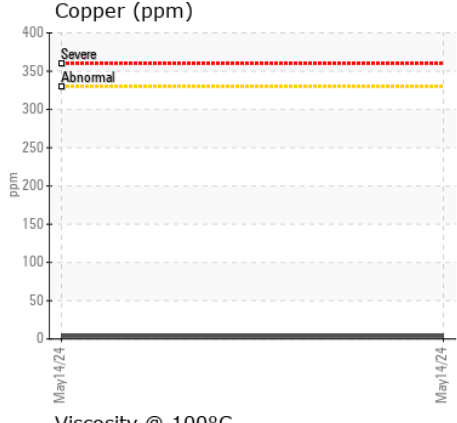
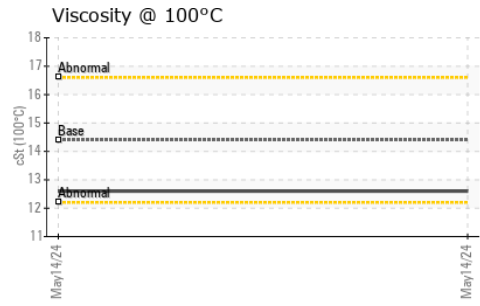
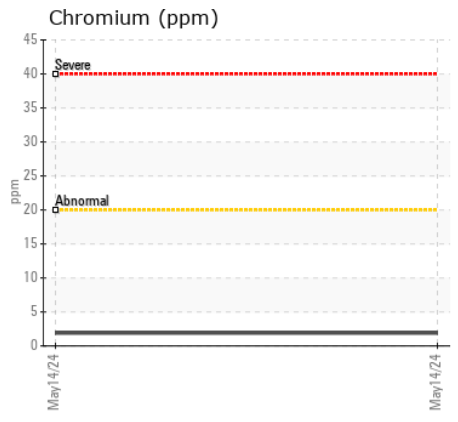
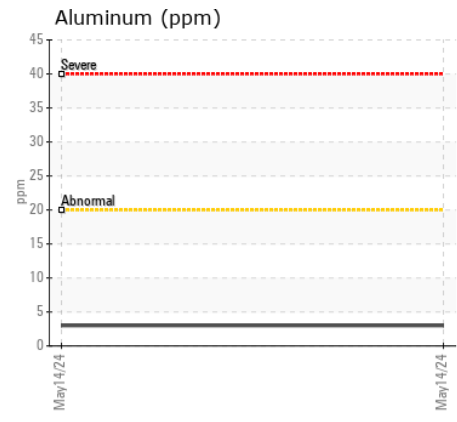
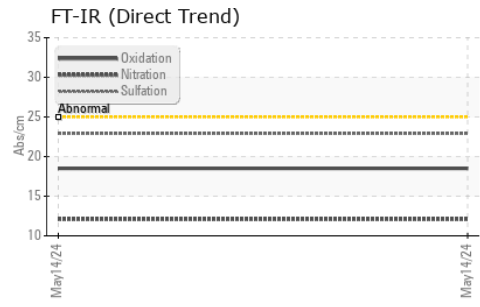
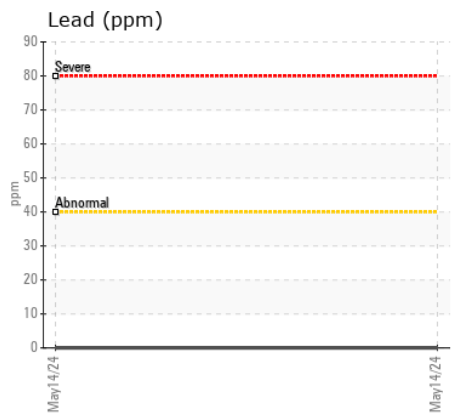
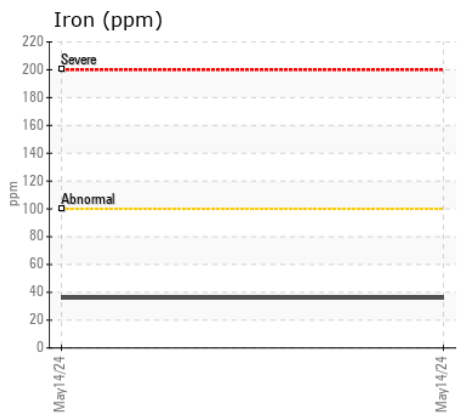
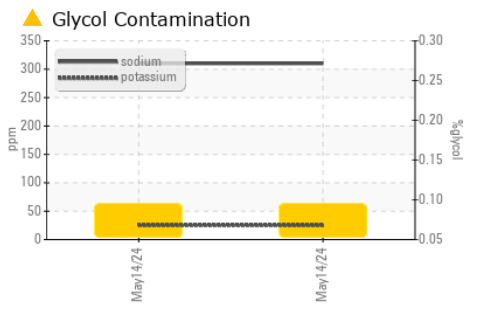
**CONTAMINATION**

Test for glycol is positive. There is a moderate concentration of glycol present in the oil.

**FLUID CONDITION**

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PC0075949</b>	---	---
Sample Date		Client Info		<b>14 May 2024</b>	---	---
Machine Age	hrs	Client Info		<b>2786</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>N/A</b>	---	---
Filter Changed		Client Info		<b>N/A</b>	---	---
Sample Status				<b>ABNORMAL</b>	---	---
Iron	ppm	ASTM D5185(m)	>100	<b>36</b>	---	---
Chromium	ppm	ASTM D5185(m)	>20	<b>2</b>	---	---
Nickel	ppm	ASTM D5185(m)	>4	<b>0</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>3</b>	---	---
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	---	---
Copper	ppm	ASTM D5185(m)	>330	<b>4</b>	---	---
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---	---
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Silicon	ppm	ASTM D5185(m)	>25	<b>6</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>▲ 25</b>	---	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Glycol	%	ASTM D7922*		<b>▲ 0.095</b>	---	---
Soot %	%	ASTM D7844*	>3	<b>0.3</b>	---	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>12.1</b>	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>22.9</b>	---	---
Silt	scalar	Visual*	NONE	<b>VLITE</b>	---	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	---	---
Sodium	ppm	ASTM D5185(m)	>44	<b>● 310</b>	---	---
Boron	ppm	ASTM D5185(m)	250	<b>33</b>	---	---
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m)	100	<b>68</b>	---	---
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185(m)	450	<b>430</b>	---	---
Calcium	ppm	ASTM D5185(m)	3000	<b>1942</b>	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1159</b>	---	---
Zinc	ppm	ASTM D5185(m)	1350	<b>1344</b>	---	---
Sulfur	ppm	ASTM D5185(m)	4250	<b>2933</b>	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>18.5</b>	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	91	<b>86.1</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	<b>12.6</b>	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	164	<b>143</b>	---	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0075949 **Received** : 15 May 2024  
**Lab Number** : 02635588 **Tested** : 15 May 2024  
**Unique Number** : 5776741 **Diagnosed** : 15 May 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: Glycol, KV40, VI, Visual )

**J. RENE LAFOND INC**  
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 Contact: Service Manager  
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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.