



# OIL ANALYSIS REPORT

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

Area  
**(GMK 163) City Of Mount Pearl**  
Machine Id  
**INTERNATIONAL Vacuum Truck, 1532**  
Component  
**Diesel Engine**  
Fluid  
**IRVING 15W40 (24 LTR)**

## RECOMMENDATION

Check for low coolant level. 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. ( Customer Sample Comment: Serial # 3HAEKTART1ML680957 )

## WEAR

Aluminum ppm levels are severe. Piston wear is indicated.

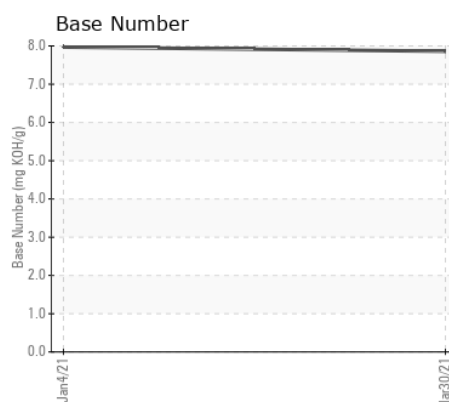
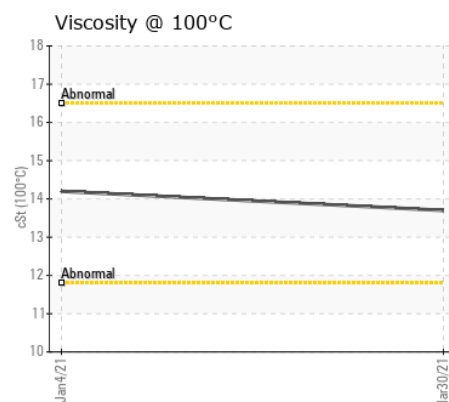
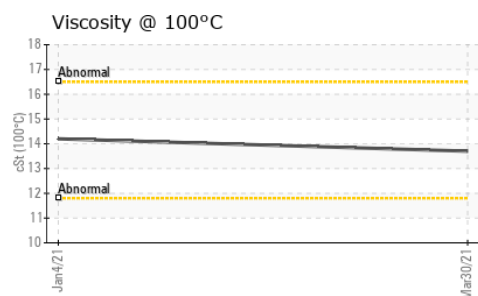
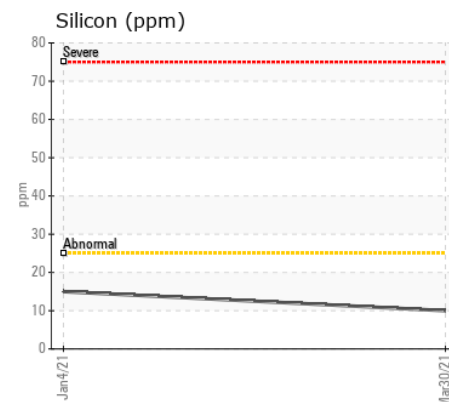
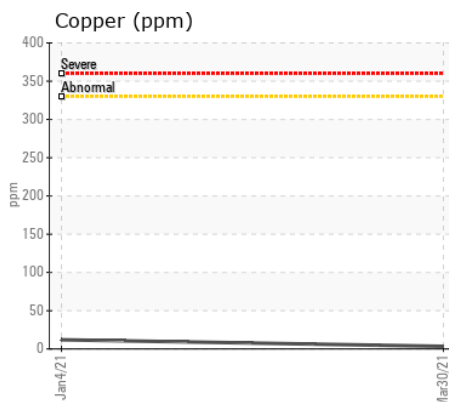
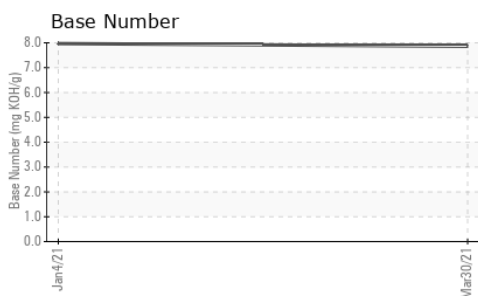
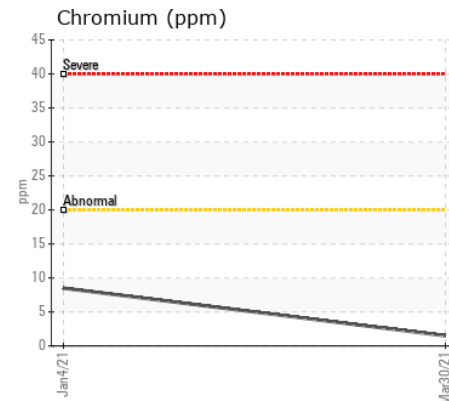
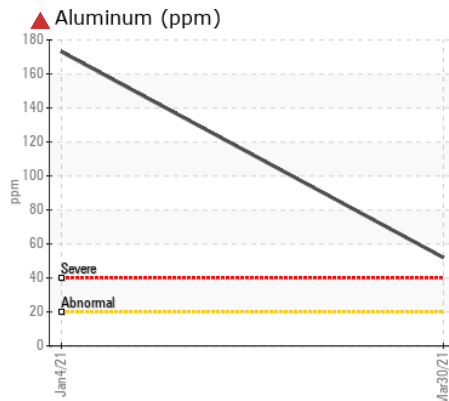
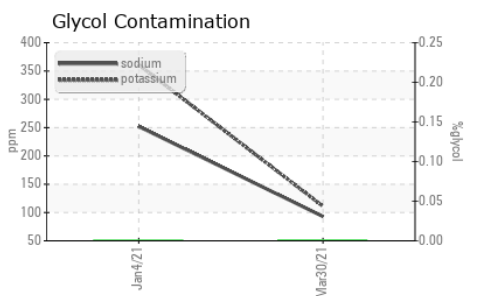
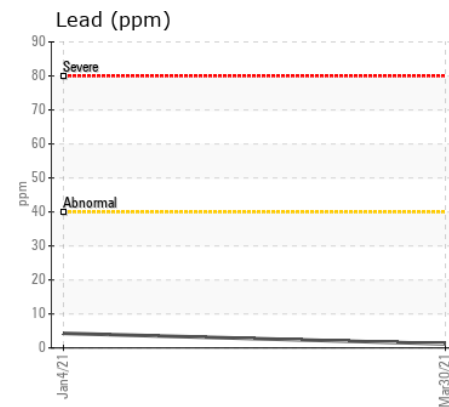
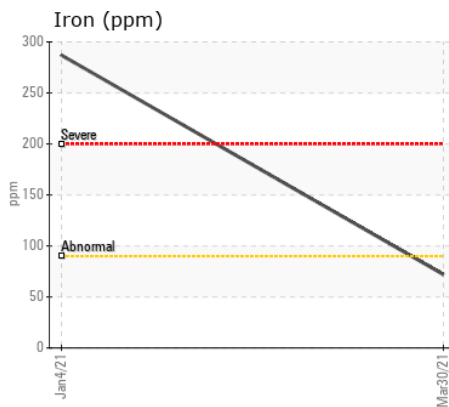
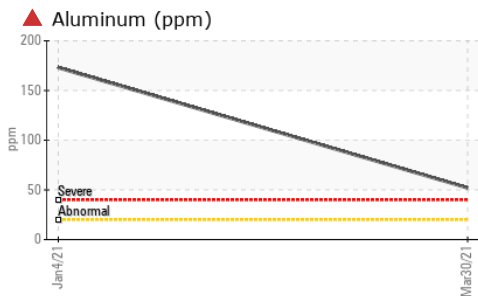
## CONTAMINATION

Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative.

## FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear. The condition of the oil is acceptable for the time in service (see recommendation).

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>OF0000325</b>	OF0000243	---
Sample Date		Client Info		<b>30 Mar 2021</b>	04 Jan 2021	---
Machine Age	hrs	Client Info		<b>4508</b>	4465	---
Oil Age	hrs	Client Info		<b>43</b>	500	---
Filter Age	hrs	Client Info		<b>43</b>	500	---
Oil Changed		Client Info		<b>Not Changed</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>SEVERE</b>	SEVERE	---
<hr/>						
Iron	ppm	ASTM D5185(m)	>90	<b>72</b>	▲ 287	---
Chromium	ppm	ASTM D5185(m)	>20	<b>2</b>	8	---
Nickel	ppm	ASTM D5185(m)	>2	<b>1</b>	3	---
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	---
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185(m)	>20	▲ <b>52</b>	▲ 173	---
Lead	ppm	ASTM D5185(m)	>40	<b>1</b>	4	---
Copper	ppm	ASTM D5185(m)	>330	<b>3</b>	12	---
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	1	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	<1	---
<hr/>						
Silicon	ppm	ASTM D5185(m)	>25	<b>10</b>	15	---
Potassium	ppm	ASTM D5185(m)	>20	▲ <b>111</b>	▲ 361	---
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol	%	ASTM D7922*		<b>0.0</b>	0.0	---
Soot %	%	ASTM D7844*	>6	<b>0.5</b>	2.5	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.8</b>	17.5	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.2</b>	29.6	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	---
<hr/>						
Sodium	ppm	ASTM D5185(m)	>101	<b>93</b>	● 252	---
Boron	ppm	ASTM D5185(m)		<b>51</b>	12	---
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185(m)		<b>33</b>	114	---
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	2	---
Magnesium	ppm	ASTM D5185(m)		<b>147</b>	740	---
Calcium	ppm	ASTM D5185(m)		<b>2047</b>	1620	---
Phosphorus	ppm	ASTM D5185(m)		<b>1076</b>	1065	---
Zinc	ppm	ASTM D5185(m)		<b>1169</b>	1209	---
Sulfur	ppm	ASTM D5185(m)		<b>3444</b>	2835	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>13.5</b>	21.2	---
Base Number (BN)	mg KOH/g	ASTM D2896*		<b>7.86</b>	7.97	---
Visc @ 100°C	cSt	ASTM D7279(m)		<b>13.7</b>	14.2	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : OF0000325 **Received** : 09 Mar 2022  
**Lab Number** : 02476450 **Tested** : 11 Mar 2022  
**Unique Number** : 5369378 **Diagnosed** : 14 Mar 2022 - Kevin Marson  
**Test Package** : MOB 2 ( Additional Tests: Glycol )

**Oil Filtration Solutions Ltd.**  
 PO BOX 16125  
 CONCEPTION BAY SOUTH, NL  
 CA A1X 2E2  
 Contact: BILL BUTLER  
 BBUTLER@OILFILTRATIONSOLUTIONS.COM  
 T: (709)834-8433  
 F: (709)834-8435

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.