



# OIL ANALYSIS REPORT

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

Machine Id  
**1405 MISSISSAUGA VALLEY**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0940206</b>	WC0817459	WC0647784
Sample Date		Client Info		<b>17 Jun 2024</b>	11 Sep 2023	11 Feb 2022
Machine Age	hrs	Client Info		<b>0</b>	0	352
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>3</b>	11	1
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	4	<1
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	1	<1
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;1</b>	3	<1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>VLITE</b>	---	---

## CONTAMINATION

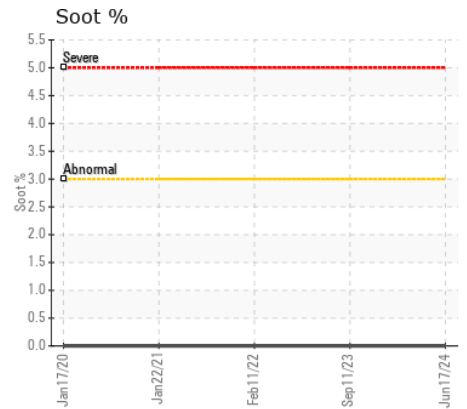
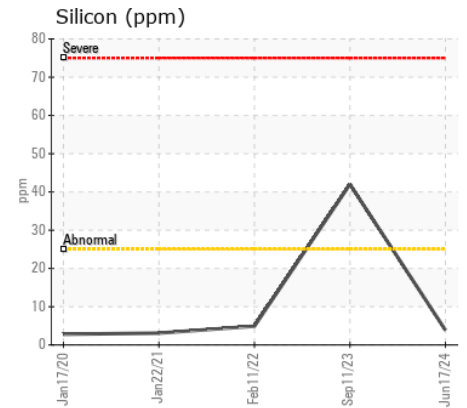
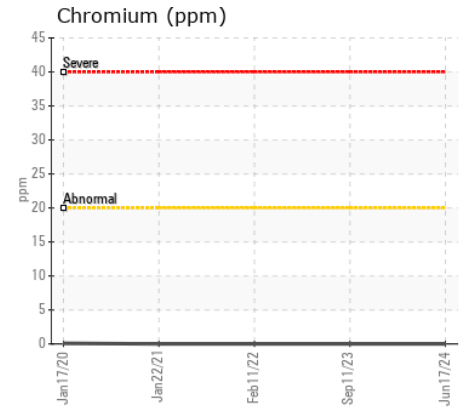
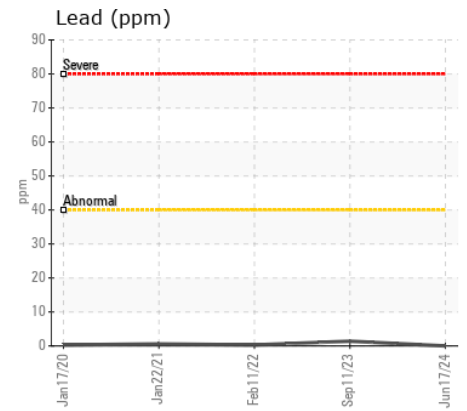
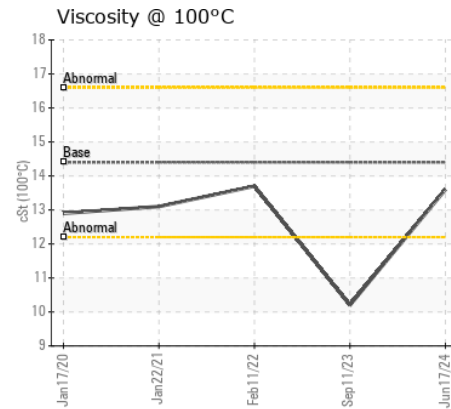
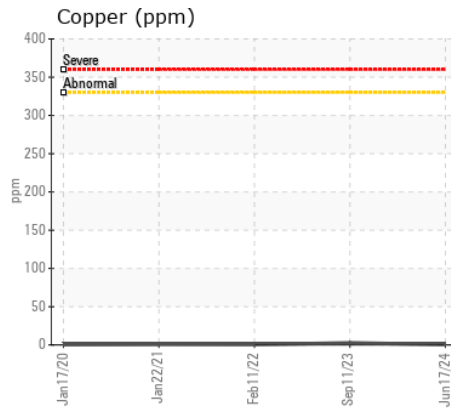
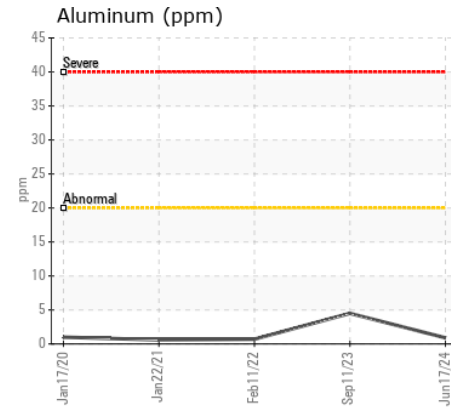
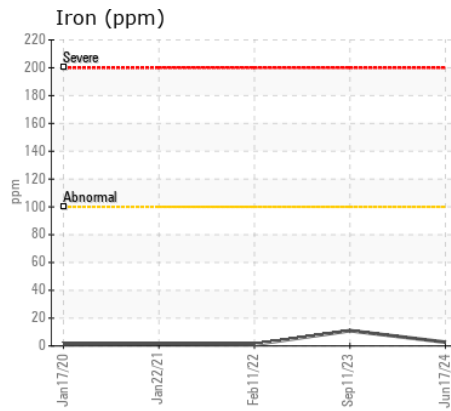
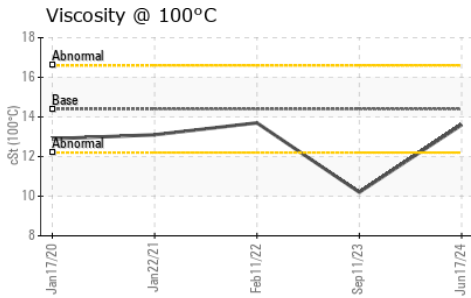
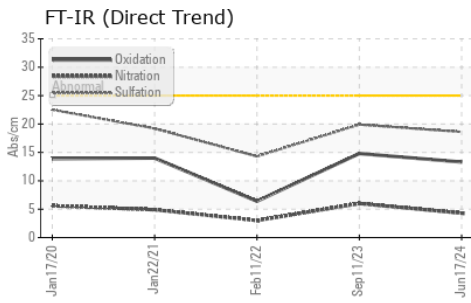
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	▲ 42	5
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Fuel		WC Method	>5	<b>&lt;1.0</b>	1.8	<1.0
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>4.3</b>	6.0	3.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>18.6</b>	19.9	14.3
Silt	scalar	Visual*	NONE	<b>NONE</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>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)	>158	<b>1</b>	3	1
Boron	ppm	ASTM D5185(m)	250	<b>98</b>	241	2
Barium	ppm	ASTM D5185(m)	10	<b>&lt;1</b>	3	0
Molybdenum	ppm	ASTM D5185(m)	100	<b>71</b>	250	57
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	1	0
Magnesium	ppm	ASTM D5185(m)	450	<b>822</b>	798	982
Calcium	ppm	ASTM D5185(m)	3000	<b>1102</b>	1383	1000
Phosphorus	ppm	ASTM D5185(m)	1150	<b>974</b>	846	1048
Zinc	ppm	ASTM D5185(m)	1350	<b>1150</b>	991	1191
Sulfur	ppm	ASTM D5185(m)	4250	<b>2706</b>	2460	2753
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>13.3</b>	14.8	6.4
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	<b>13.6</b>	▲ 10.2	13.7



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0940206  
**Lab Number** : 02643150  
**Unique Number** : 5800689  
**Test Package** : MOB 1 ( Additional Tests: Visual )  
**Received** : 20 Jun 2024  
**Tested** : 20 Jun 2024  
**Diagnosed** : 20 Jun 2024 - Kevin Marson

**NORTHERN GENERATOR CO. LTD.**  
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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.