



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**178REXDALE**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0914905</b>	WC0606460	WC0483810
Sample Date		Client Info		<b>16 May 2024</b>	29 Oct 2021	11 Nov 2020
Machine Age	hrs	Client Info		<b>607</b>	499	482
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>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	<b>5</b>	3	4
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	1
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185(m)	>330	<b>2</b>	<1	1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---

## CONTAMINATION

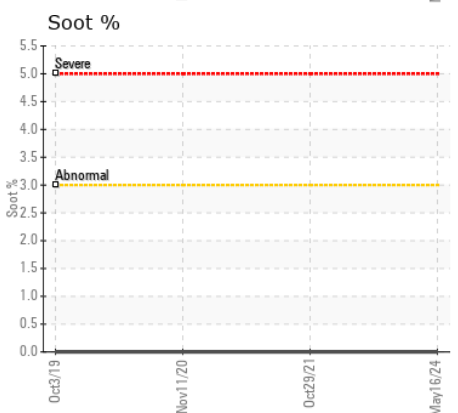
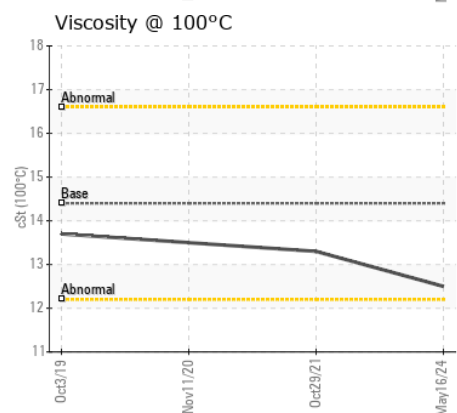
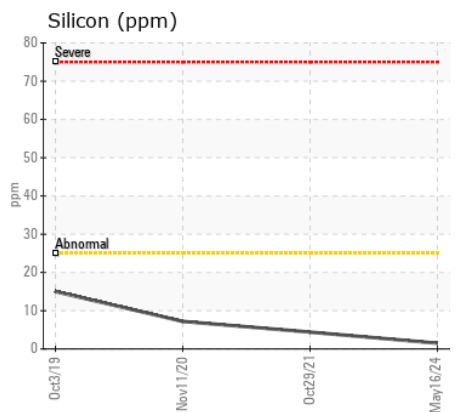
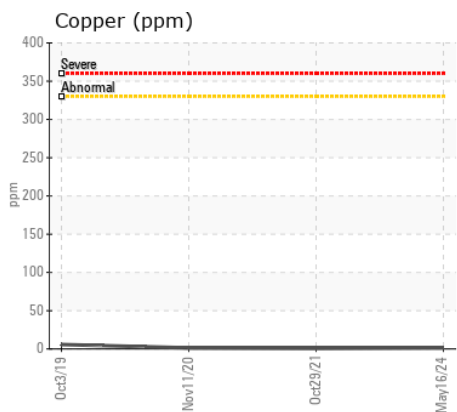
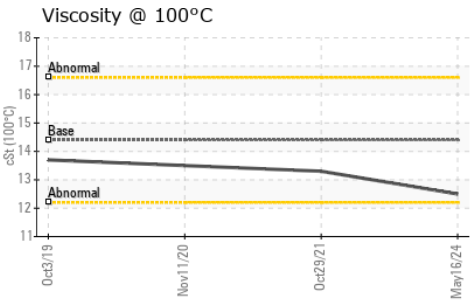
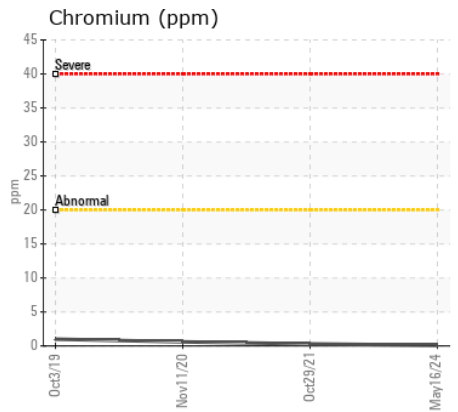
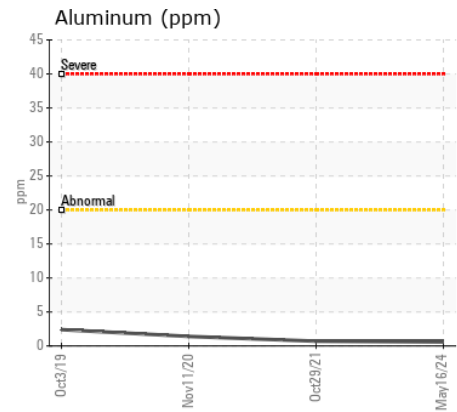
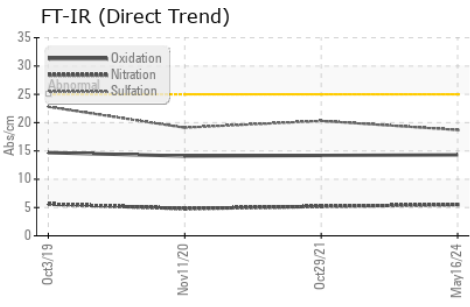
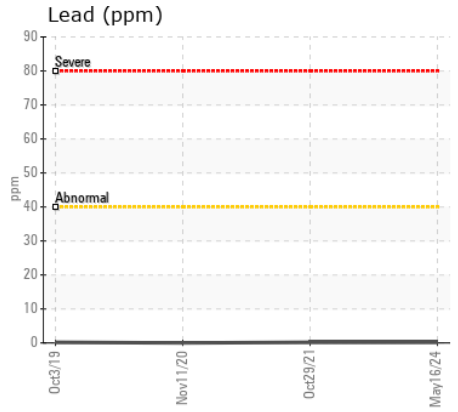
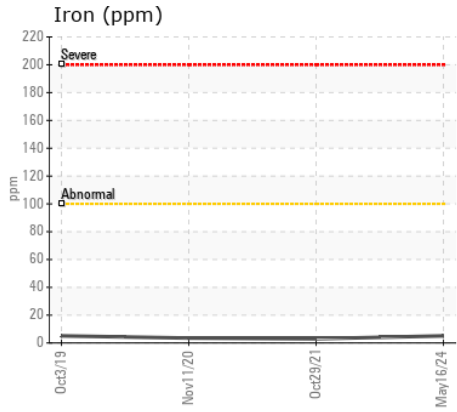
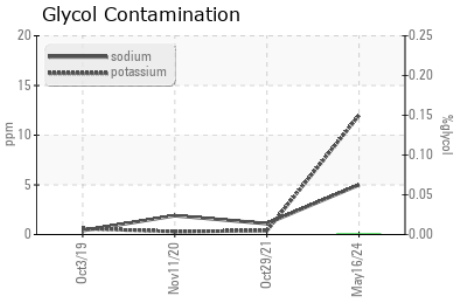
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	4	7
Potassium	ppm	ASTM D5185(m)	>20	<b>12</b>	<1	<1
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	%	ASTM D7922*		<b>0.0</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>5.5</b>	5.2	4.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>18.7</b>	20.3	19.1
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	---
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>5</b>	1	2
Boron	ppm	ASTM D5185(m)	250	<b>2</b>	7	37
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	100	<b>59</b>	61	64
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	<b>964</b>	1034	937
Calcium	ppm	ASTM D5185(m)	3000	<b>1040</b>	1036	1055
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1015</b>	1092	984
Zinc	ppm	ASTM D5185(m)	1350	<b>1181</b>	1251	1190
Sulfur	ppm	ASTM D5185(m)	4250	<b>2779</b>	2885	2793
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>14.3</b>	14.2	14.1
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	<b>12.5</b>	13.3	13.5



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0914905  
**Lab Number** : 02643162  
**Unique Number** : 5800701  
**Test Package** : MOB 1 ( Additional Tests: Glycol, Visual )  
**Received** : 20 Jun 2024  
**Tested** : 20 Jun 2024  
**Diagnosed** : 20 Jun 2024 - Wes Davis

**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.