



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**250 LAKE ST**  
 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		WC0910619	WC0795022	WC0647842
Sample Date		Client Info		22 Mar 2024	17 Mar 2023	14 Mar 2022
Machine Age	hrs	Client Info		550	0	517
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	2	2	2
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>4	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	<1	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>40	0	1	<1
Copper	ppm	ASTM D5185(m)	>330	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

## CONTAMINATION

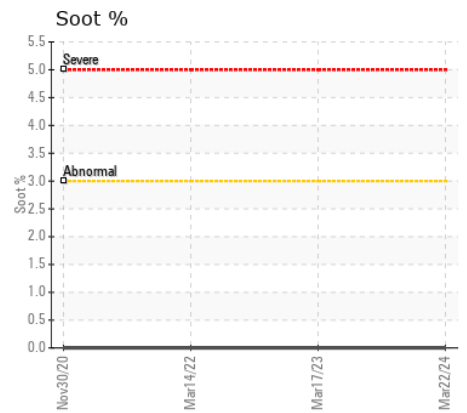
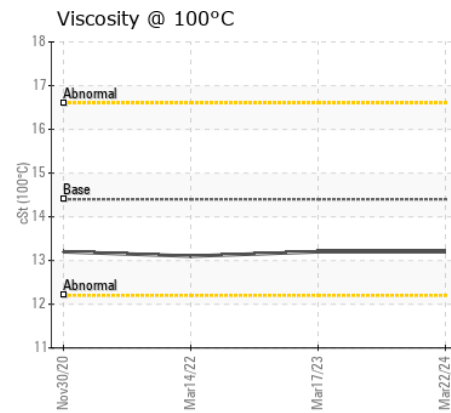
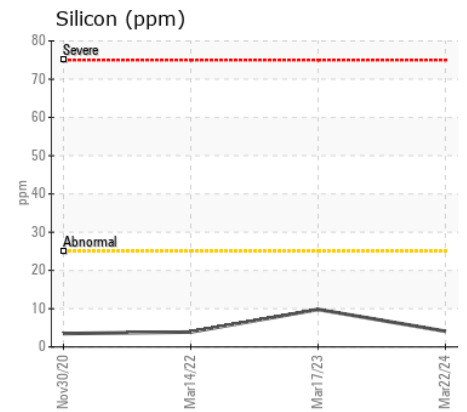
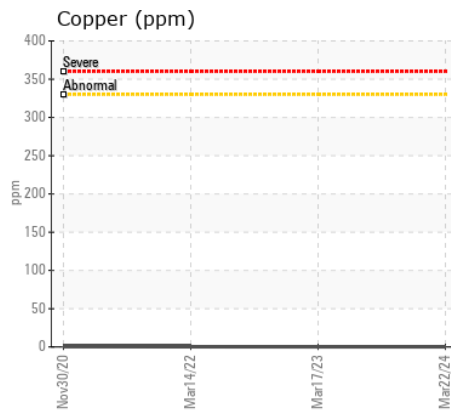
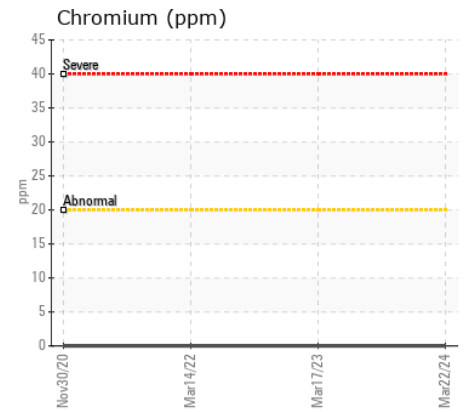
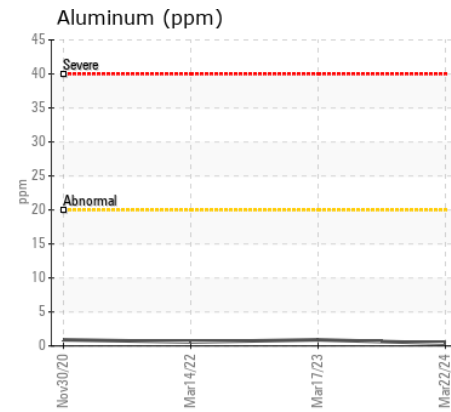
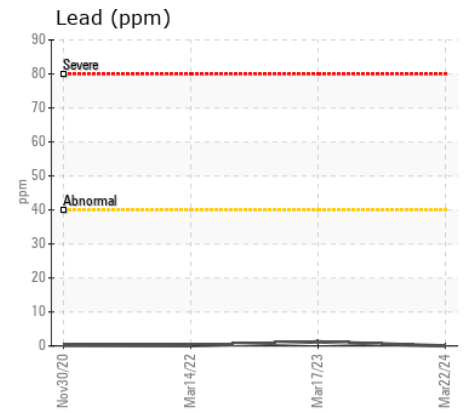
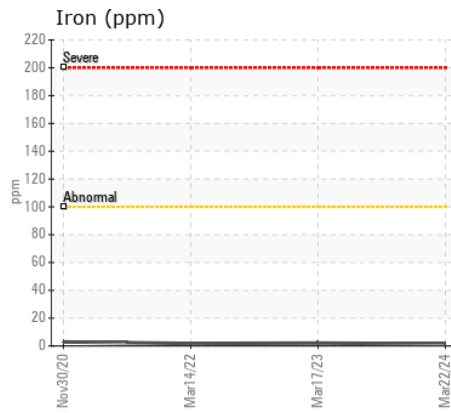
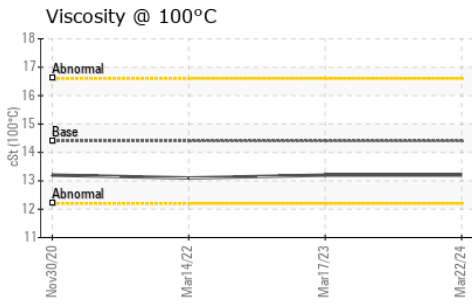
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	10	4
Potassium	ppm	ASTM D5185(m)	>20	0	<1	<1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	4.6	5.2	5.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.4	21.8	20.3
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)	>158	1	2	2
Boron	ppm	ASTM D5185(m)	250	2	5	12
Barium	ppm	ASTM D5185(m)	10	0	0	0
Molybdenum	ppm	ASTM D5185(m)	100	58	55	51
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	988	932	940
Calcium	ppm	ASTM D5185(m)	3000	1043	1130	1130
Phosphorus	ppm	ASTM D5185(m)	1150	1022	1077	1089
Zinc	ppm	ASTM D5185(m)	1350	1166	1176	1238
Sulfur	ppm	ASTM D5185(m)	4250	2766	2767	2969
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.5	14.2	13.6
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	13.2	13.2	13.1



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0910619  
**Lab Number** : 02625638  
**Unique Number** : 5750757  
**Test Package** : MOB 1  
**Received** : 01 Apr 2024  
**Tested** : 01 Apr 2024  
**Diagnosed** : 01 Apr 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.