



# OIL ANALYSIS REPORT

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

Machine Id  
**333 MARKET DRIVE GEN #4**

Component  
**Diesel Engine**

Fluid  
**DIESEL ENGINE OIL SAE 30 (--- 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>WC0910597</b>	WC0795026	WC0647853
Sample Date		Client Info		<b>07 Mar 2024</b>	23 Mar 2023	28 Feb 2022
Machine Age	hrs	Client Info		<b>0</b>	0	52
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	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>3</b>	4	10
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>8</b>	9	8
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<b>1</b>	2	7
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## CONTAMINATION

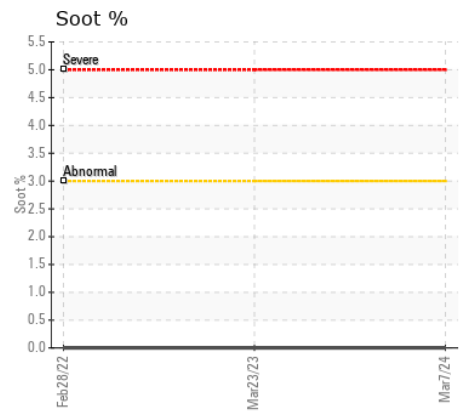
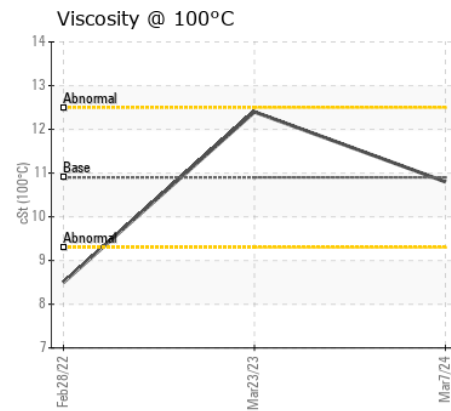
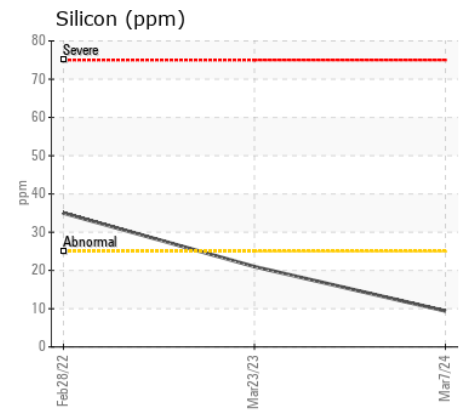
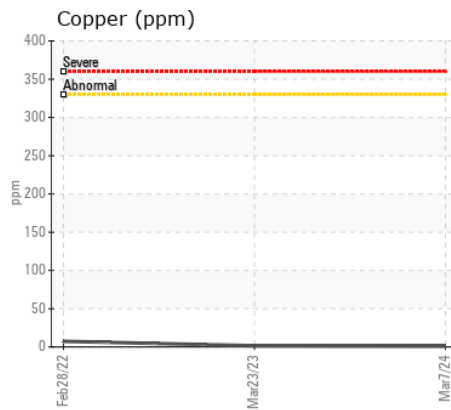
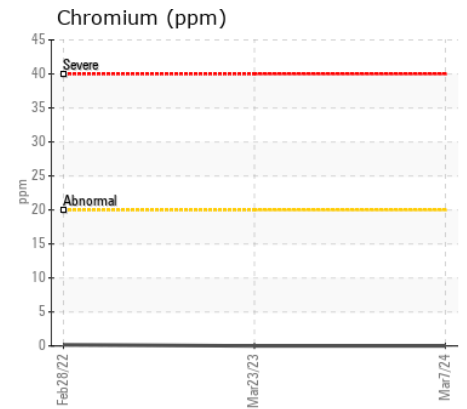
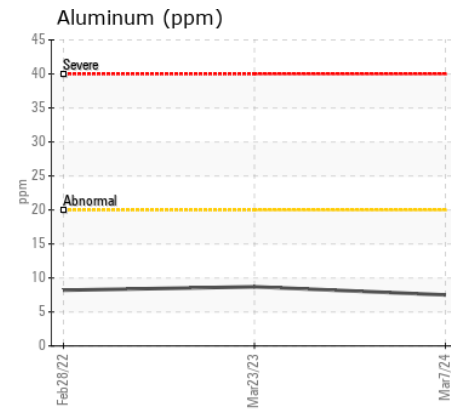
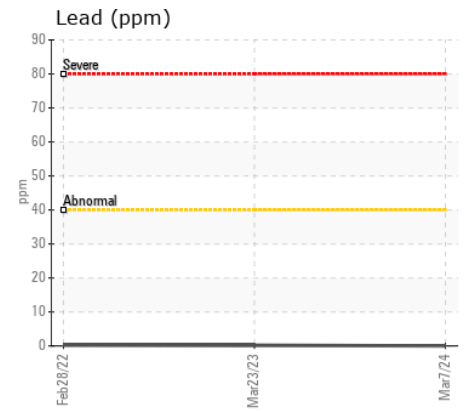
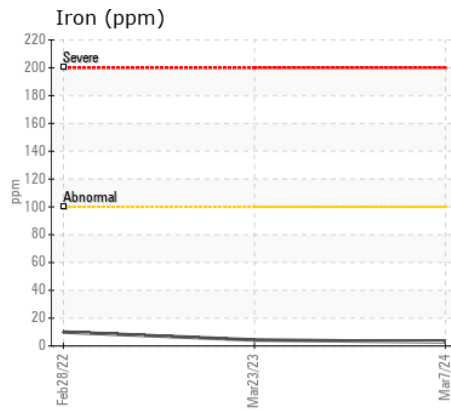
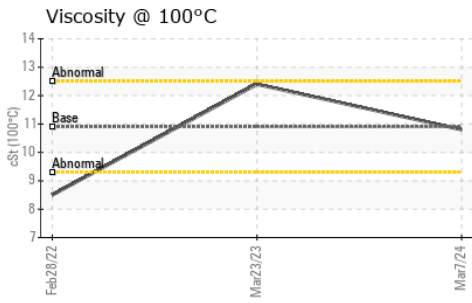
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>9</b>	21	35
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	0.5
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>4.9</b>	4.8	5.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>15.5</b>	21.3	16.8
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)	>75	<b>1</b>	2	6
Boron	ppm	ASTM D5185(m)	250	<b>152</b>	337	63
Barium	ppm	ASTM D5185(m)	10	<b>&lt;1</b>	<1	3
Molybdenum	ppm	ASTM D5185(m)	100	<b>79</b>	71	44
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	1
Magnesium	ppm	ASTM D5185(m)	450	<b>458</b>	404	529
Calcium	ppm	ASTM D5185(m)	3000	<b>1259</b>	1447	1406
Phosphorus	ppm	ASTM D5185(m)	1150	<b>657</b>	996	706
Zinc	ppm	ASTM D5185(m)	1350	<b>757</b>	1062	769
Sulfur	ppm	ASTM D5185(m)	4250	<b>1981</b>	2767	2551
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>8.7</b>	12.5	9.4
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	<b>10.8</b>	12.4	8.5



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0910597  
**Lab Number** : 02625635  
**Unique Number** : 5750754  
**Test Package** : MOB 1

**Received** : 01 Apr 2024  
**Tested** : 01 Apr 2024  
**Diagnosed** : 01 Apr 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.