



# OIL ANALYSIS REPORT

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

Machine Id  
**11200 HWY 400 S**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA XR 4 SAE 15W40 (--- LTR)**

## 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>WC0915447</b>	WC0783841	WC0647791
Sample Date		Client Info		<b>07 May 2024</b>	23 Feb 2023	14 Feb 2022
Machine Age	hrs	Client Info		<b>0</b>	0	0
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>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>6</b>	2	1
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>1</b>	2	<1
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	<1	0
Copper	ppm	ASTM D5185(m)	>330	<b>3</b>	4	1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## CONTAMINATION

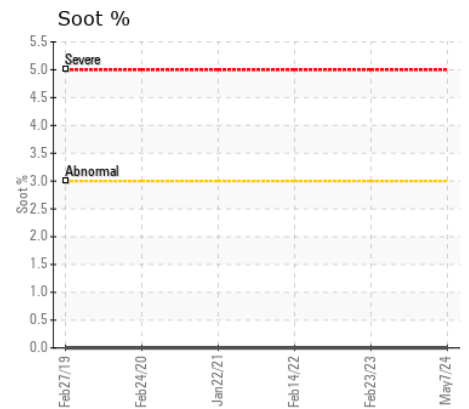
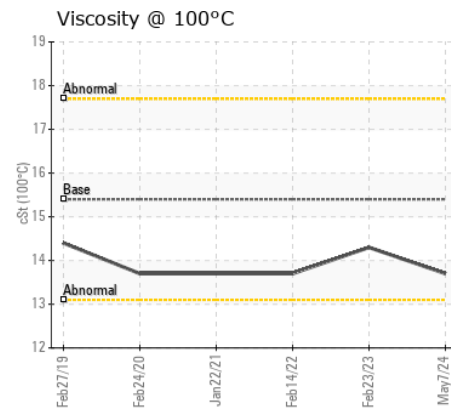
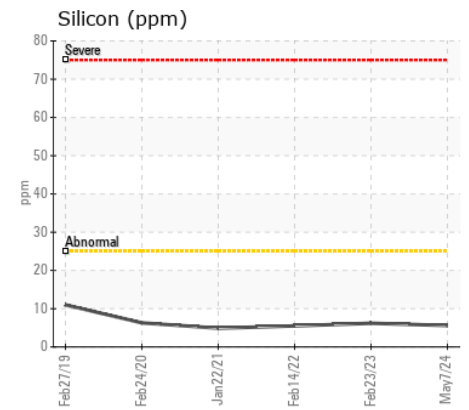
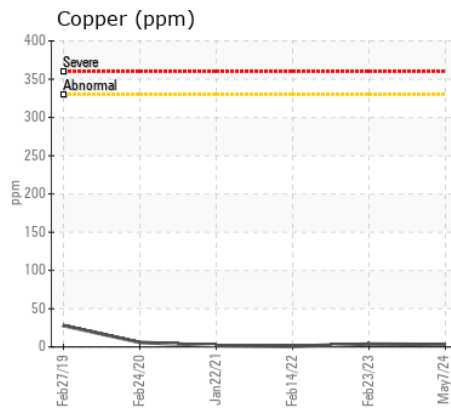
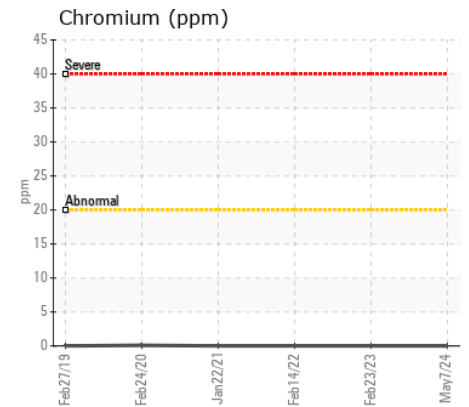
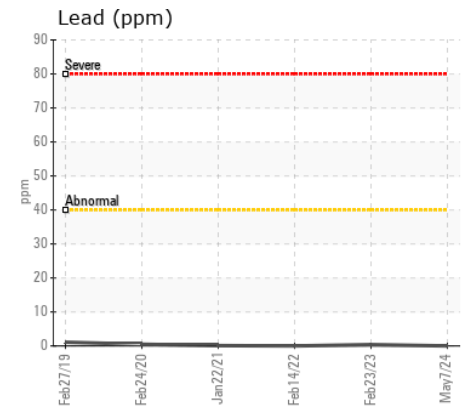
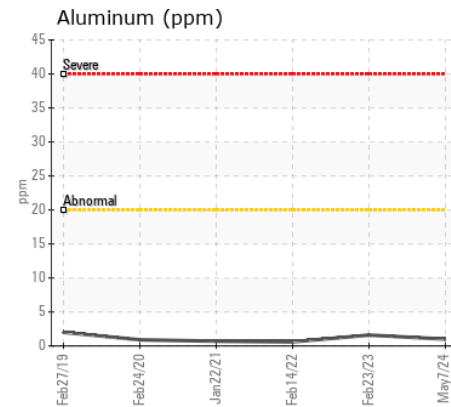
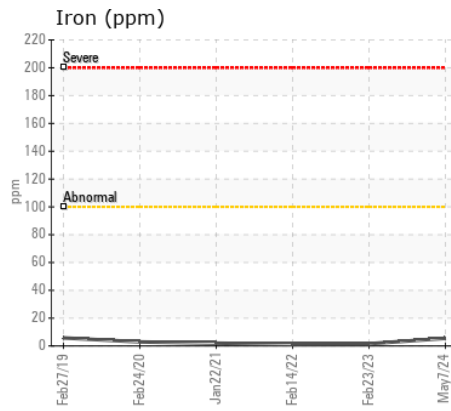
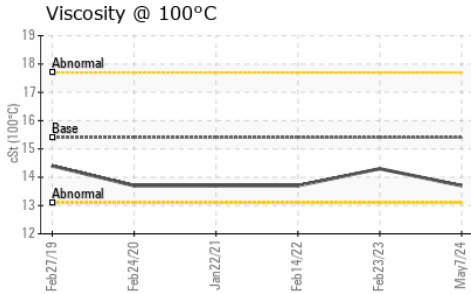
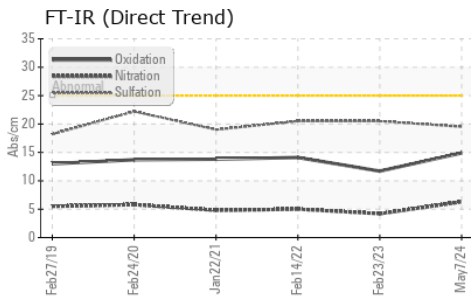
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>6</b>	6	6
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	<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		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>6.3</b>	4.2	5.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.5</b>	20.5	20.5
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)		<b>2</b>	2	1
Boron	ppm	ASTM D5185(m)	1	<b>78</b>	337	1
Barium	ppm	ASTM D5185(m)	1	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	1	<b>69</b>	76	58
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	10	<b>905</b>	478	1004
Calcium	ppm	ASTM D5185(m)	3032	<b>1157</b>	1362	1030
Phosphorus	ppm	ASTM D5185(m)	1054	<b>1000</b>	1078	1082
Zinc	ppm	ASTM D5185(m)	1332	<b>1209</b>	1154	1239
Sulfur	ppm	ASTM D5185(m)	3985	<b>2742</b>	2819	2849
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>14.9</b>	11.7	14.1
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>13.7</b>	14.3	13.7



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0915447  
**Lab Number** : 02643149  
**Unique Number** : 5800688  
**Test Package** : MOB 1

**Received** : 20 Jun 2024  
**Tested** : 20 Jun 2024  
**Diagnosed** : 20 Jun 2024 - Kevin Marson

**NORTHERN GENERATOR CO. LTD.**  
 80 ASHBRIDGE CIRCLE., UNIT #1 & 2  
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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.