



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**4175 14TH AVENUE UNIT #2**  
 Component  
**2 Diesel Engine**  
 Fluid  
**PETRO CANADA XR 4 SAE 15W40 (24 LTR)**

## RECOMMENDATION

No corrective action is recommended at this time. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0897578</b>	WC0515876	---
Sample Date		Client Info		<b>23 Jan 2024</b>	05 Jan 2021	---
Machine Age	hrs	Client Info		<b>0</b>	0	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>N/A</b>	N/A	---
Filter Changed		Client Info		<b>N/A</b>	N/A	---
Sample Status				<b>NORMAL</b>	NORMAL	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>51	<b>2</b>	2	---
Chromium	ppm	ASTM D5185(m)	>11	<b>0</b>	0	---
Nickel	ppm	ASTM D5185(m)	>5	<b>0</b>	0	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185(m)	>31	<b>&lt;1</b>	1	---
Lead	ppm	ASTM D5185(m)	>26	<b>&lt;1</b>	<1	---
Copper	ppm	ASTM D5185(m)	>26	<b>1</b>	1	---
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	---

## CONTAMINATION

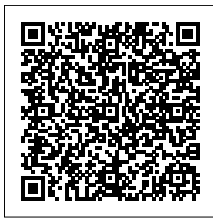
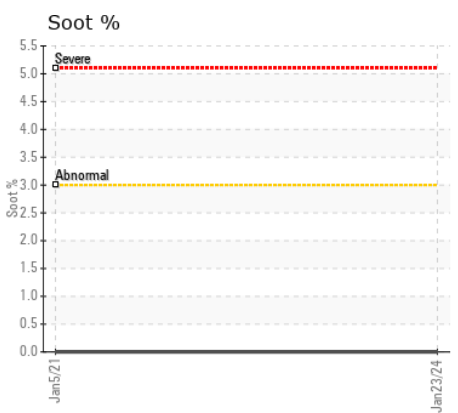
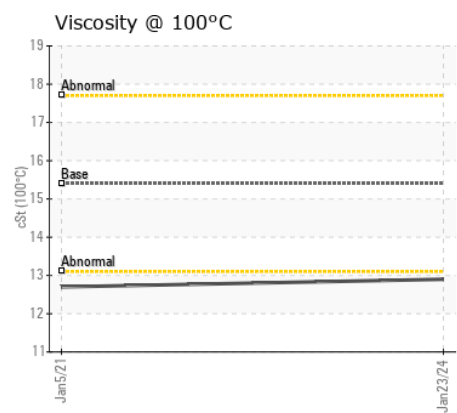
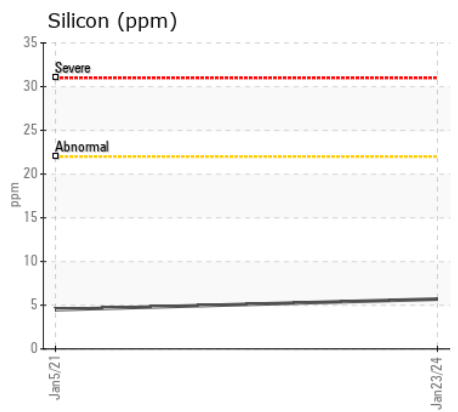
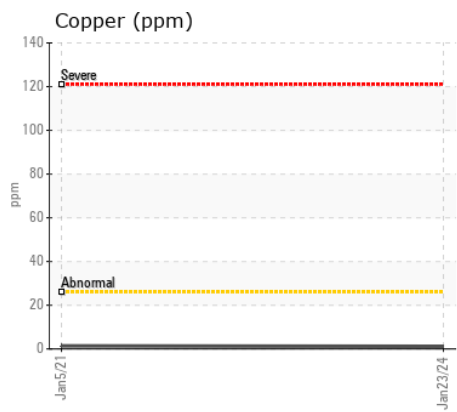
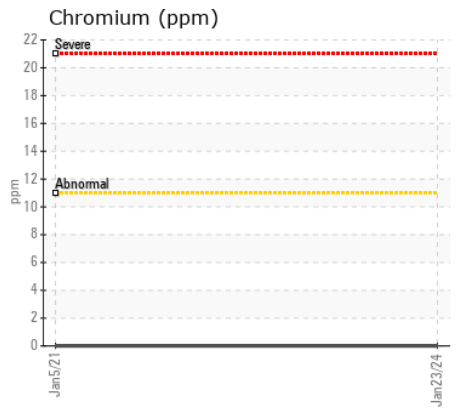
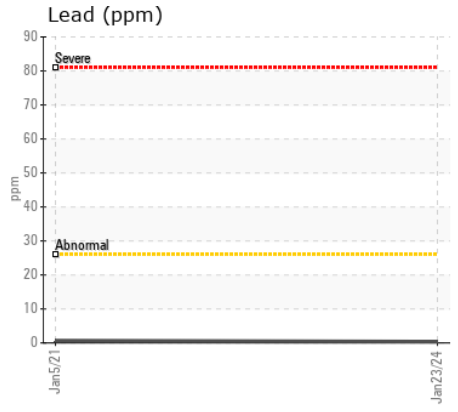
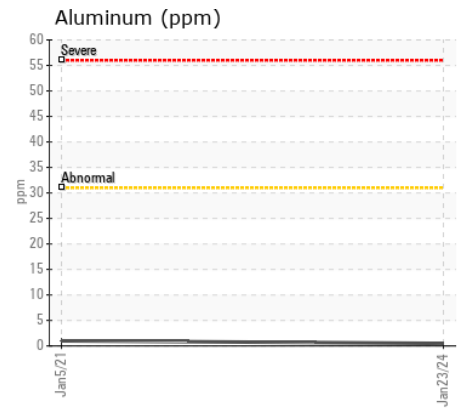
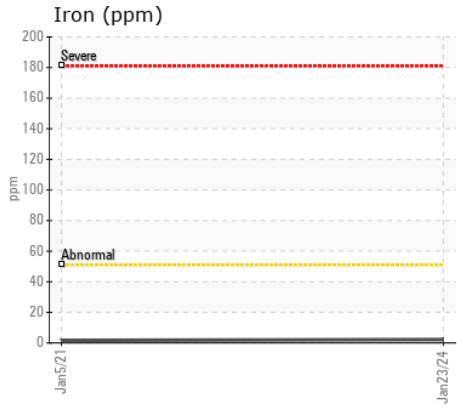
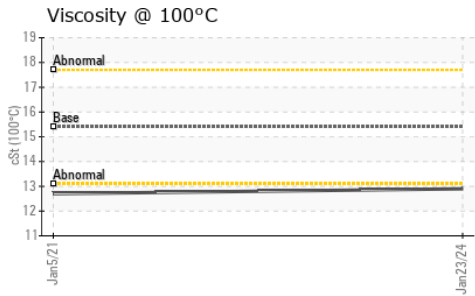
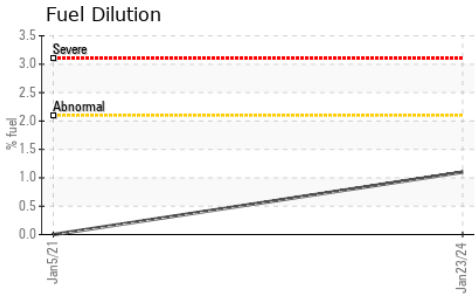
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185(m)	>22	<b>6</b>	4	---
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	---
Fuel	%	ASTM D7593*	>2.1	<b>1.1</b>	<1.0	---
Water		WC Method	>0.21	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	ASTM D7844*	>3	<b>0</b>	0	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>4.5</b>	4.5	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>18.4</b>	18.9	---
Emulsified Water	scalar	Visual*	>0.21	<b>NEG</b>	NEG	---

## FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)	>31	<b>1</b>	2	---
Boron	ppm	ASTM D5185(m)	1	<b>41</b>	54	---
Barium	ppm	ASTM D5185(m)	1	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185(m)	1	<b>62</b>	69	---
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185(m)	10	<b>930</b>	953	---
Calcium	ppm	ASTM D5185(m)	3032	<b>1074</b>	1116	---
Phosphorus	ppm	ASTM D5185(m)	1054	<b>1018</b>	1023	---
Zinc	ppm	ASTM D5185(m)	1332	<b>1173</b>	1238	---
Sulfur	ppm	ASTM D5185(m)	3985	<b>2778</b>	2929	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>13.4</b>	13.8	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>12.9</b>	12.7	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0897578 **Received** : 01 Apr 2024  
**Lab Number** : 02625604 **Tested** : 02 Apr 2024  
**Unique Number** : 5750723 **Diagnosed** : 02 Apr 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel )

**NORTHERN GENERATOR CO. LTD.**  
 80 ASHBRIDGE CIRCLE,, UNIT #1 & 2  
 WOODBRIDGE, ON  
 CA L4L 3R5  
 Contact: Selome Afework  
 selome@northerngenerator.com  
 T: (905)264-9744  
 F: (905)264-9714

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.