



# OIL ANALYSIS REPORT

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

Machine Id  
**28 ELIZABETH**  
 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>WC0897591</b>	WC0396756	WC0810831
Sample Date		Client Info		<b>02 Feb 2024</b>	23 Aug 2023	28 Apr 2023
Machine Age	hrs	Client Info		<b>114</b>	415	0
Oil Age	hrs	Client Info		<b>0</b>	415	0
Filter Age	hrs	Client Info		<b>0</b>	415	0
Oil Changed		Client Info		<b>N/A</b>	Changed	N/A
Filter Changed		Client Info		<b>N/A</b>	Changed	N/A
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>2</b>	10	4
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>1</b>	2	1
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;1</b>	2	<1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## CONTAMINATION

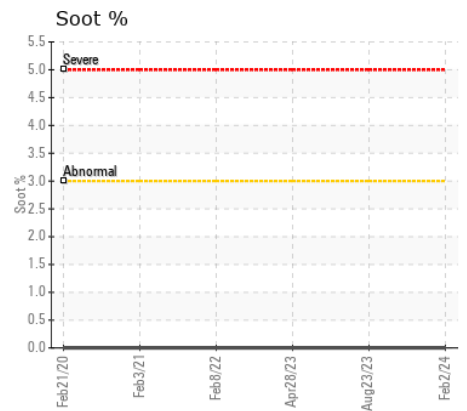
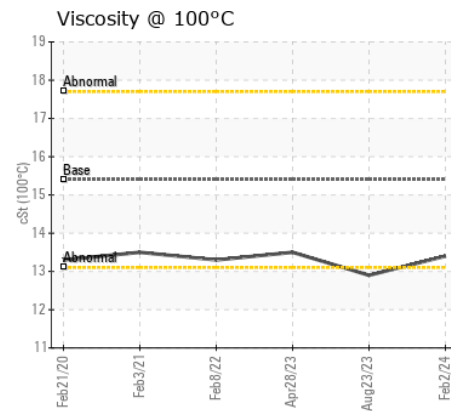
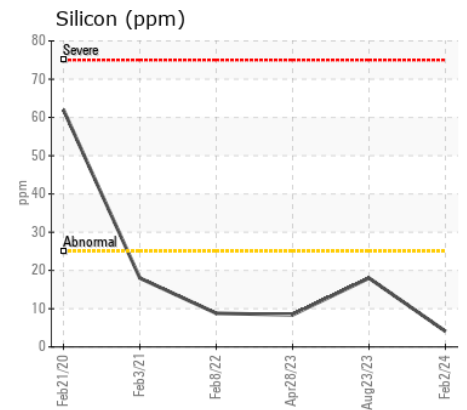
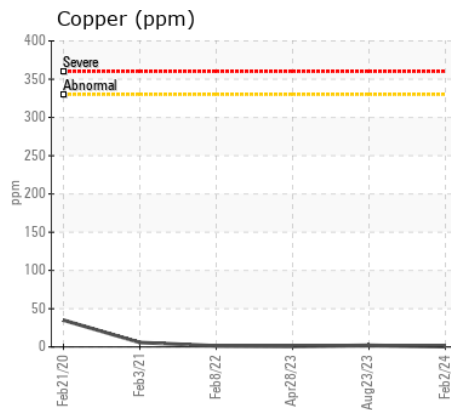
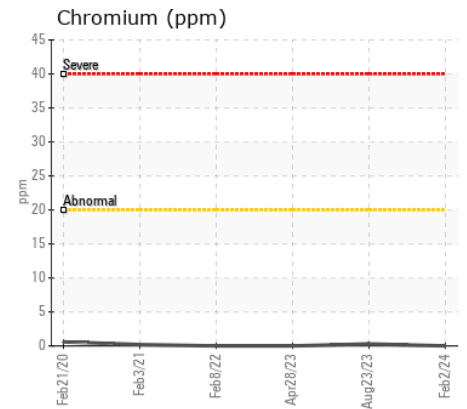
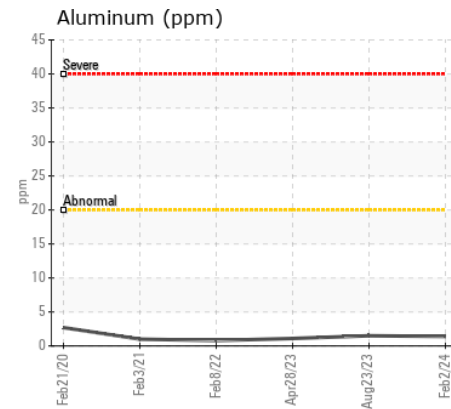
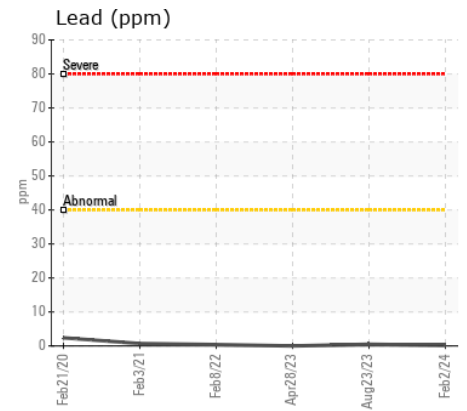
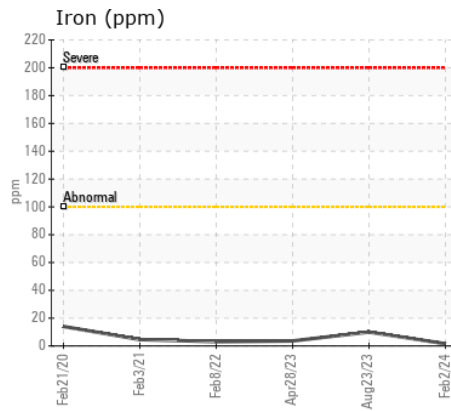
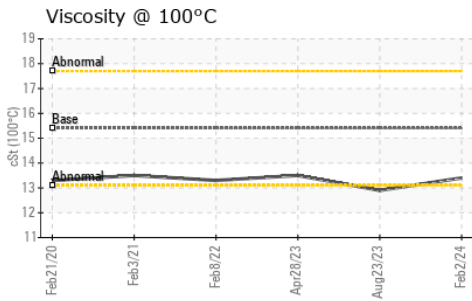
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	18	8
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	1	0
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>4.5</b>	6.2	5.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>18.3</b>	19.9	19.4
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>&lt;1</b>	6	2
Boron	ppm	ASTM D5185(m)	1	<b>14</b>	274	141
Barium	ppm	ASTM D5185(m)	1	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	1	<b>58</b>	82	66
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	1
Magnesium	ppm	ASTM D5185(m)	10	<b>949</b>	614	775
Calcium	ppm	ASTM D5185(m)	3032	<b>1048</b>	1409	1193
Phosphorus	ppm	ASTM D5185(m)	1054	<b>1058</b>	737	1095
Zinc	ppm	ASTM D5185(m)	1332	<b>1173</b>	789	1166
Sulfur	ppm	ASTM D5185(m)	3985	<b>2970</b>	2300	2790
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>13.7</b>	13.5	14.5
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>13.4</b>	12.9	13.5



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0897591  
**Lab Number** : 02619226  
**Unique Number** : 5736336  
**Test Package** : MOB 1  
**Received** : 01 Mar 2024  
**Tested** : 01 Mar 2024  
**Diagnosed** : 01 Mar 2024 - Wes Davis

**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.