



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	NORMAL

Machine Id  
**2301 DERRY RD W**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA XR 4 SAE 15W40 (--- LTR)**

## RECOMMENDATION

No corrective action is recommended at this time. 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>WC0910644</b>	WC0810816	WC0678690
Sample Date		Client Info		<b>12 Apr 2024</b>	01 May 2023	06 May 2022
Machine Age	hrs	Client Info		<b>0</b>	240	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>MARGINAL</b>	ABNORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>6</b>	7	3
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	0	0
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	<1
Copper	ppm	ASTM D5185(m)	>330	<b>2</b>	2	2
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---

## CONTAMINATION

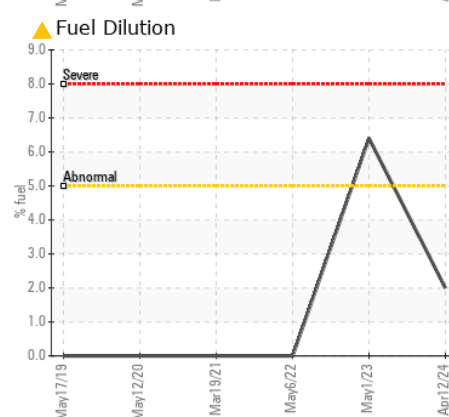
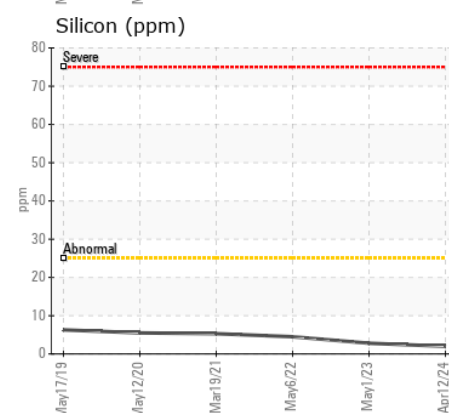
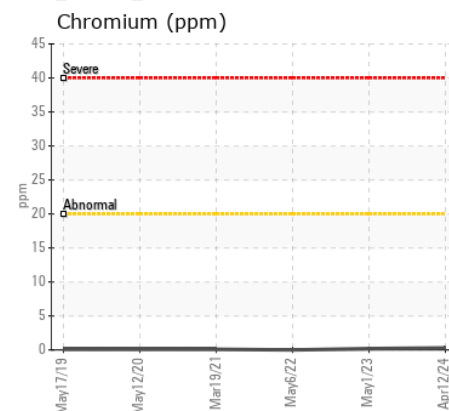
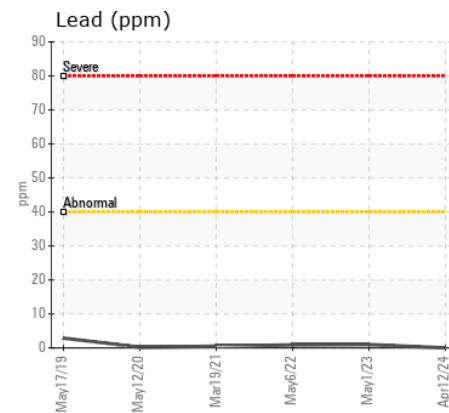
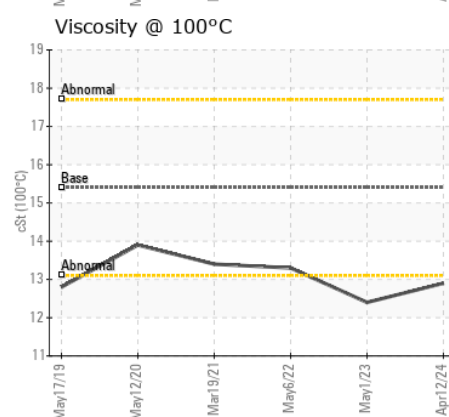
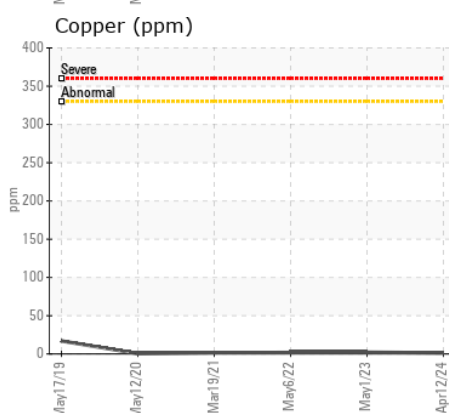
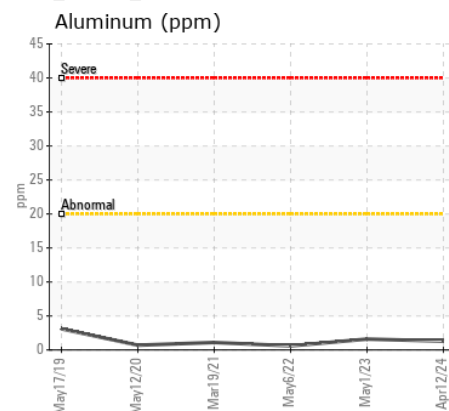
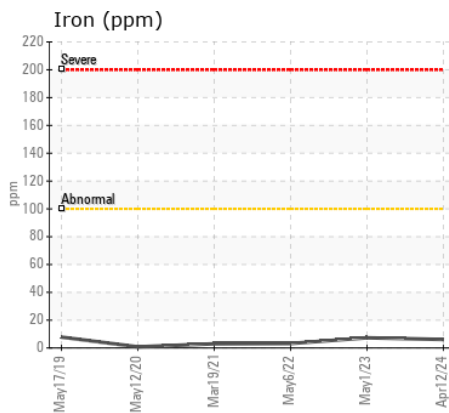
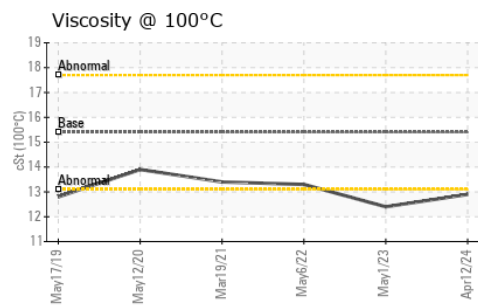
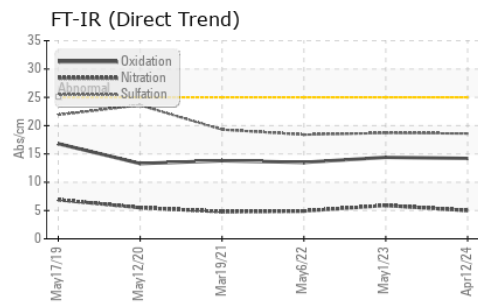
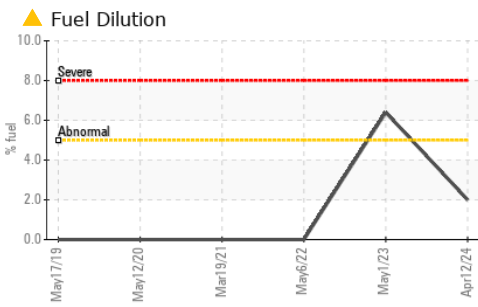
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	3	4
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	0
Fuel	%	ASTM D7593*	>5	<b>▲ 2</b>	<b>▲ 6.4</b>	<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>5.0</b>	5.9	4.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>18.6</b>	18.7	18.4
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
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>1</b>	2	2
Boron	ppm	ASTM D5185(m)	1	<b>2</b>	5	5
Barium	ppm	ASTM D5185(m)	1	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	1	<b>57</b>	56	55
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	10	<b>979</b>	886	936
Calcium	ppm	ASTM D5185(m)	3032	<b>1014</b>	1016	1009
Phosphorus	ppm	ASTM D5185(m)	1054	<b>1006</b>	986	990
Zinc	ppm	ASTM D5185(m)	1332	<b>1156</b>	1070	1167
Sulfur	ppm	ASTM D5185(m)	3985	<b>2707</b>	2731	2810
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>14.2</b>	14.4	13.5
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>12.9</b>	<b>▲ 12.4</b>	13.3



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0910644  
**Lab Number** : 02633011  
**Unique Number** : 5774164  
**Test Package** : MOB 1 ( Additional Tests: PercentFuel, Visual )

**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.