



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**360RIDELLE**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA XR 4 SAE 15W40 (--- 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>WC0910660</b>	WC0810809	WC0515858
Sample Date		Client Info		<b>13 May 2024</b>	03 May 2023	18 Mar 2021
Machine Age	hrs	Client Info		<b>82</b>	0	384
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

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	<b>2</b>	2	2
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>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	1	1
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m)	>330	<b>1</b>	2	9
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## CONTAMINATION

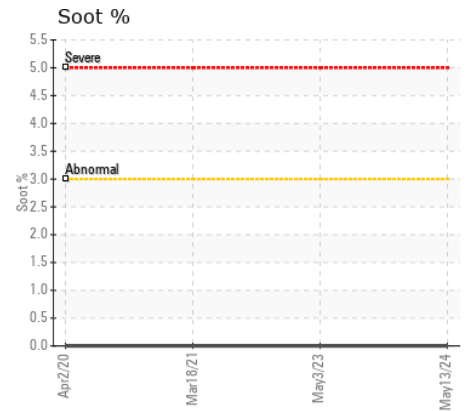
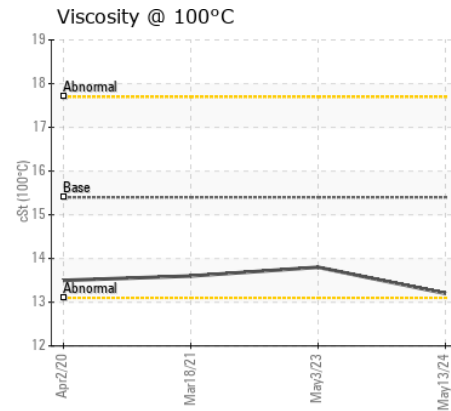
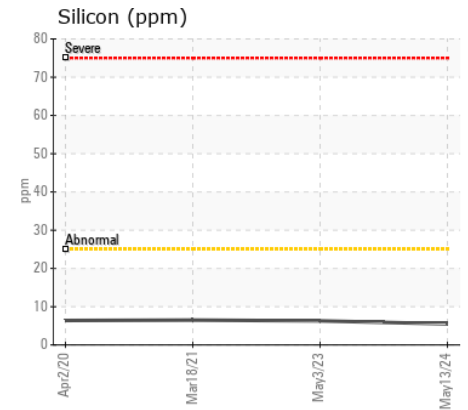
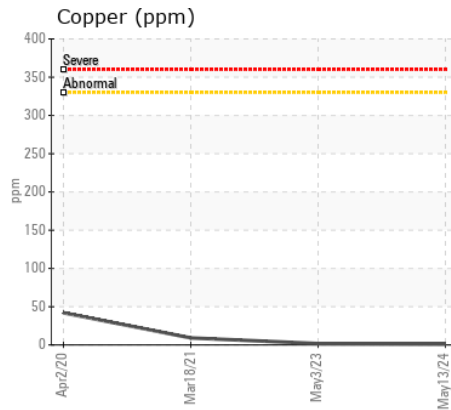
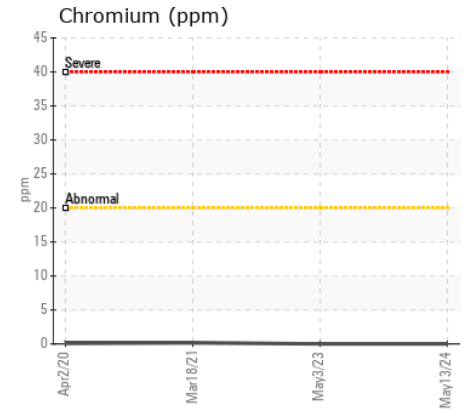
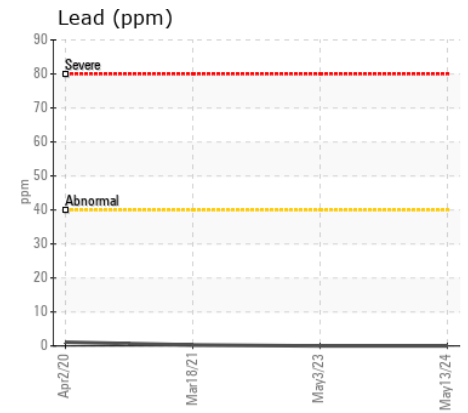
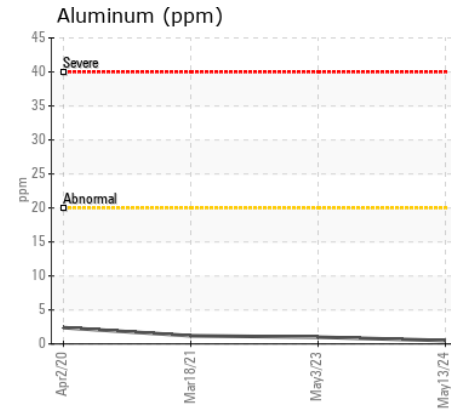
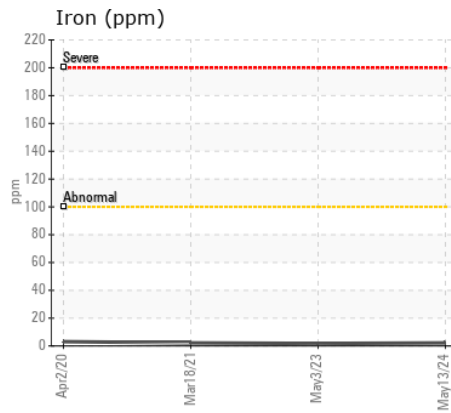
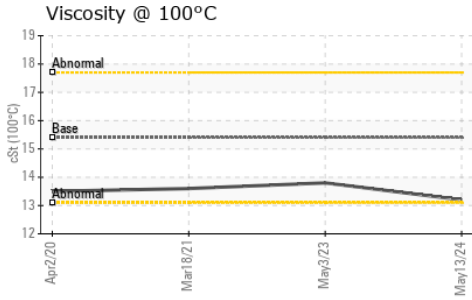
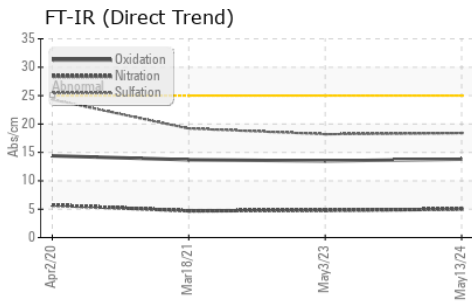
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>6</b>	6	6
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<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>5.0</b>	4.8	4.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>18.4</b>	18.2	19.2
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>	1	2
Boron	ppm	ASTM D5185(m)	1	<b>2</b>	6	55
Barium	ppm	ASTM D5185(m)	1	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	1	<b>59</b>	58	66
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	10	<b>971</b>	934	903
Calcium	ppm	ASTM D5185(m)	3032	<b>1029</b>	1078	1068
Phosphorus	ppm	ASTM D5185(m)	1054	<b>1007</b>	1063	953
Zinc	ppm	ASTM D5185(m)	1332	<b>1190</b>	1150	1165
Sulfur	ppm	ASTM D5185(m)	3985	<b>2792</b>	2694	2788
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>13.8</b>	13.5	13.7
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>13.2</b>	13.8	13.6



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0910660  
**Lab Number** : 02643164  
**Unique Number** : 5800703  
**Test Package** : MOB 1

**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.