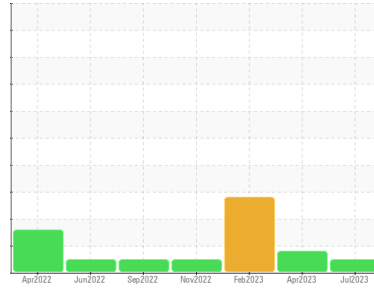




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**920120**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON XL SYN BLEND 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	<b>GFL0084270</b>	GFL0077600	GFL0070709	
Sample Date	Client Info	<b>11 Jul 2023</b>	26 Apr 2023	08 Feb 2023	
Machine Age	kms	Client Info	<b>154033</b>	5593	5040
Oil Age	kms	Client Info	<b>0</b>	556	582
Oil Changed	Client Info	<b>Changed</b>	Changed	Changed	
Sample Status		<b>NORMAL</b>	MARGINAL	SEVERE	

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<b>&lt;1.0</b>	▲ 2.8	● 15.8
Glycol	WC Method	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m) >110	<b>19</b>	24	37
Chromium	ppm	ASTM D5185(m) >4	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185(m) >2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m) >2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m) >25	<b>4</b>	7	11
Lead	ppm	ASTM D5185(m) >45	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m) >85	<b>2</b>	2	2
Tin	ppm	ASTM D5185(m) >4	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185(m)	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m) 1	<b>3</b>	2	2
Barium	ppm	ASTM D5185(m) 1	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 60	<b>57</b>	58	44
Manganese	ppm	ASTM D5185(m) 1	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m) 1010	<b>955</b>	942	694
Calcium	ppm	ASTM D5185(m) 1070	<b>1057</b>	1111	834
Phosphorus	ppm	ASTM D5185(m) 1150	<b>1038</b>	1039	816
Zinc	ppm	ASTM D5185(m) 1270	<b>1177</b>	1096	875
Sulfur	ppm	ASTM D5185(m) 2060	<b>2440</b>	2381	1961
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

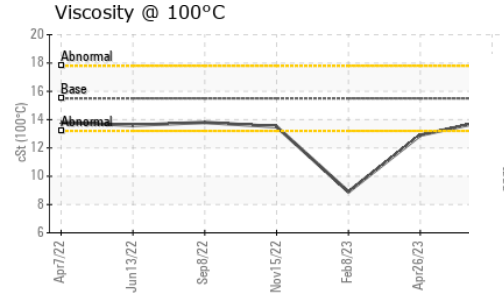
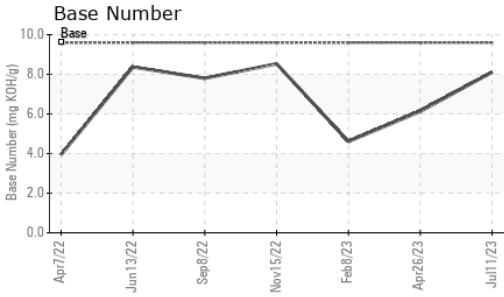
method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m) >30	<b>4</b>	4	4
Sodium	ppm	ASTM D5185(m)	<b>6</b>	5	3
Potassium	ppm	ASTM D5185(m) >20	<b>2</b>	4	12

## INFRA-RED

method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844* >3	<b>0.6</b>	0.6	0.5
Nitration	Abs/cm	ASTM D7624* >20	<b>9.4</b>	9.4	10.9
Sulfation	Abs/1mm	ASTM D7415* >30	<b>22.1</b>	23.4	23.0



# OIL ANALYSIS REPORT

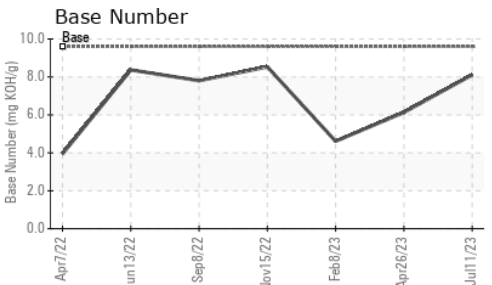
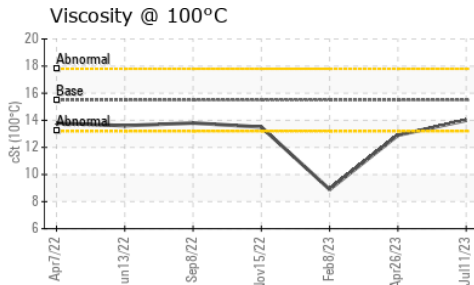
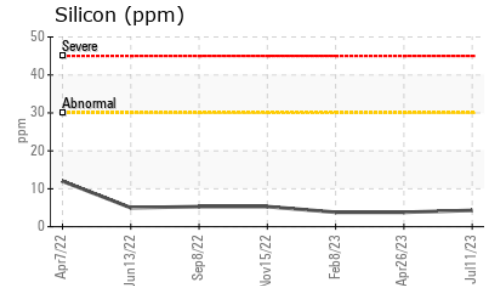
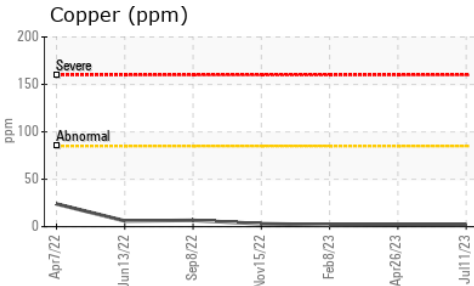
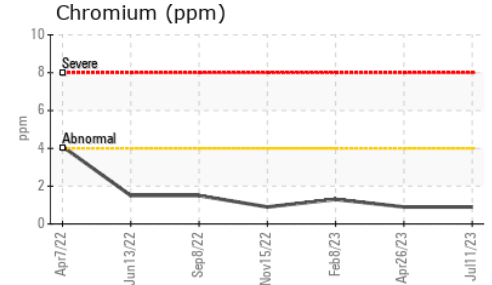
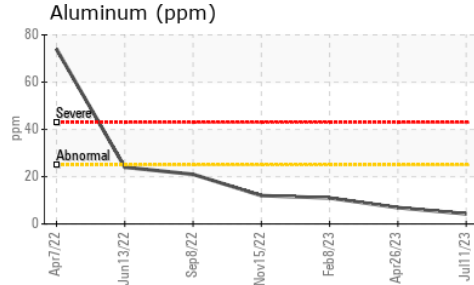
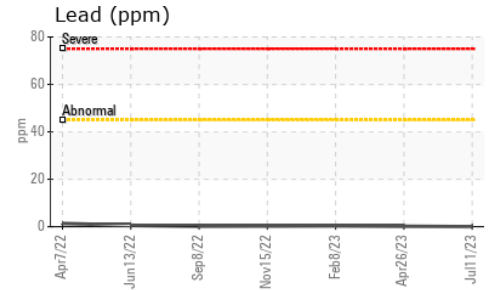
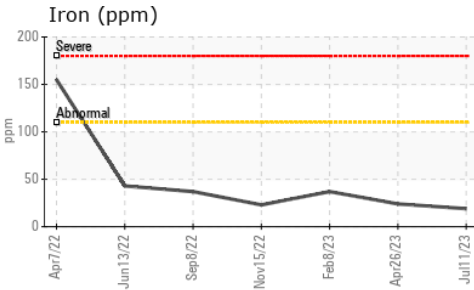


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>19.0</b>	19.5	19.4
Base Number (BN)	mg KOH/g	ASTM D2896*	9.6	<b>8.11</b>	6.13	4.61

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.5	<b>14.0</b>	12.9	<span style="color: red;">●</span> 8.9

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 550 - Rocky View County  
**Sample No.** : GFL0084270 **Received** : 24 Jul 2023  
**Lab Number** : **02571646** **Diagnosed** : 25 Jul 2023  
**Unique Number** : 5616697 **Diagnostician** : Wes Davis  
**Test Package** : MOB 2

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.

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