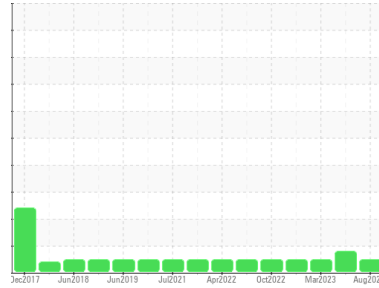




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**201043**

Component  
**Diesel Engine**

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

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

Metal levels are typical for a new component breaking in.

### 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>GFL0084330</b>	GFL0077592	GFL0070740
Sample Date	Client Info		<b>15 Aug 2023</b>	27 Jun 2023	07 Mar 2023
Machine Age	kms	Client Info	<b>9546</b>	373251	8806
Oil Age	kms	Client Info	<b>227</b>	0	398
Oil Changed	Client Info		<b>Changed</b>	N/A	Changed
Sample Status			<b>NORMAL</b>	MARGINAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	▲ 3.6	<1.0
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>100	<b>7</b>	15	8
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>	0	<1
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	3	2
Lead	ppm	ASTM D5185(m)	>40	<b>2</b>	7	2
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	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>2</b>	2	2
Barium	ppm	ASTM D5185(m)	1	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>57</b>	59	57
Manganese	ppm	ASTM D5185(m)	1	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>959</b>	950	918
Calcium	ppm	ASTM D5185(m)	1070	<b>1028</b>	1045	1136
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1049</b>	1038	1069
Zinc	ppm	ASTM D5185(m)	1270	<b>1167</b>	1184	1171
Sulfur	ppm	ASTM D5185(m)	2060	<b>2522</b>	2397	2578
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

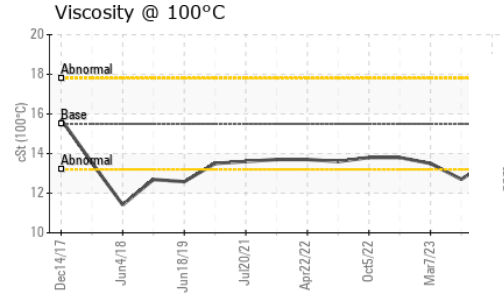
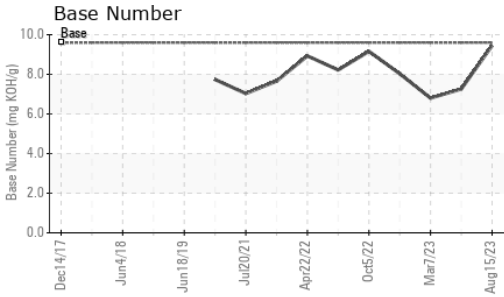
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>3</b>	6	4
Sodium	ppm	ASTM D5185(m)		<b>1</b>	2	2
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	3	<1

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>0.8</b>	1.3	0.6
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.7</b>	12.1	9.4
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>22.6</b>	24.6	23.2



# OIL ANALYSIS REPORT

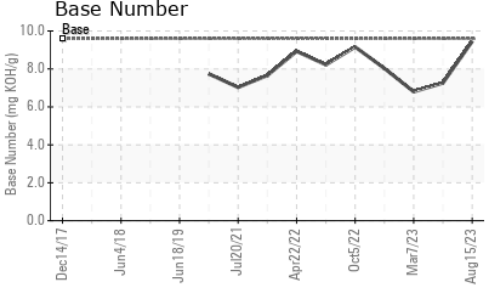
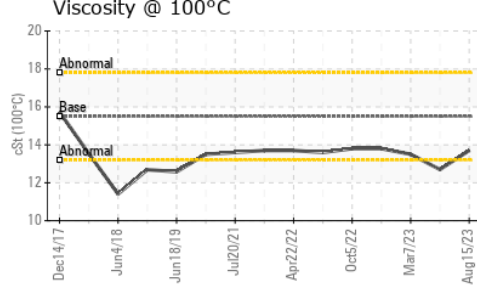
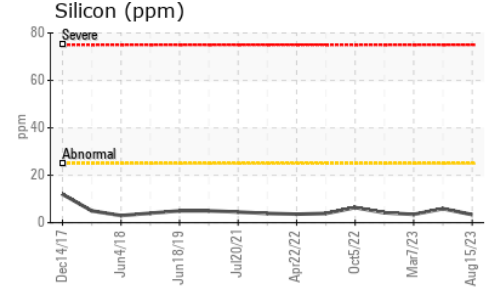
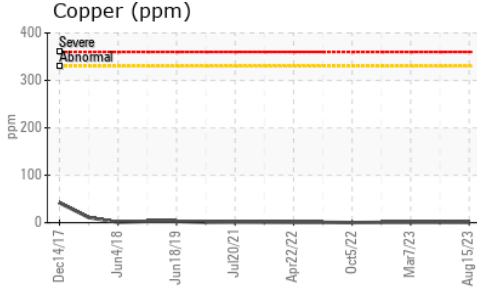
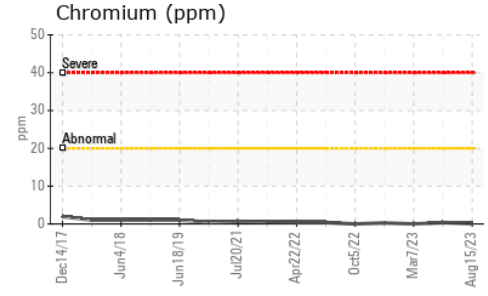
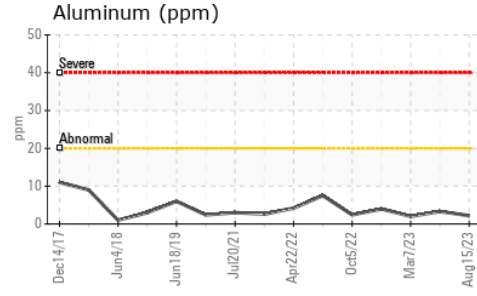
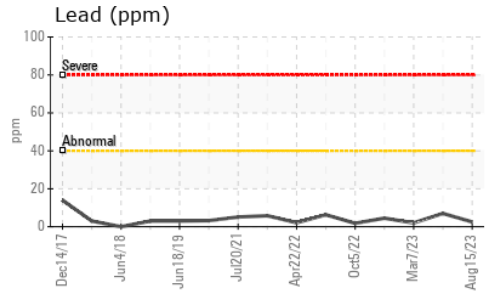
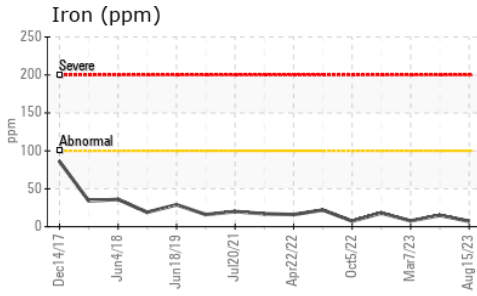


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>18.0</b>	23.4	18.1
Base Number (BN)	mg KOH/g	ASTM D2896*	9.6	<b>9.45</b>	7.26	6.80

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>13.7</b>	12.7	13.5

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 550 - Rocky View County  
**Sample No.** : GFL0084330 **Received** : 22 Aug 2023  
**Lab Number** : **02577346** **Diagnosed** : 23 Aug 2023  
**Unique Number** : 5630406 **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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