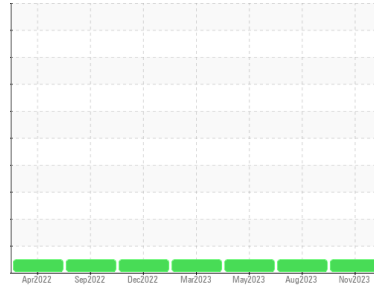




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**421051**

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>GFL0091586</b>	GFL0084323	GFL0077609	
Sample Date	Client Info	<b>06 Nov 2023</b>	14 Aug 2023	25 May 2023	
Machine Age	kms	Client Info	<b>4195</b>	107850	95344
Oil Age	kms	Client Info	<b>0</b>	0	0
Oil Changed	Client Info	<b>Changed</b>	Changed	Changed	
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL	

## CONTAMINATION

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

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >80	<b>13</b>	9	9
Chromium	ppm ASTM D5185(m) >5	<b>&lt;1</b>	<1	<1
Nickel	ppm ASTM D5185(m) >2	<b>&lt;1</b>	<1	<1
Titanium	ppm ASTM D5185(m)	<b>0</b>	0	<1
Silver	ppm ASTM D5185(m) >3	<b>&lt;1</b>	0	0
Aluminum	ppm ASTM D5185(m) >30	<b>5</b>	3	2
Lead	ppm ASTM D5185(m) >30	<b>0</b>	0	0
Copper	ppm ASTM D5185(m) >150	<b>1</b>	1	1
Tin	ppm ASTM D5185(m) >5	<b>0</b>	0	<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>&lt;1</b>	0	0
Molybdenum	ppm ASTM D5185(m) 60	<b>57</b>	58	57
Manganese	ppm ASTM D5185(m) 1	<b>0</b>	<1	<1
Magnesium	ppm ASTM D5185(m) 1010	<b>934</b>	955	928
Calcium	ppm ASTM D5185(m) 1070	<b>1085</b>	1033	1082
Phosphorus	ppm ASTM D5185(m) 1150	<b>987</b>	1038	1067
Zinc	ppm ASTM D5185(m) 1270	<b>1174</b>	1170	1155
Sulfur	ppm ASTM D5185(m) 2060	<b>2501</b>	2556	2581
Lithium	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

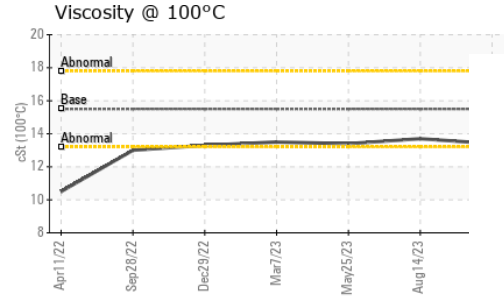
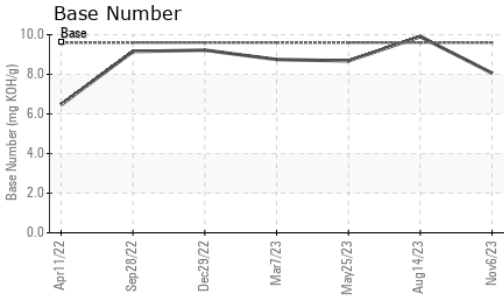
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >20	<b>&lt;1</b>	3	3
Sodium	ppm ASTM D5185(m)	<b>&lt;1</b>	1	2
Potassium	ppm ASTM D5185(m) >20	<b>4</b>	3	1

## INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	<b>0.3</b>	0.1	0.1
Nitration	Abs/cm ASTM D7624* >20	<b>8.3</b>	6.7	6.7
Sulfation	Abs./1mm ASTM D7415* >30	<b>19.7</b>	19.8	19.1



# OIL ANALYSIS REPORT

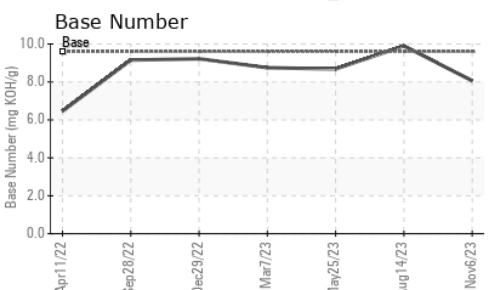
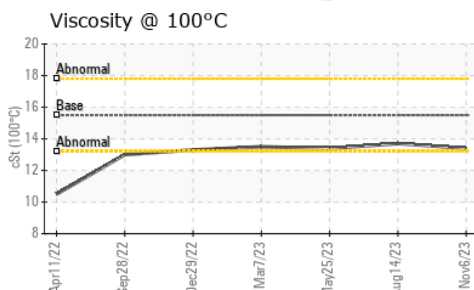
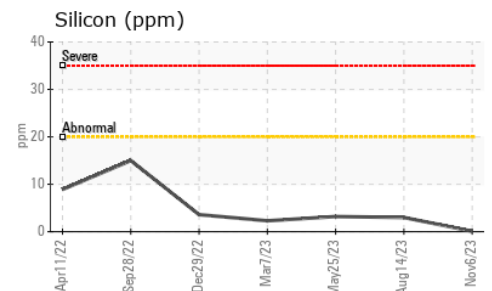
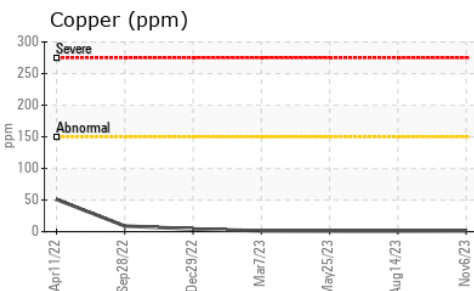
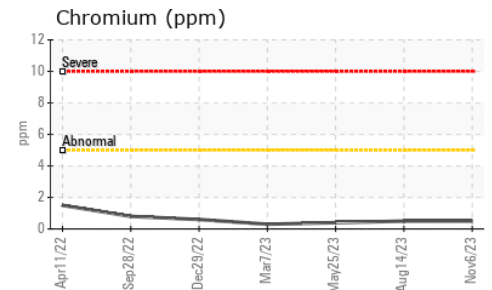
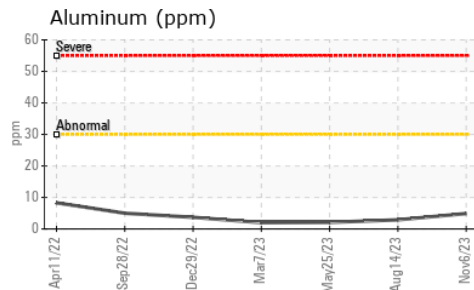
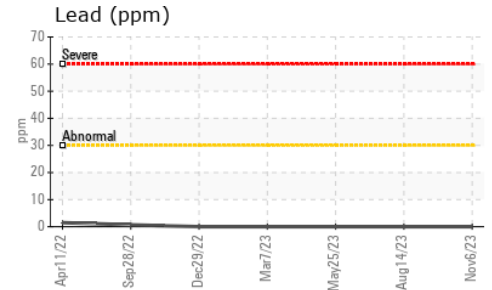
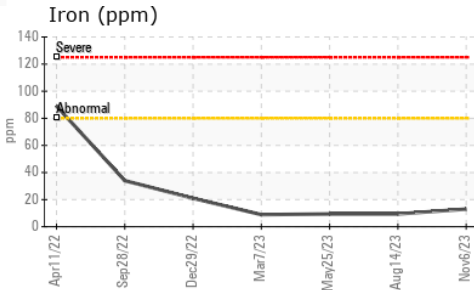


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>16.5</b>	14.5	15.0
Base Number (BN)	mg KOH/g	ASTM D2896*	9.6	<b>8.06</b>	9.90	8.68

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>13.4</b>	13.7	13.4

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 550 - Rocky View County  
**Sample No.** : GFL0091586 **Received** : 15 Nov 2023  
**Lab Number** : 02596479 **Diagnosed** : 15 Nov 2023  
**Unique Number** : 5681559 **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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