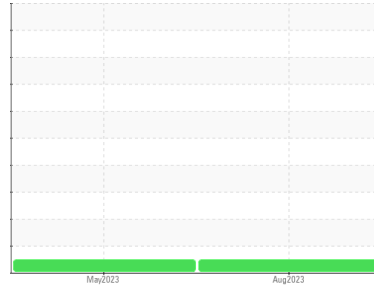




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**413101**  
 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>GFL0084317</b>	GFL0077606	---
Sample Date	Client Info		<b>09 Aug 2023</b>	23 May 2023	---
Machine Age	hrs	Client Info	<b>1135</b>	583	---
Oil Age	hrs	Client Info	<b>578</b>	583	---
Oil Changed	Client Info		<b>Changed</b>	Changed	---
Sample Status			<b>NORMAL</b>	NORMAL	---

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>80	<b>35</b>	47	---
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	---
Titanium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185(m)	>30	<b>3</b>	4	---
Lead	ppm	ASTM D5185(m)	>30	<b>0</b>	<1	---
Copper	ppm	ASTM D5185(m)	>150	<b>4</b>	14	---
Tin	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	---
Antimony	ppm	ASTM D5185(m)		<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	1	<b>5</b>	42	---
Barium	ppm	ASTM D5185(m)	1	<b>&lt;1</b>	4	---
Molybdenum	ppm	ASTM D5185(m)	60	<b>59</b>	41	---
Manganese	ppm	ASTM D5185(m)	1	<b>&lt;1</b>	5	---
Magnesium	ppm	ASTM D5185(m)	1010	<b>949</b>	575	---
Calcium	ppm	ASTM D5185(m)	1070	<b>1116</b>	1673	---
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1028</b>	779	---
Zinc	ppm	ASTM D5185(m)	1270	<b>1179</b>	864	---
Sulfur	ppm	ASTM D5185(m)	2060	<b>2412</b>	1944	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---

## CONTAMINANTS

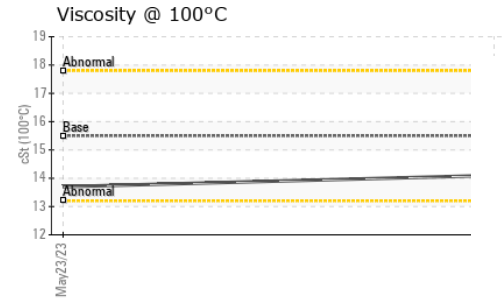
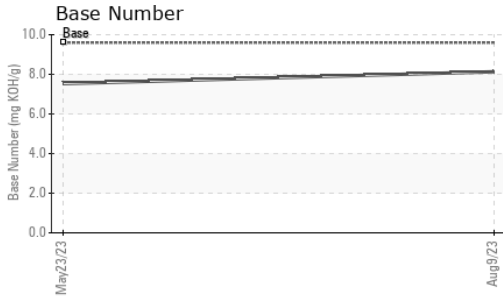
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>20	<b>5</b>	18	---
Sodium	ppm	ASTM D5185(m)		<b>2</b>	5	---
Potassium	ppm	ASTM D5185(m)	>20	<b>5</b>	2	---

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>0.7</b>	0.7	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>10.1</b>	11.0	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>23.2</b>	24.8	---



# OIL ANALYSIS REPORT

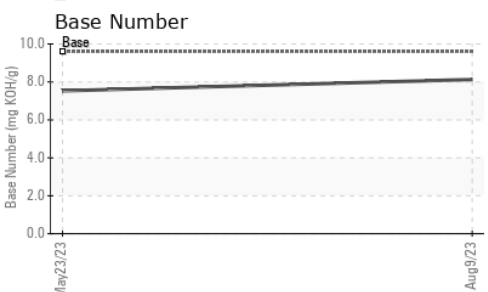
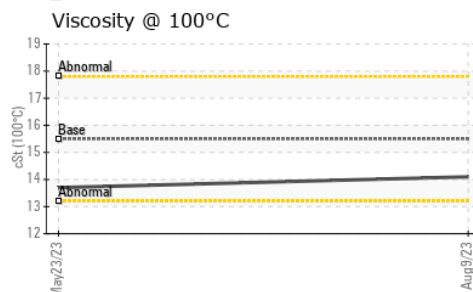
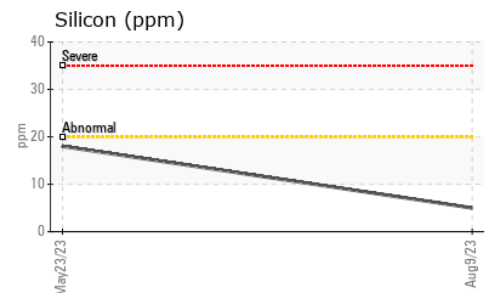
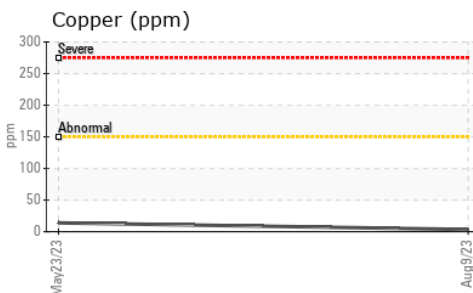
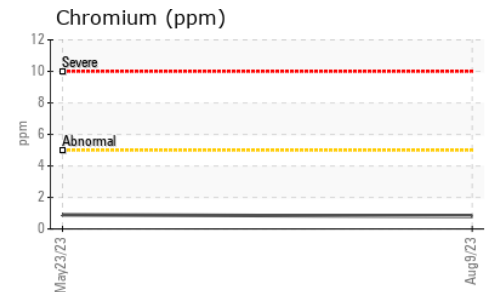
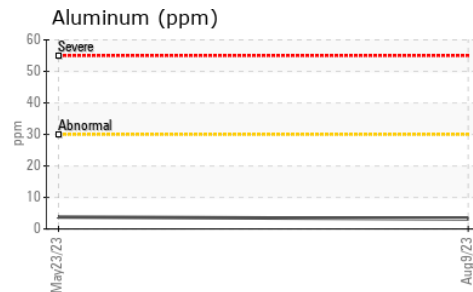
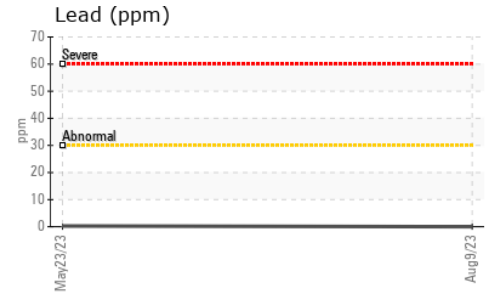
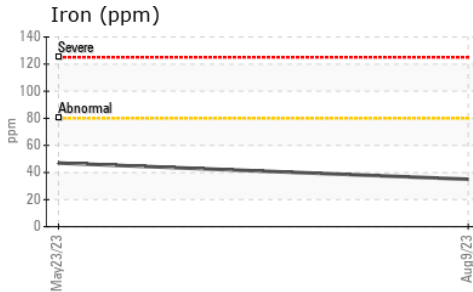


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>20.0</b>	25.4	---
Base Number (BN)	mg KOH/g	ASTM D2896*	9.6	<b>8.13</b>	7.53	---

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.5	<b>14.1</b>	13.7	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 550 - Rocky View County  
**Sample No.** : GFL0084317 **Received** : 15 Aug 2023 220 Carmek Blvd  
**Lab Number** : **02575834** **Diagnosed** : 16 Aug 2023 Rocky View County, AB  
**Unique Number** : 5628894 **Diagnostician** : Wes Davis CA T1X 1X1  
**Test Package** : MOB 2 **Contact:** GFL Calgary  
 calgarymaintenance@gflenv.com

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.

F: (403)369-6163