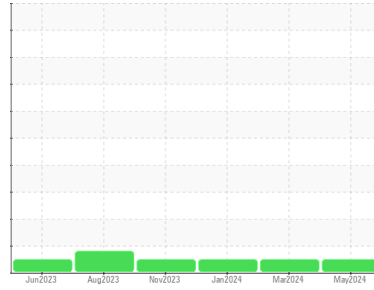




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**413152**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- LTR)**

## 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 condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0119010</b>	GFL0112545	GFL0102647
Sample Date	Client Info		<b>23 May 2024</b>	26 Mar 2024	14 Jan 2024
Machine Age	kms	Client Info	<b>90758</b>	0	2173
Oil Age	kms	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<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

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>120	<b>9</b>	11	14
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	2	2
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	2
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m)	>330	<b>4</b>	9	36
Tin	ppm	ASTM D5185(m)	>15	<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)	2	<b>4</b>	2	2
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>60</b>	58	60
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185(m)	950	<b>962</b>	967	970
Calcium	ppm	ASTM D5185(m)	1050	<b>1067</b>	1047	1077
Phosphorus	ppm	ASTM D5185(m)	995	<b>1018</b>	1001	1024
Zinc	ppm	ASTM D5185(m)	1180	<b>1168</b>	1185	1185
Sulfur	ppm	ASTM D5185(m)	2600	<b>2528</b>	2501	2642
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

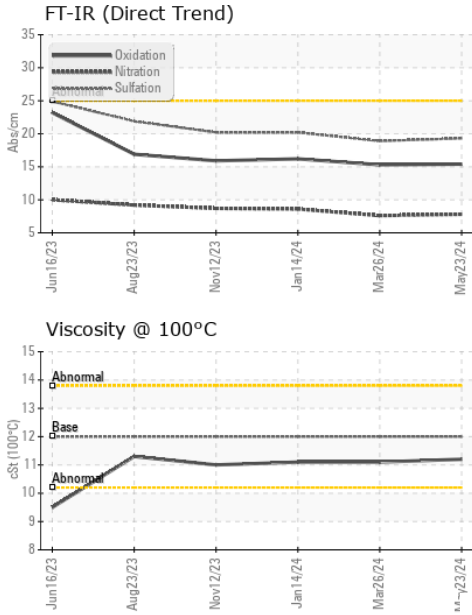
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	1	5
Sodium	ppm	ASTM D5185(m)		<b>1</b>	1	1
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	2

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>4	<b>0.2</b>	0.1	0.2
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.8</b>	7.6	8.6
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>19.3</b>	18.9	20.2



# OIL ANALYSIS REPORT

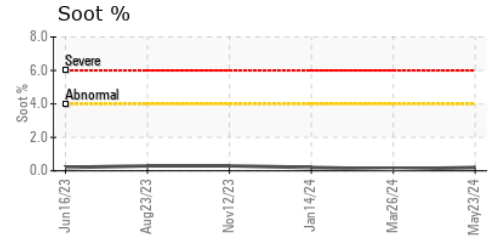
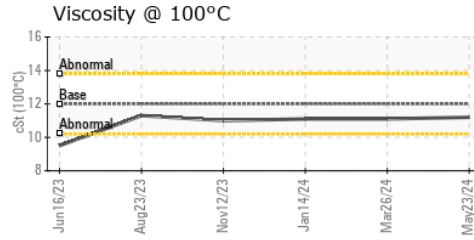
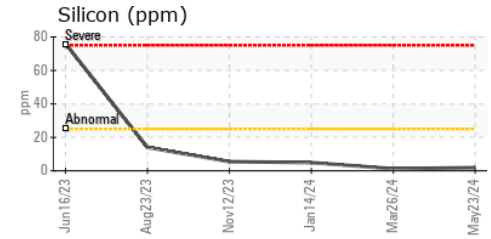
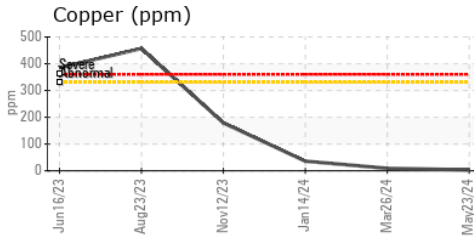
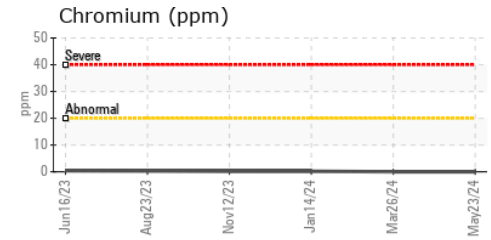
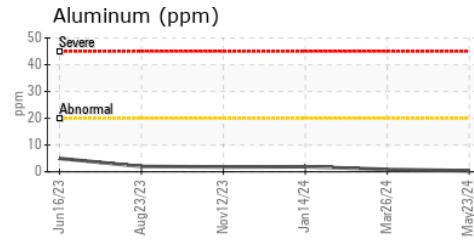
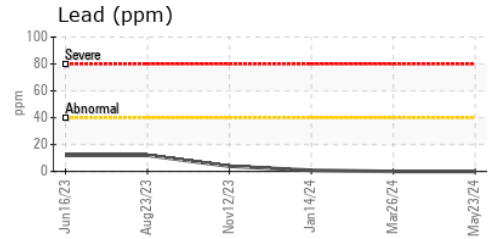
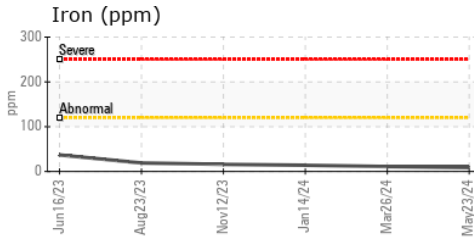


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>15.4</b>	15.3	16.2

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>VLITE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	---	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
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)	12.00	<b>11.2</b>	11.1	11.1

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0119010      **Received** : 29 May 2024  
**Lab Number** : **02638396**      **Tested** : 29 May 2024  
**Unique Number** : 5787558      **Diagnosed** : 29 May 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: Visual )

**GFL Environmental - 554 - Edmonton SW**  
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 F:

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.