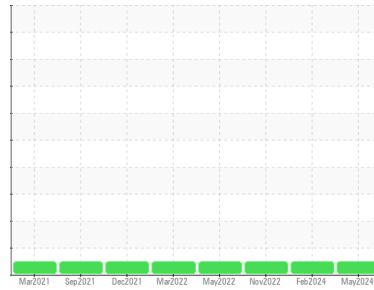




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id

**501092**

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON SHP 10W30 (--- 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 condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0108210</b>	GFL0108241	GFL0047673
Sample Date	Client Info		<b>03 May 2024</b>	13 Feb 2024	25 Nov 2022
Machine Age	hrs	Client Info	<b>12902</b>	12339	9334
Oil Age	hrs	Client Info	<b>500</b>	676	732
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
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)	>100	<b>43</b>	62	30
Chromium	ppm	ASTM D5185(m)	>20	<b>1</b>	2	2
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	<1
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>5</b>	8	5
Lead	ppm	ASTM D5185(m)	>40	<b>7</b>	2	9
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>15	<b>0</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)	2	<b>1</b>	2	2
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>64</b>	61	62
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>1060</b>	1008	1017
Calcium	ppm	ASTM D5185(m)	1050	<b>1155</b>	1146	1139
Phosphorus	ppm	ASTM D5185(m)	995	<b>1058</b>	1036	1111
Zinc	ppm	ASTM D5185(m)	1180	<b>1248</b>	1209	1268
Sulfur	ppm	ASTM D5185(m)	2600	<b>2351</b>	2480	2478
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

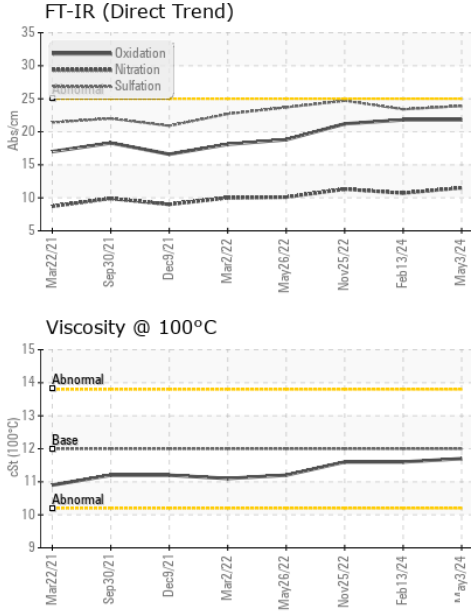
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	6	7
Sodium	ppm	ASTM D5185(m)		<b>2</b>	3	2
Potassium	ppm	ASTM D5185(m)	>20	<b>4</b>	4	4

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>0.5</b>	0.5	0.4
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.5</b>	10.7	11.3
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>23.9</b>	23.4	24.7



# OIL ANALYSIS REPORT

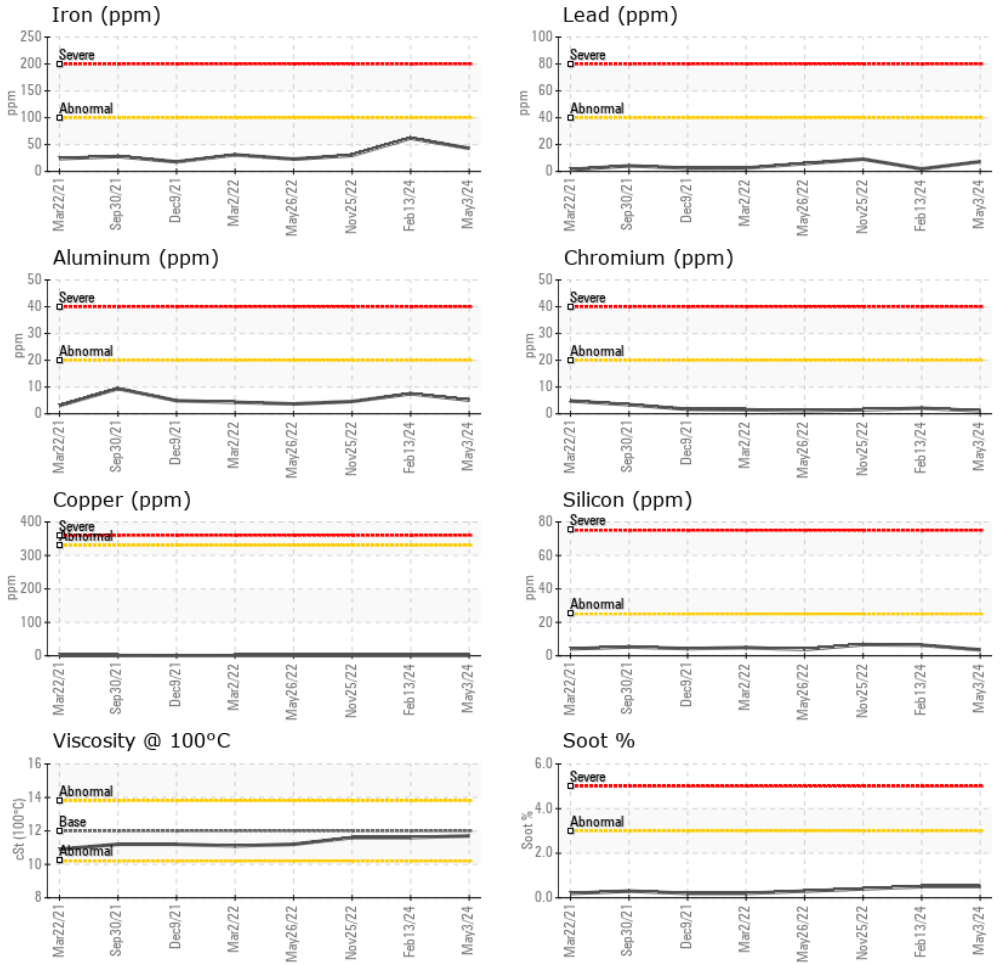


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>21.8</b>	21.8	21.2

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	---	---
Silt	scalar	Visual*	NONE	<b>VLITE</b>	---	---
Debris	scalar	Visual*	NONE	<b>VLITE</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>11.7</b>	11.6	11.6

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 355 - Saskatoon**  
**Sample No.** : GFL0108210 **Received** : 30 May 2024 **100 Cory Road**  
**Lab Number** : 02638799 **Tested** : 30 May 2024 **Saskatoon, SK**  
**Unique Number** : 5787961 **Diagnosed** : 30 May 2024 - Wes Davis **CA S7K 3J7**  
**Test Package** : MOB 1 ( Additional Tests: Visual ) **Contact: Ryan Polichuk**  
**To discuss this sample report, contact Customer Service at 1-800-268-2131.** **rpolichuk@gflenv.com**  
**Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.** **T: (306)244-9500**  
**Validity of results and interpretation are based on the sample and information as supplied.** **F:**