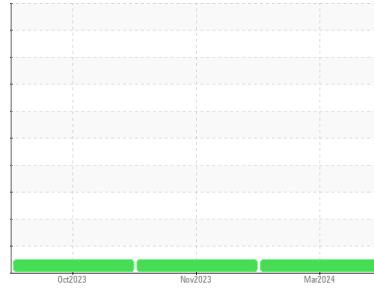




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id

**401117**

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON SHP 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

### 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>GFL0096745</b>	GFL0096753	GFL0096711
Sample Date	Client Info		<b>04 Mar 2024</b>	30 Nov 2023	25 Oct 2023
Machine Age	kms	Client Info	<b>25455</b>	24817	535321
Oil Age	kms	Client Info	<b>0</b>	600	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	>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>24</b>	11	21
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	2	2
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	0
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)	0	<b>2</b>	2	2
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	<b>60</b>	56	59
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185(m)	1010	<b>968</b>	920	951
Calcium	ppm	ASTM D5185(m)	1070	<b>1053</b>	1032	1033
Phosphorus	ppm	ASTM D5185(m)	1150	<b>956</b>	975	962
Zinc	ppm	ASTM D5185(m)	1270	<b>1168</b>	1123	1179
Sulfur	ppm	ASTM D5185(m)	2060	<b>2309</b>	2614	2348
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

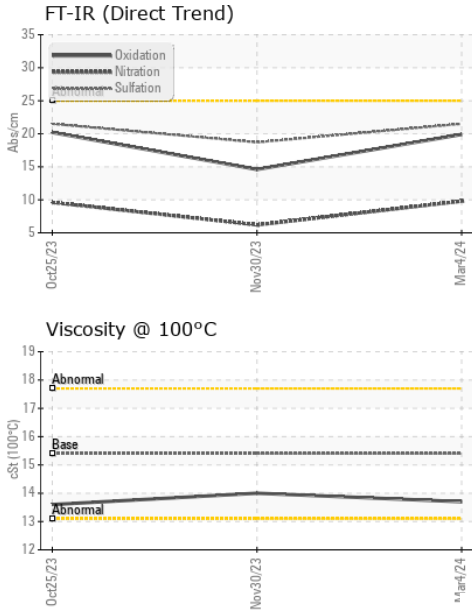
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>3</b>	3	6
Sodium	ppm	ASTM D5185(m)		<b>6</b>	3	5
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	1	<1

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>0.3</b>	0	0.4
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.8</b>	6.2	9.6
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>21.5</b>	18.7	21.5



# OIL ANALYSIS REPORT

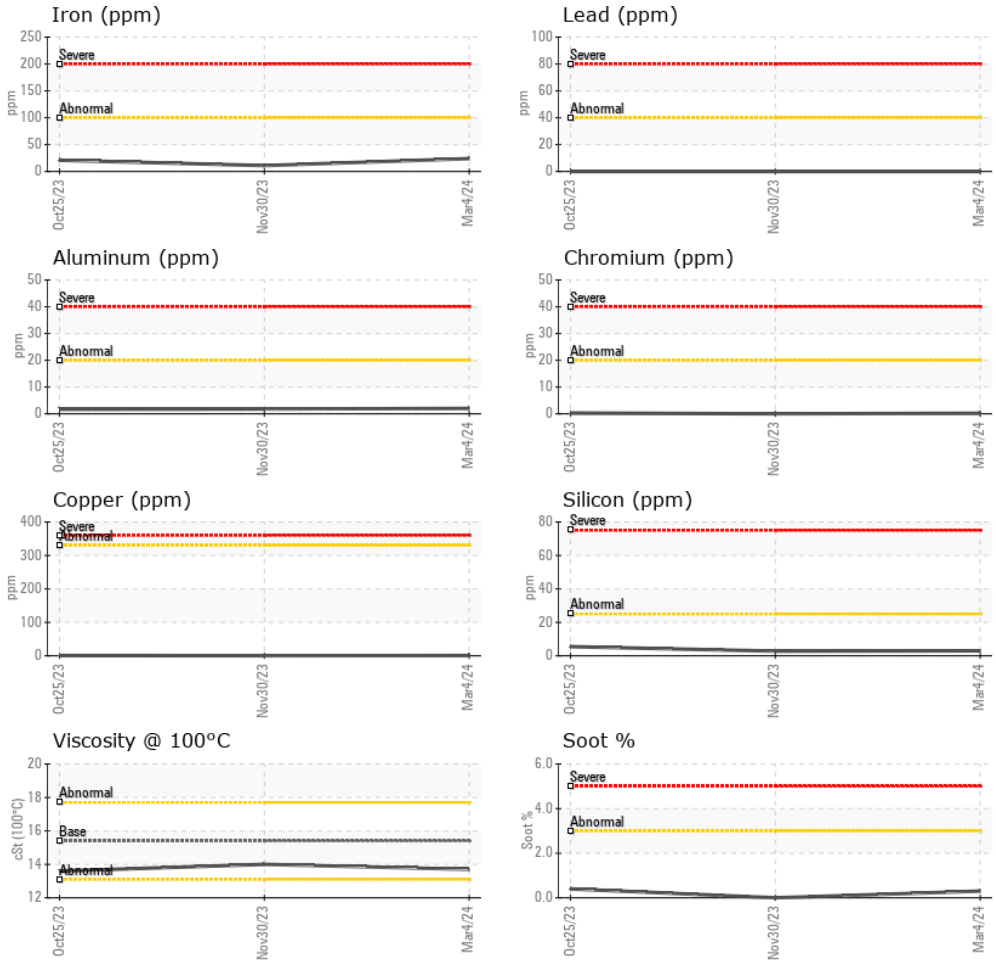


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>19.9</b>	14.6	20.2

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	---	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	---	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	NORML
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)	15.4	<b>13.7</b>	14.0	13.6

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 574 - Vancouver Fleet**  
**Sample No.** : GFL0096745 **Received** : 23 Apr 2024 70 Golden Drive,  
**Lab Number** : **02630872** **Tested** : 23 Apr 2024 Coquitlam, BC  
**Unique Number** : 5772025 **Diagnosed** : 23 Apr 2024 - Wes Davis CA V3K 6B5  
**Test Package** : MOB 1 ( Additional Tests: Visual ) Contact: Gary Ewasiuk  
gewasiuk@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.