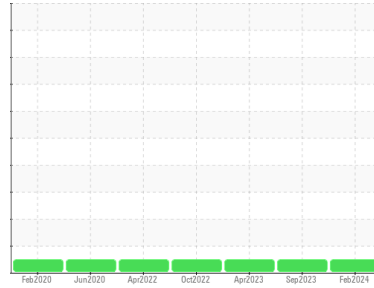




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**401196**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (--- LTR)**

## 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>GFL0090407</b>	GFL0071476	GFL0071494
Sample Date	Client Info		<b>08 Feb 2024</b>	25 Sep 2023	10 Apr 2023
Machine Age	kms	Client Info	<b>337562</b>	321490	300136
Oil Age	kms	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	Changed	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>21</b>	20	28
Chromium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m) >4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m) >3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m) >20	<b>4</b>	4	4
Lead	ppm	ASTM D5185(m) >40	<b>4</b>	4	5
Copper	ppm	ASTM D5185(m) >330	<b>1</b>	1	2
Tin	ppm	ASTM D5185(m) >15	<b>&lt;1</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) 0	<b>1</b>	2	4
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m) 60	<b>63</b>	63	63
Manganese	ppm	ASTM D5185(m) 0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m) 1010	<b>1006</b>	1012	999
Calcium	ppm	ASTM D5185(m) 1070	<b>1120</b>	1117	1216
Phosphorus	ppm	ASTM D5185(m) 1150	<b>1080</b>	1026	1140
Zinc	ppm	ASTM D5185(m) 1270	<b>1245</b>	1278	1261
Sulfur	ppm	ASTM D5185(m) 2060	<b>2638</b>	2423	2539
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

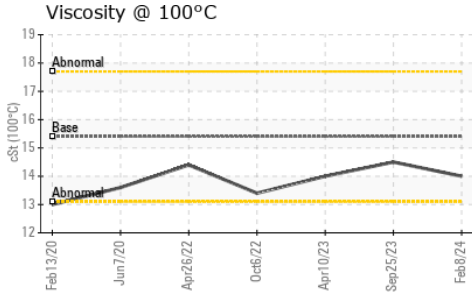
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	<b>4</b>	5	5
Sodium	ppm	ASTM D5185(m)	<b>4</b>	5	4
Potassium	ppm	ASTM D5185(m) >20	<b>2</b>	2	2

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	<b>1.2</b>	1.2	0.8
Nitration	Abs/cm	ASTM D7624* >20	<b>16.7</b>	15.0	11.4
Sulfation	Abs/.1mm	ASTM D7415* >30	<b>27.2</b>	25.7	25.7



# OIL ANALYSIS REPORT



### FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs./1mm ASTM D7414*	<b>&gt;25</b>	26.7	18.8

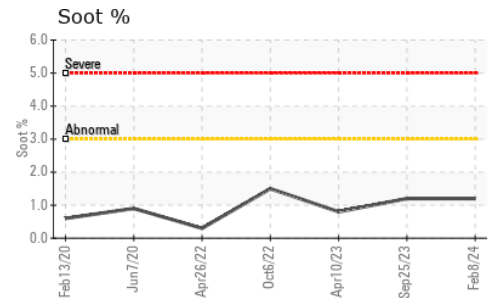
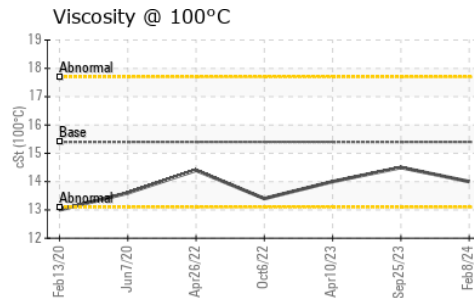
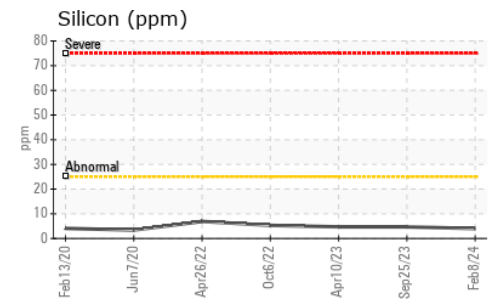
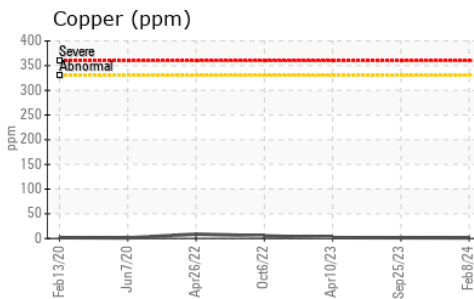
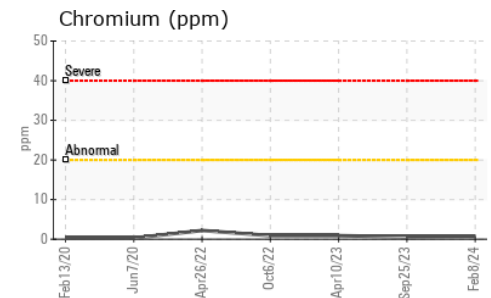
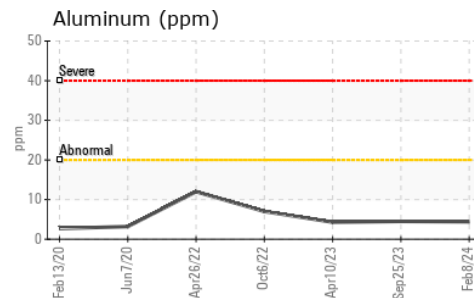
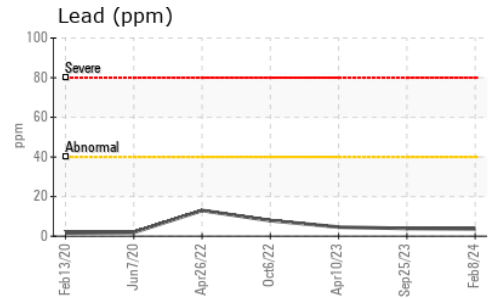
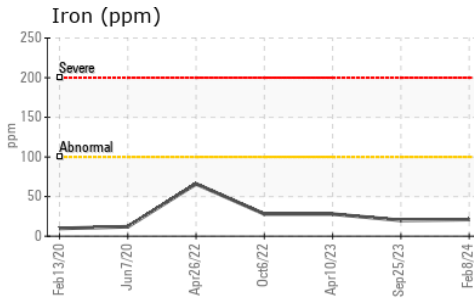
### VISUAL

method	limit/base	current	history1	history2
Emulsified Water	scalar Visual*	<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)	<b>14.0</b>	14.5	14.0

### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0090407 **Received** : 12 Feb 2024  
**Lab Number** : 02614906 **Tested** : 12 Feb 2024  
**Unique Number** : 5724001 **Diagnosed** : 13 Feb 2024 - Kevin Marson  
**Test Package** : MOB 1

**GFL Environmental - 216M**  
 2475 Beryl Drive  
 Oakville, ON  
 CA L6J 7X4  
 Contact: Matthew Gunness  
 mgunness@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.