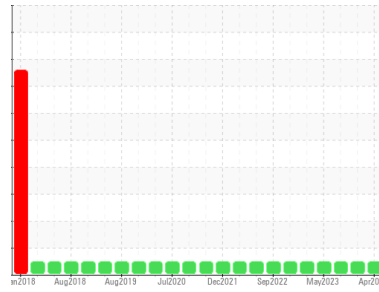




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**701042**

Component  
**Front Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (20 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>GFL0116836</b>	GFL0110725	GFL0085659
Sample Date	Client Info		<b>30 Apr 2024</b>	26 Jan 2024	07 Nov 2023
Machine Age	hrs	Client Info	<b>1360</b>	1360	1360
Oil Age	hrs	Client Info	<b>1360</b>	1360	1360
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	>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)	>90	<b>4</b>	12	18
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
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>1</b>	1	2
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;1</b>	1	4
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>3</b>	2	2
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	<b>56</b>	56	57
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	1010	<b>937</b>	910	911
Calcium	ppm	ASTM D5185(m)	1070	<b>1008</b>	1012	1016
Phosphorus	ppm	ASTM D5185(m)	1150	<b>958</b>	927	900
Zinc	ppm	ASTM D5185(m)	1270	<b>1142</b>	1136	1155
Sulfur	ppm	ASTM D5185(m)	2060	<b>2486</b>	2465	2296
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

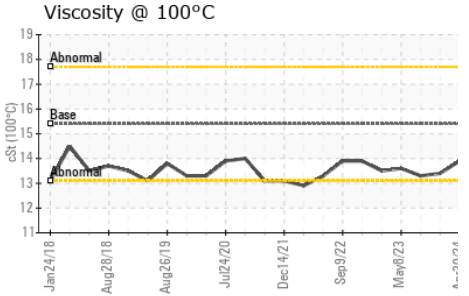
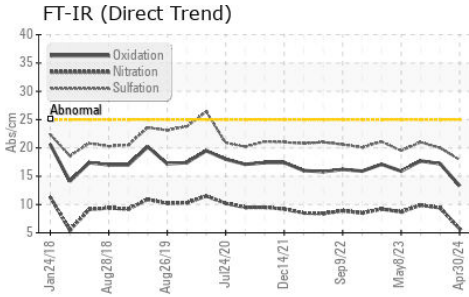
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>9</b>	5	5
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	2	2
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	1	1

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>6	<b>0</b>	0.3	0.4
Nitration	Abs/cm	ASTM D7624*	>20	<b>5.7</b>	9.4	9.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>17.9</b>	20.0	21.0



# OIL ANALYSIS REPORT



## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs./1mm ASTM D7414*	>25	13.3	17.2	17.7

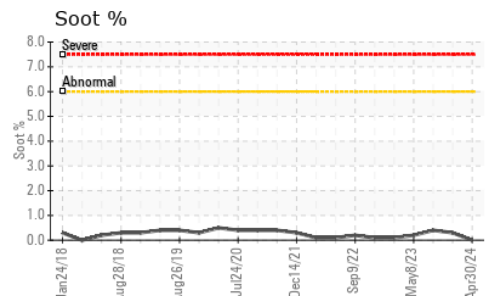
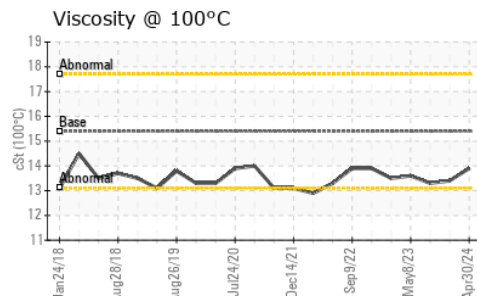
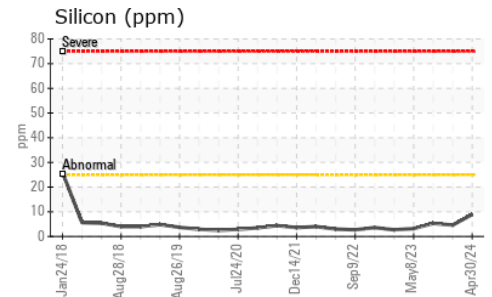
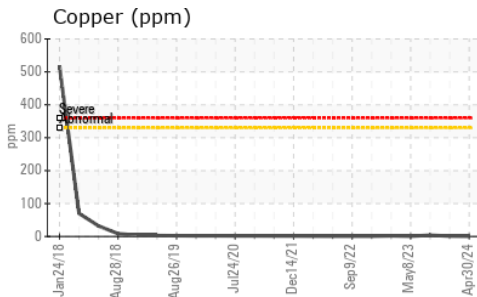
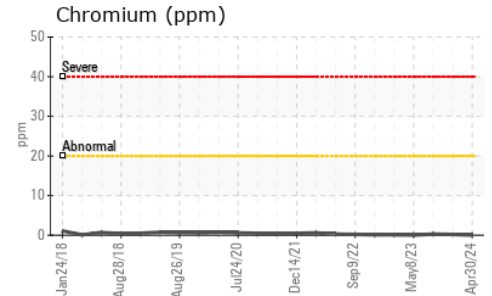
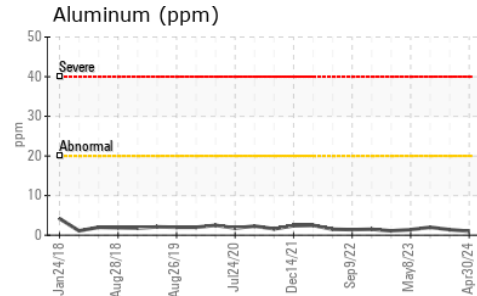
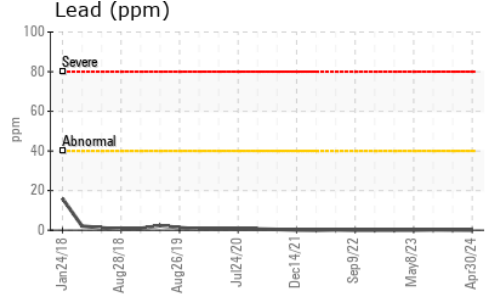
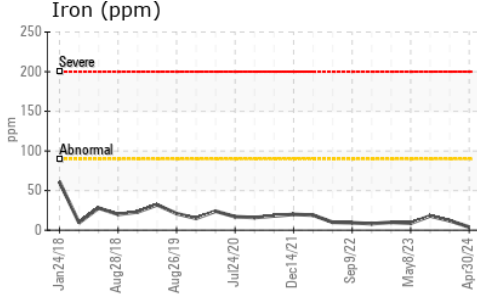
## VISUAL

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

## FLUID PROPERTIES

method	limit/base	current	history1	history2	
Visc @ 100°C	cSt ASTM D7279(m)	15.4	13.9	13.4	13.3

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0116836  
**Lab Number** : 02632971  
**Unique Number** : 5774124  
**Test Package** : MOB 1

**GFL Environmental - 221 - Windsor**  
 905 Tecumseh Road W  
 Windsor, ON  
 CA N8W 4J5  
 Contact: Rhys Marotte  
 rmarotte@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.