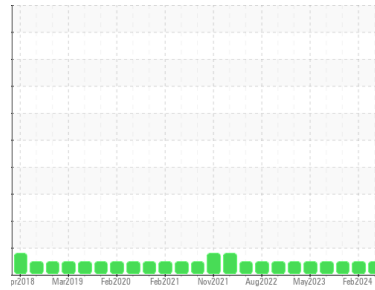




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

**801065**

Component

**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>GFL0116848</b>	GFL0110731	GFL0097453
Sample Date	Client Info		<b>22 May 2024</b>	21 Feb 2024	29 Nov 2023
Machine Age	hrs	Client Info	<b>8322</b>	8322	8322
Oil Age	hrs	Client Info	<b>8322</b>	8322	8322
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>12</b>	9	13
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185(m) >4	<b>0</b>	<1	<1
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>&lt;1</b>	2	1
Lead	ppm	ASTM D5185(m) >40	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m) >330	<b>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>56</b>	57	57
Manganese	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m) 1010	<b>921</b>	910	918
Calcium	ppm	ASTM D5185(m) 1070	<b>1005</b>	999	1021
Phosphorus	ppm	ASTM D5185(m) 1150	<b>928</b>	952	956
Zinc	ppm	ASTM D5185(m) 1270	<b>1148</b>	1133	1170
Sulfur	ppm	ASTM D5185(m) 2060	<b>2275</b>	2488	2329
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

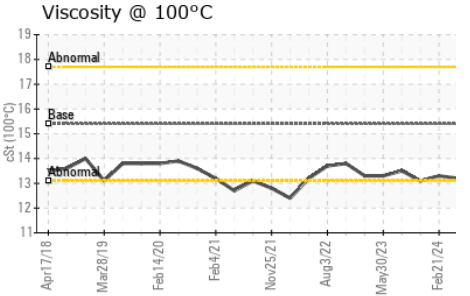
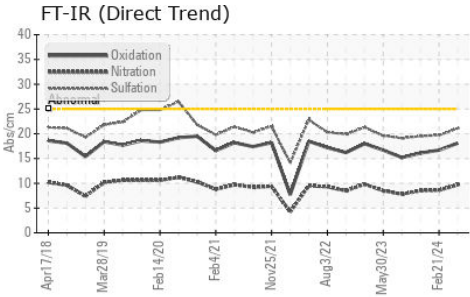
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	<b>3</b>	4	7
Sodium	ppm	ASTM D5185(m)	<b>1</b>	1	2
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	1	<1

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	<b>0.3</b>	0.2	0.3
Nitration	Abs/cm	ASTM D7624* >20	<b>9.7</b>	8.6	8.5
Sulfation	Abs./1mm	ASTM D7415* >30	<b>21.1</b>	19.7	19.5



# OIL ANALYSIS REPORT

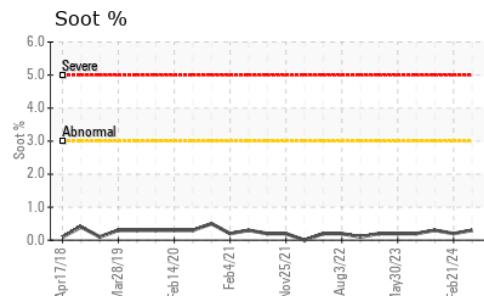
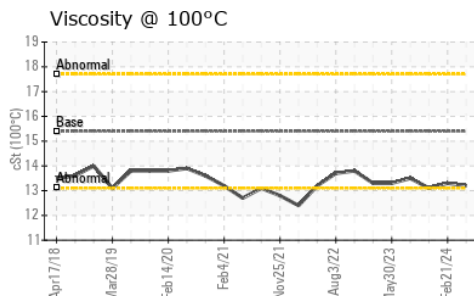
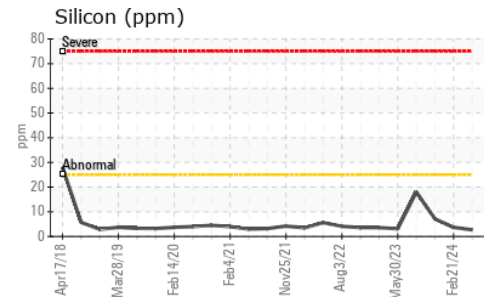
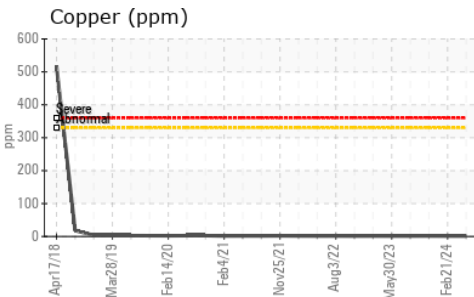
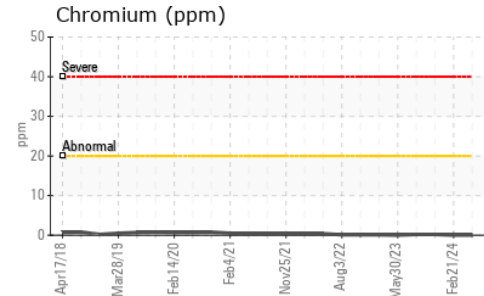
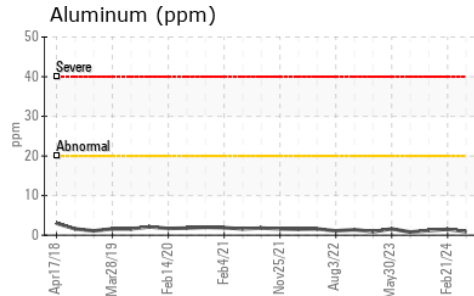
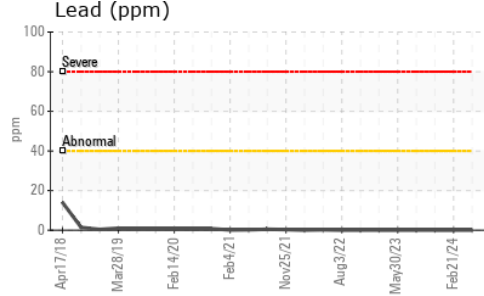
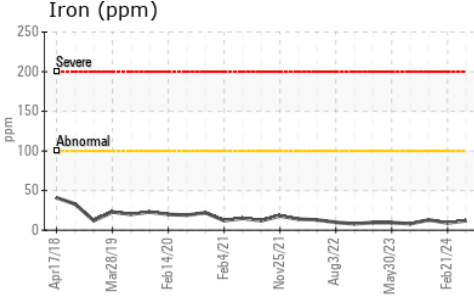


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>18.1</b>	16.7	16.1

VISUAL		method	limit/base	current	history1	history2
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>13.2</b>	13.3	13.1

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0116848  
**Lab Number** : **02637405**  
**Unique Number** : 5786567  
**Test Package** : MOB 1

**GFL Environmental - 221 - Windsor**  
 905 Tecumseh Road W  
 Windsor, ON  
 CA N8W 4J5

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.

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