



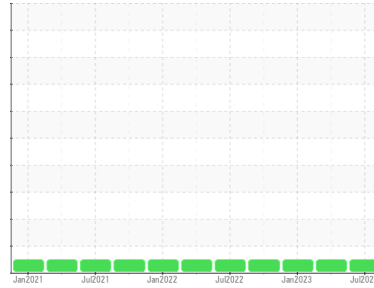
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**411007**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- 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>GFL0078493</b>	GFL0078520	GFL0071317
Sample Date	Client Info		<b>18 Jul 2023</b>	09 Apr 2023	23 Jan 2023
Machine Age	kms	Client Info	<b>0</b>	5283	4937
Oil Age	kms	Client Info	<b>17595</b>	0	571
Oil Changed	Client Info		<b>N/A</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
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >120	<b>2</b>	6	10
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185(m) >5	<b>0</b>	1	2
Titanium	ppm	ASTM D5185(m) >2	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m) >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m) >20	<b>&lt;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>	2	4
Tin	ppm	ASTM D5185(m) >15	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185(m)	<b>0</b>	<1	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>5</b>	3	2
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 60	<b>57</b>	59	60
Manganese	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m) 1010	<b>933</b>	957	972
Calcium	ppm	ASTM D5185(m) 1070	<b>1019</b>	1122	1153
Phosphorus	ppm	ASTM D5185(m) 1150	<b>1036</b>	1076	1077
Zinc	ppm	ASTM D5185(m) 1270	<b>1143</b>	1187	1224
Sulfur	ppm	ASTM D5185(m) 2060	<b>2580</b>	2634	2537
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>	2	3
Sodium	ppm	ASTM D5185(m)	<b>2</b>	1	1
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	2

## INFRA-RED

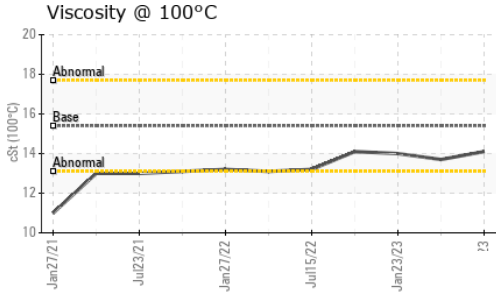
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >4	<b>0</b>	0	0.1
Nitration	Abs/cm	ASTM D7624* >20	<b>4.8</b>	7.9	9.5
Sulfation	Abs/.1mm	ASTM D7415* >30	<b>18.1</b>	22.0	21.7

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414* >25	<b>13.4</b>	15.2	17.1



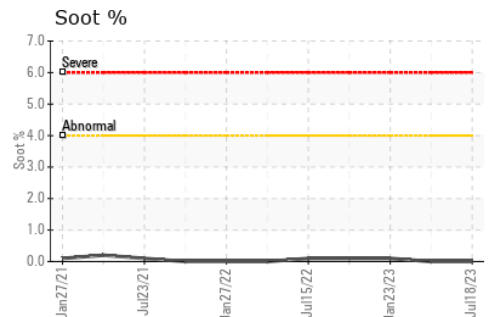
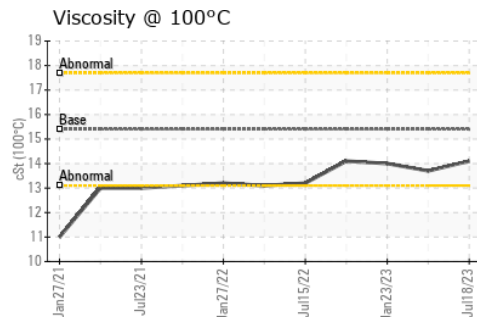
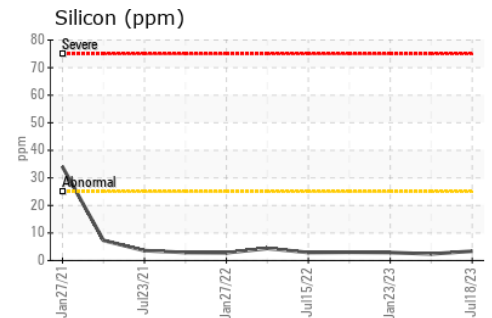
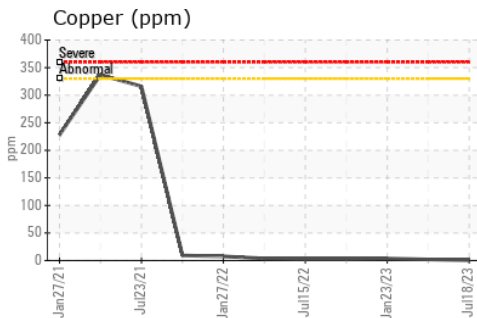
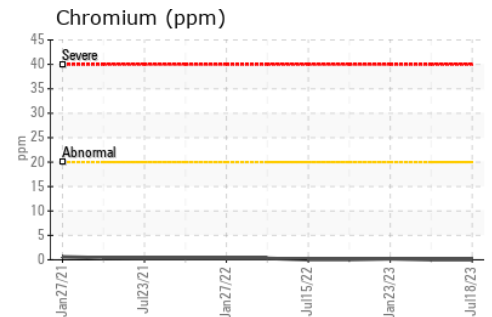
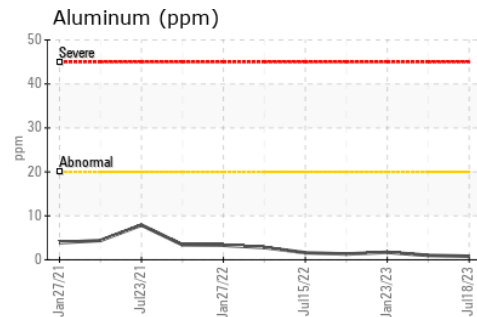
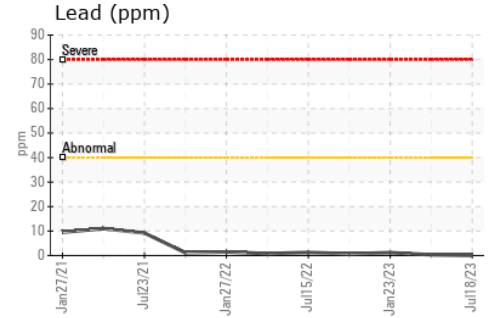
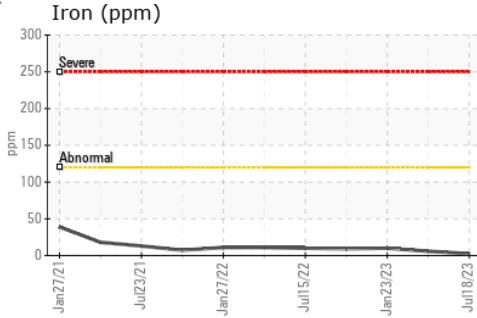
# OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	14.1	13.7

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 246 - Windsor**  
**Sample No.** : GFL0078493 **Received** : 19 Jul 2023  
**Lab Number** : 02570830 **Diagnosed** : 19 Jul 2023  
**Unique Number** : 5615881 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1

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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