



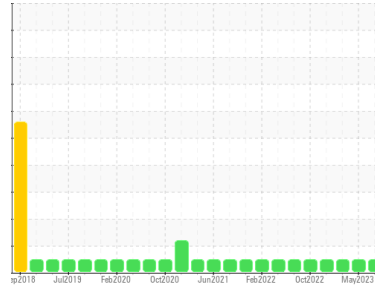
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**701065**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (32 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	history 1	history 2
Sample Number	Client Info		<b>GFL0074290</b>	GFL0074298	GFL0061070
Sample Date	Client Info		<b>06 Jul 2023</b>	15 May 2023	01 Mar 2023
Machine Age	hrs	Client Info	<b>14221</b>	13214	13214
Oil Age	hrs	Client Info	<b>417</b>	590	584
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history 1	history 2
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	history 1	history 2
Iron	ppm	ASTM D5185(m) >120	<b>3</b>	4	6
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m) >5	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m) >2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m) >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m) >20	<b>1</b>	2	1
Lead	ppm	ASTM D5185(m) >40	<b>0</b>	<1	0
Copper	ppm	ASTM D5185(m) >330	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m) >15	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185(m)	<b>0</b>	0	<1
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	history 1	history 2
Boron	ppm	ASTM D5185(m) 0	<b>4</b>	4	4
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 60	<b>58</b>	57	58
Manganese	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m) 1010	<b>953</b>	958	952
Calcium	ppm	ASTM D5185(m) 1070	<b>1029</b>	1035	1078
Phosphorus	ppm	ASTM D5185(m) 1150	<b>1072</b>	1091	1088
Zinc	ppm	ASTM D5185(m) 1270	<b>1158</b>	1181	1167
Sulfur	ppm	ASTM D5185(m) 2060	<b>2547</b>	2585	2632
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185(m) >25	<b>2</b>	3	3
Sodium	ppm	ASTM D5185(m)	<b>4</b>	2	2
Potassium	ppm	ASTM D5185(m) >20	<b>1</b>	<1	<1

## INFRA-RED

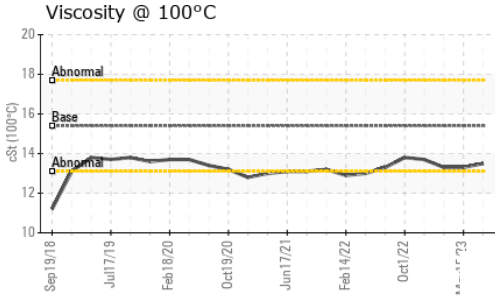
	method	limit/base	current	history 1	history 2
Soot %	%	ASTM D7844* >4	<b>0</b>	0.1	0
Nitration	Abs/cm	ASTM D7624* >20	<b>7.4</b>	8.8	9.7
Sulfation	Abs/.1mm	ASTM D7415* >30	<b>18.4</b>	19.3	20.9

## FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	ASTM D7414* >25	<b>15.1</b>	16.0	17.0



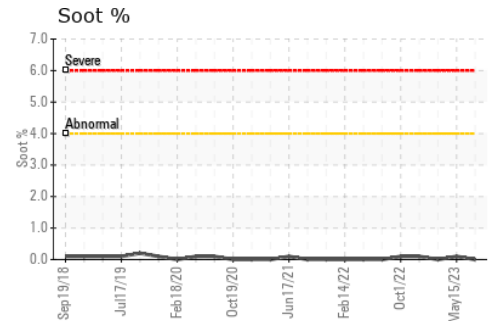
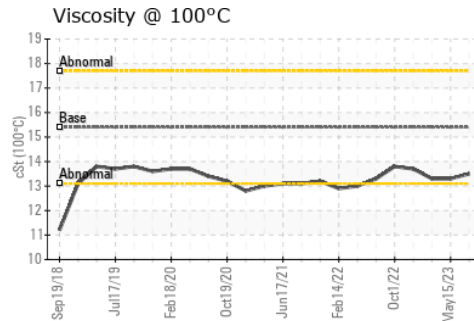
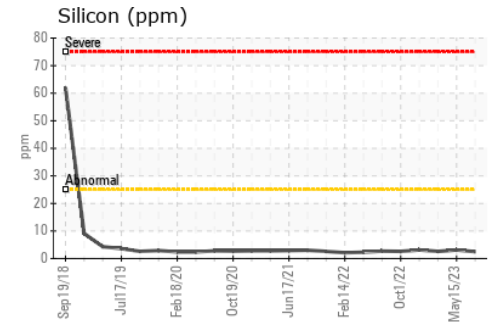
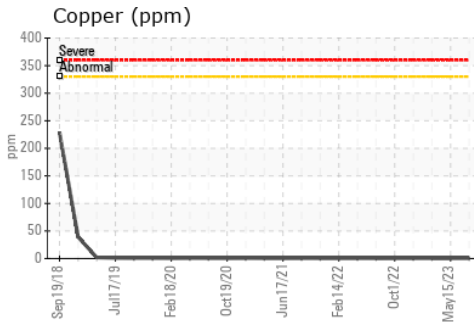
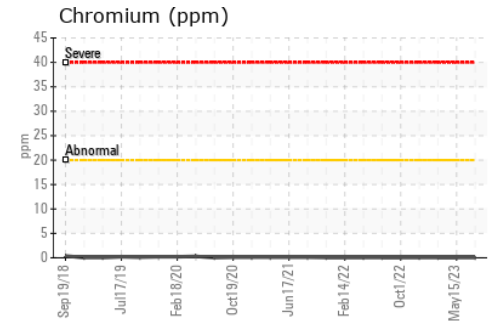
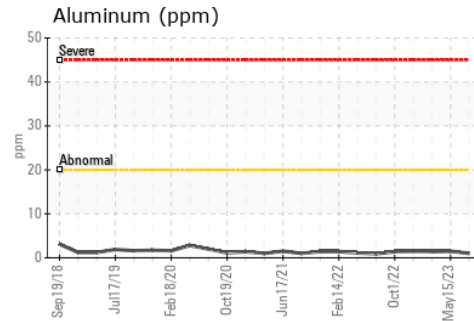
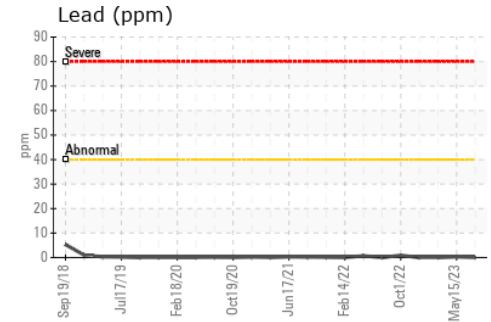
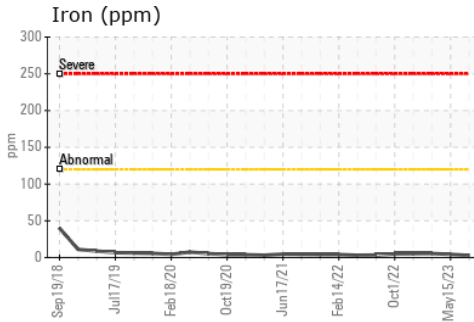
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.5	13.3

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0074290 **Received** : 07 Jul 2023  
**Lab Number** : 02568476 **Diagnosed** : 07 Jul 2023  
**Unique Number** : 5605522 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1

**GFL Environmental - 216**  
 15 Bermondsey Road  
 Toronto, ON  
 CA M4B 0A6  
 Contact: Tom Hatzioannidis  
 thatzioannidis@gflenv.com  
 T: (416)678-9340  
 F:

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.