



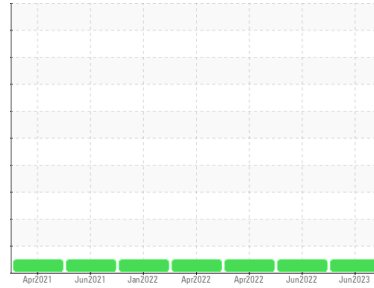
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**5619**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 10W30 (--- 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>GFL0085915</b>	GFL0054150	GFL0039048
Sample Date	Client Info		<b>23 Jun 2023</b>	27 Jun 2022	28 Apr 2022
Machine Age	kms	Client Info	<b>858822</b>	0	1146
Oil Age	kms	Client Info	<b>0</b>	0	600
Oil Changed	Client Info		<b>Changed</b>	Changed	Not 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>	0.0	NEG

## WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185(m) >120	<b>20</b>	17	9
Chromium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m) >5	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m) >2	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185(m) >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m) >20	<b>2</b>	1	<1
Lead	ppm	ASTM D5185(m) >40	<b>2</b>	4	1
Copper	ppm	ASTM D5185(m) >330	<b>4</b>	6	9
Tin	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	2	1
Antimony	ppm	ASTM D5185(m)	<b>0</b>	<1	<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) 2	<b>2</b>	2	2
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 50	<b>61</b>	61	60
Manganese	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m) 950	<b>999</b>	1014	1041
Calcium	ppm	ASTM D5185(m) 1050	<b>1066</b>	1149	1090
Phosphorus	ppm	ASTM D5185(m) 995	<b>1045</b>	1018	1081
Zinc	ppm	ASTM D5185(m) 1180	<b>1194</b>	1267	1251
Sulfur	ppm	ASTM D5185(m) 2600	<b>2216</b>	2283	2574
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>12</b>	6	5
Sodium	ppm	ASTM D5185(m)	<b>5</b>	5	2
Potassium	ppm	ASTM D5185(m) >20	<b>1</b>	8	<1

## INFRA-RED

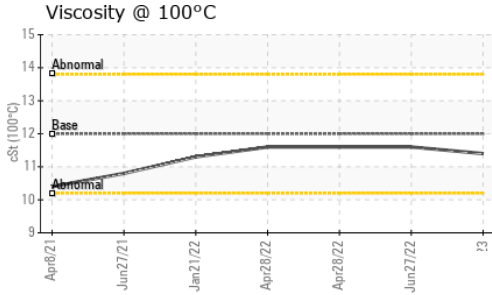
	method	limit/base	current	history 1	history 2
Soot %	%	ASTM D7844* >4	<b>0.7</b>	0.4	0
Nitration	Abs/cm	ASTM D7624* >20	<b>9.8</b>	9.6	6.3
Sulfation	Abs/.1mm	ASTM D7415* >30	<b>22.7</b>	23.6	18.6

## FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	ASTM D7414* >25	<b>18.8</b>	18.7	12.7



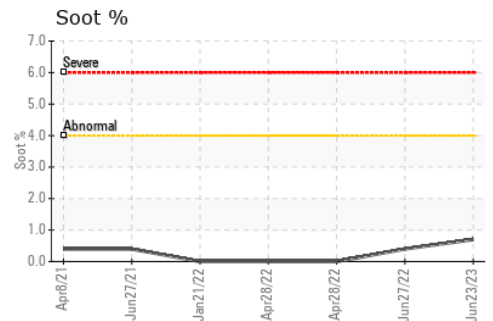
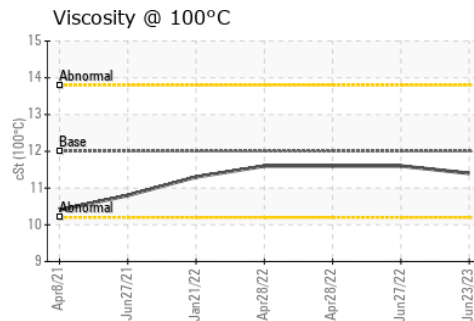
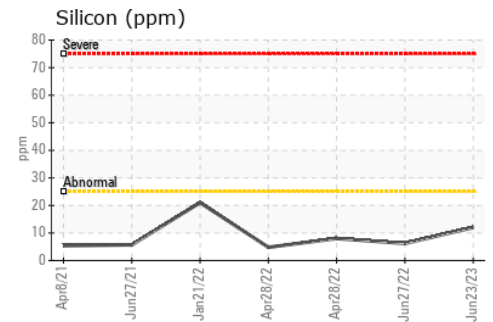
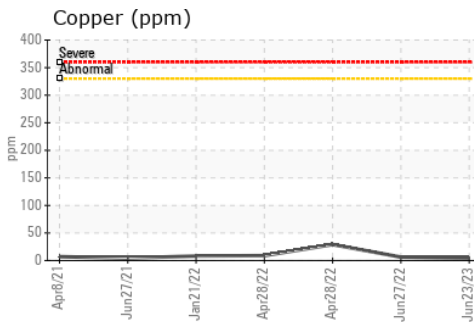
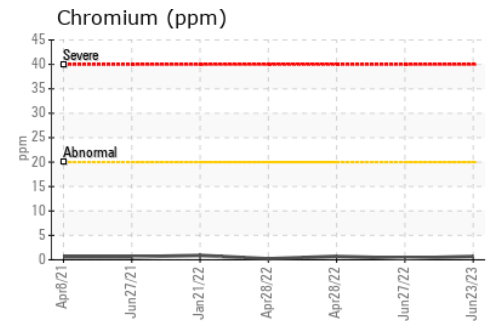
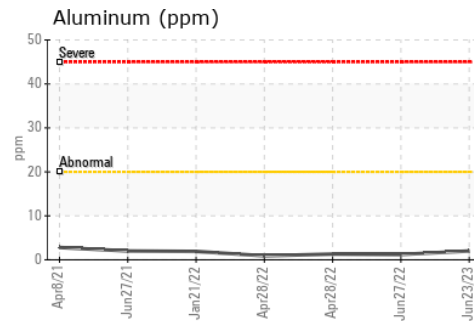
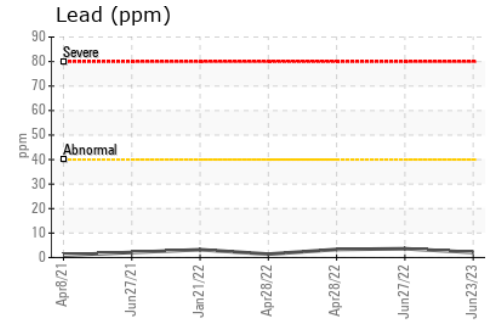
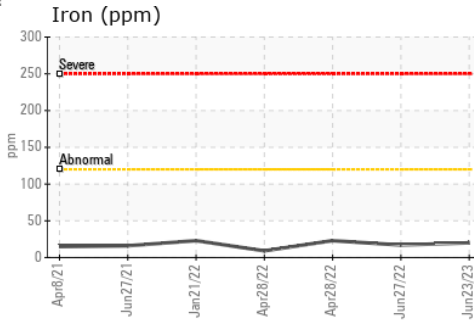
# OIL ANALYSIS REPORT



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)	12.00	11.4	11.6

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 554 - Edmonton SW  
**Sample No.** : GFL0085915 **Received** : 04 Jul 2023  
**Lab Number** : 02567697 **Diagnosed** : 04 Jul 2023  
**Unique Number** : 5604743 **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.

Contact: Tim Greig  
 tgreig@gflenv.com

T:  
F: