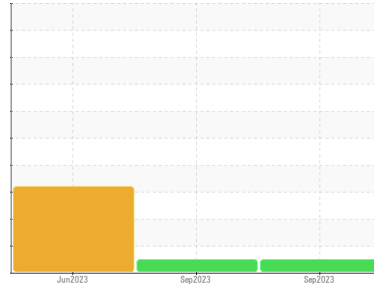




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**221094**

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	history1	history2
Sample Number	Client Info		<b>GFL0093904</b>	GFL0090584	GFL0085919
Sample Date	Client Info		<b>20 Sep 2023</b>	02 Sep 2023	27 Jun 2023
Machine Age	hrs	Client Info	<b>9858</b>	9841	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	NORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	1.7
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >100	<b>4</b>	12	▲ 87
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	<1	5
Nickel	ppm	ASTM D5185(m) >4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m) >3	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	1	17
Lead	ppm	ASTM D5185(m) >40	<b>&lt;1</b>	0	2
Copper	ppm	ASTM D5185(m) >330	<b>&lt;1</b>	<1	22
Tin	ppm	ASTM D5185(m) >15	<b>0</b>	0	▲ 12
Antimony	ppm	ASTM D5185(m)	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	<1
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) 2	<b>3</b>	4	156
Barium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	0	3
Molybdenum	ppm	ASTM D5185(m) 50	<b>59</b>	54	157
Manganese	ppm	ASTM D5185(m) 0	<b>0</b>	<1	2
Magnesium	ppm	ASTM D5185(m) 950	<b>979</b>	918	170
Calcium	ppm	ASTM D5185(m) 1050	<b>1054</b>	974	2296
Phosphorus	ppm	ASTM D5185(m) 995	<b>1024</b>	991	917
Zinc	ppm	ASTM D5185(m) 1180	<b>1189</b>	1118	1003
Sulfur	ppm	ASTM D5185(m) 2600	<b>2658</b>	2461	4180
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>	3	▲ 70
Sodium	ppm	ASTM D5185(m)	<b>1</b>	1	4
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	1	2

## INFRA-RED

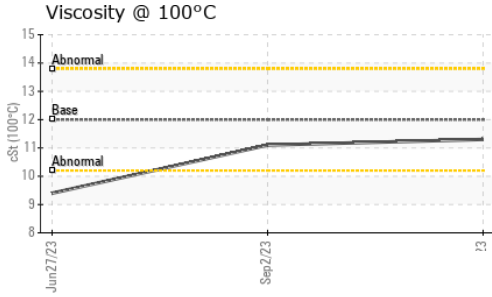
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	<b>0</b>	0	0.9
Nitration	Abs/cm	ASTM D7624* >20	<b>4.8</b>	6.4	10.2
Sulfation	Abs/.1mm	ASTM D7415* >30	<b>17.9</b>	19.7	21.9

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414* >25	<b>13.6</b>	14.9	14.9



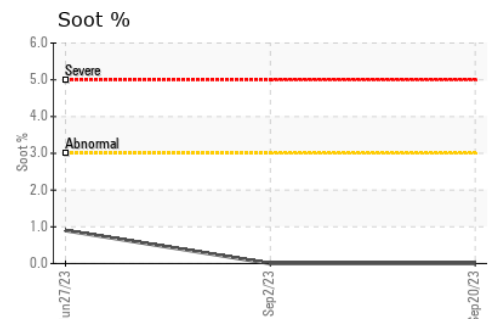
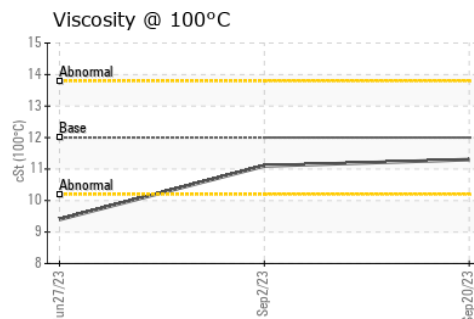
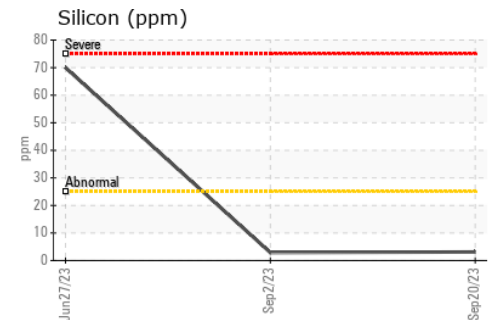
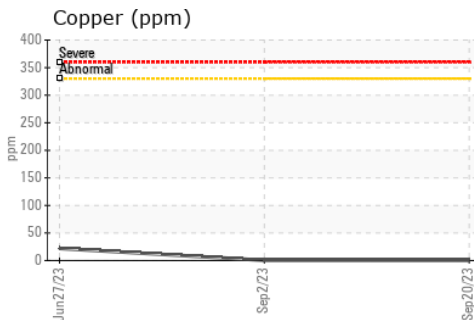
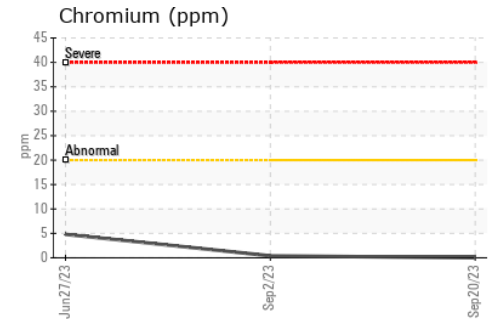
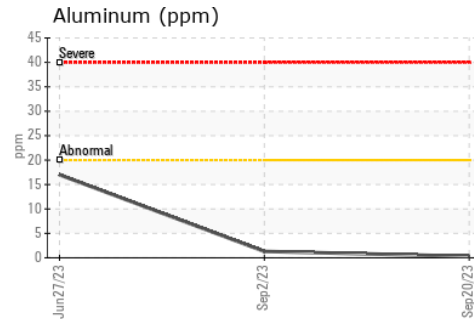
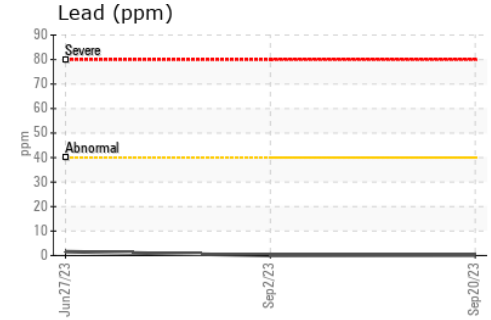
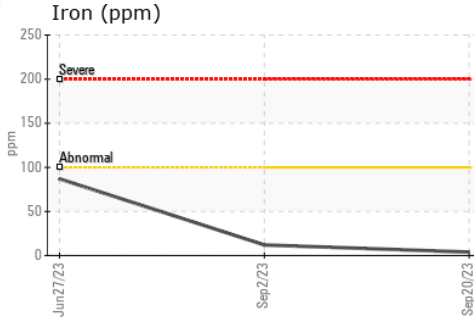
# OIL ANALYSIS REPORT



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)	12.00	11.3	11.1

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 554 - Edmonton SW  
**Sample No.** : GFL0093904 **Received** : 03 Oct 2023  
**Lab Number** : 02586317 **Diagnosed** : 03 Oct 2023  
**Unique Number** : 5655383 **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

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