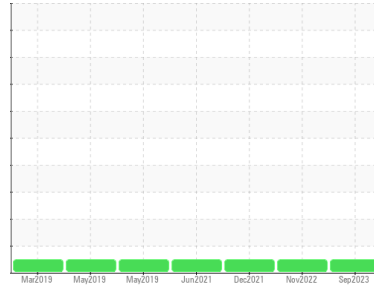




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**201034**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 10W30 (--- 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>GFL0090587</b>	GFL0059957	GFL0039015
Sample Date	Client Info	<b>05 Sep 2023</b>	20 Nov 2022	09 Dec 2021
Machine Age	hrs	<b>2110</b>	1595	0
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>Changed</b>	N/A	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
Glycol	WC Method	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >100	<b>9</b>	11	8
Chromium	ppm ASTM D5185(m) >20	<b>&lt;1</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	0
Aluminum	ppm ASTM D5185(m) >20	<b>3</b>	5	2
Lead	ppm ASTM D5185(m) >40	<b>&lt;1</b>	<1	<1
Copper	ppm ASTM D5185(m) >330	<b>2</b>	1	<1
Tin	ppm ASTM D5185(m) >15	<b>0</b>	<1	<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	history1	history2
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>58</b>	58	59
Manganese	ppm ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185(m) 950	<b>969</b>	963	1003
Calcium	ppm ASTM D5185(m) 1050	<b>1036</b>	1064	1026
Phosphorus	ppm ASTM D5185(m) 995	<b>1057</b>	1088	1076
Zinc	ppm ASTM D5185(m) 1180	<b>1188</b>	1194	1222
Sulfur	ppm ASTM D5185(m) 2600	<b>2608</b>	2616	2629
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>6</b>	3	4
Sodium	ppm ASTM D5185(m)	<b>2</b>	2	2
Potassium	ppm ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1

## INFRA-RED

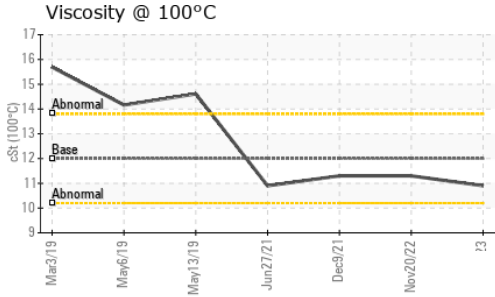
method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	<b>0.2</b>	0.4	0.2
Nitration	Abs/cm ASTM D7624* >20	<b>9.0</b>	9.3	6.7
Sulfation	Abs/.1mm ASTM D7415* >30	<b>19.2</b>	20.3	17.3

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm ASTM D7414* >25	<b>17.7</b>	17.5	12.9



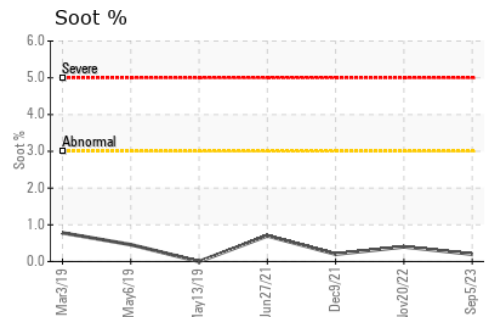
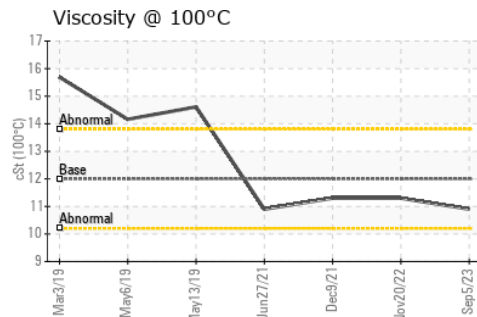
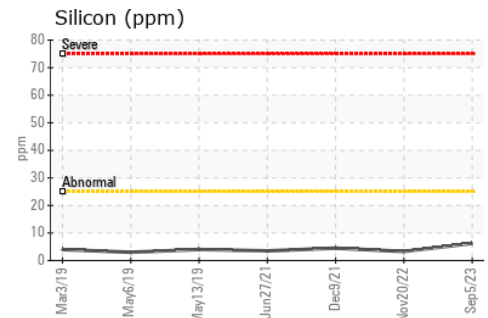
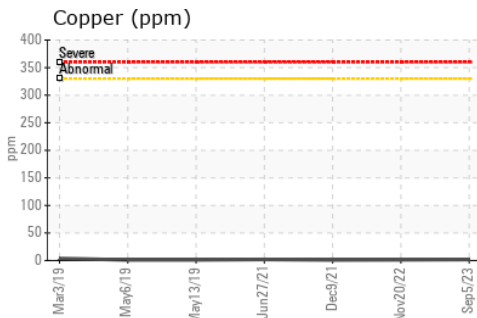
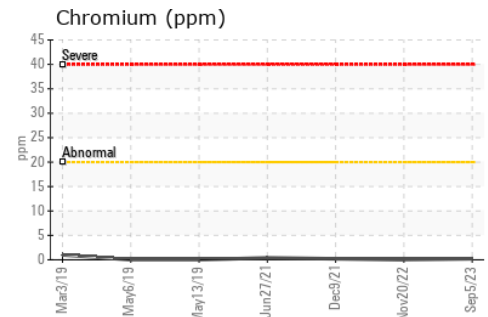
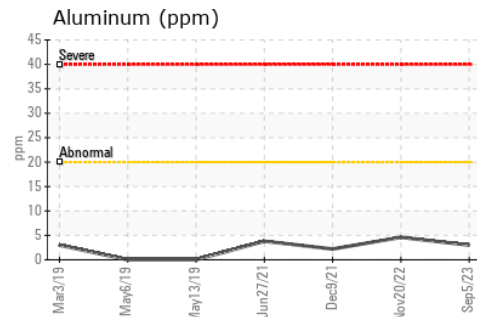
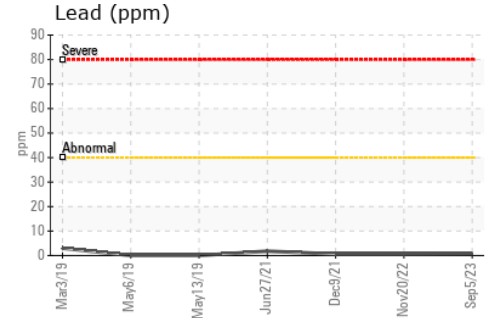
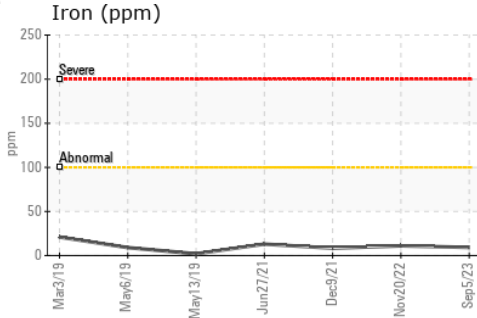
# OIL ANALYSIS REPORT



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	10.9	11.3

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 554 - Edmonton SW**  
**Sample No.** : GFL0090587 **Received** : 18 Sep 2023 **8409 -15th Street NW**  
**Lab Number** : 02583119 **Diagnosed** : 18 Sep 2023 **Edmonton, AB**  
**Unique Number** : 5644184 **Diagnostician** : Wes Davis **CA T6P 0B8**  
**Test Package** : MOB 1 **Contact:** Tim Greig **tgreig@gflenv.com**

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.