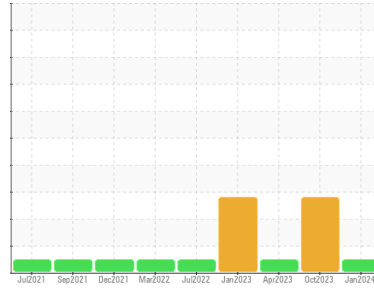




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**301214**

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>GFL0096782</b>	GFL0096712	GFL0073217
Sample Date	Client Info	<b>30 Jan 2024</b>	25 Oct 2023	11 Apr 2023
Machine Age	kms	<b>168510</b>	162330	149225
Oil Age	kms	<b>5000</b>	0	5000
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	ABNORMAL	NORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<b>&lt;1.0</b>	▲ 3.3	<1.0
Water	WC Method >0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >100	<b>8</b>	5	5
Chromium	ppm ASTM D5185(m) >20	<b>&lt;1</b>	0	0
Nickel	ppm ASTM D5185(m) >2	<b>&lt;1</b>	<1	<1
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) >25	<b>2</b>	1	1
Lead	ppm ASTM D5185(m) >40	<b>0</b>	0	0
Copper	ppm ASTM D5185(m) >330	<b>&lt;1</b>	<1	<1
Tin	ppm ASTM D5185(m) >15	<b>0</b>	0	0
Antimony	ppm ASTM D5185(m)	<b>0</b>	0	<1
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>4</b>	10	11
Barium	ppm ASTM D5185(m) 0	<b>0</b>	<1	0
Molybdenum	ppm ASTM D5185(m) 50	<b>59</b>	57	59
Manganese	ppm ASTM D5185(m) 0	<b>0</b>	0	<1
Magnesium	ppm ASTM D5185(m) 950	<b>848</b>	▲ 428	356
Calcium	ppm ASTM D5185(m) 1050	<b>1012</b>	941	977
Phosphorus	ppm ASTM D5185(m) 995	<b>883</b>	▲ 556	568
Zinc	ppm ASTM D5185(m) 1180	<b>1037</b>	▲ 646	600
Sulfur	ppm ASTM D5185(m) 2600	<b>2478</b>	▲ 1600	1610
Lithium	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

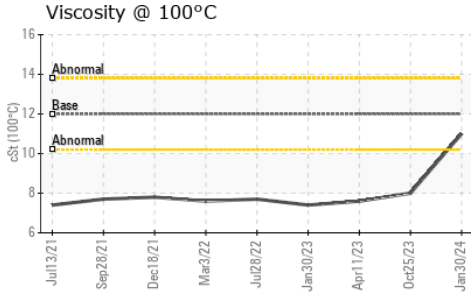
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >25	<b>2</b>	2	2
Sodium	ppm ASTM D5185(m)	<b>9</b>	10	8
Potassium	ppm ASTM D5185(m) >20	<b>1</b>	0	1

## INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	<b>0</b>	0	0
Nitration	Abs/cm ASTM D7624* >20	<b>12.1</b>	11.2	9.1
Sulfation	Abs./1mm ASTM D7415* >30	<b>23.6</b>	22.7	19.9



# OIL ANALYSIS REPORT

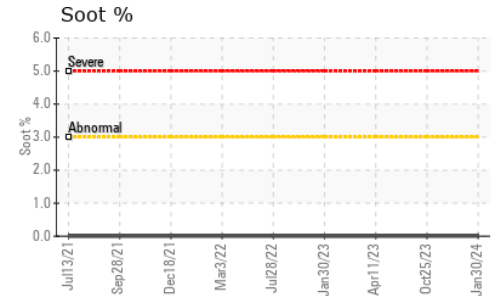
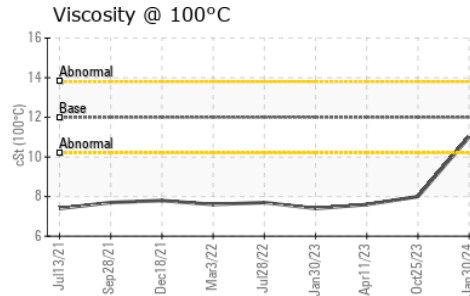
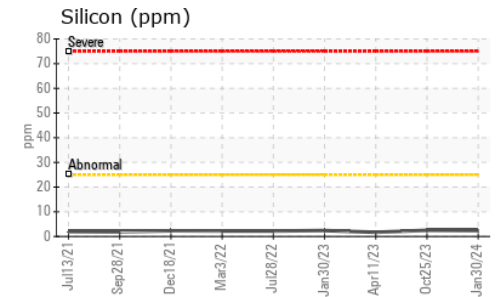
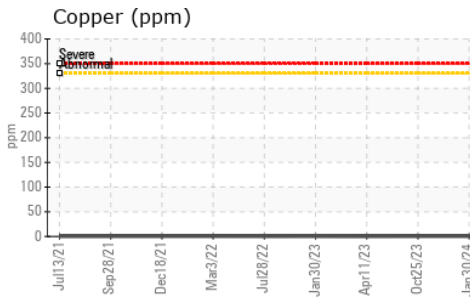
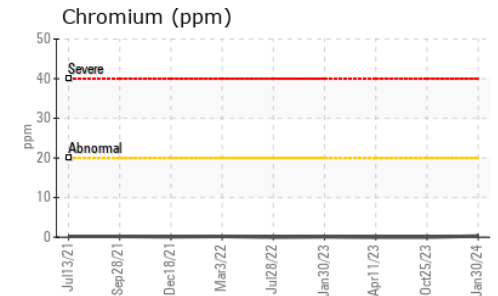
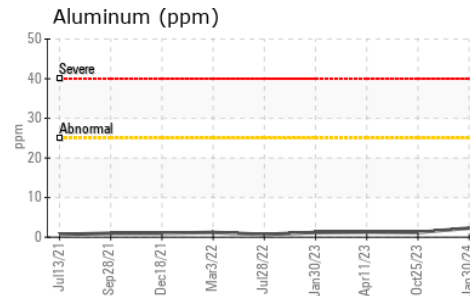
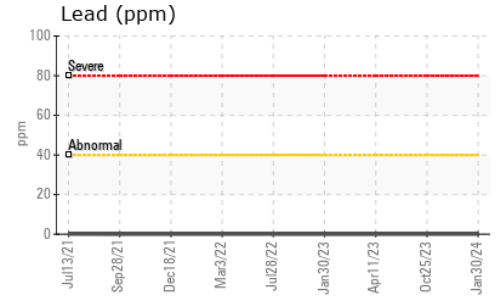
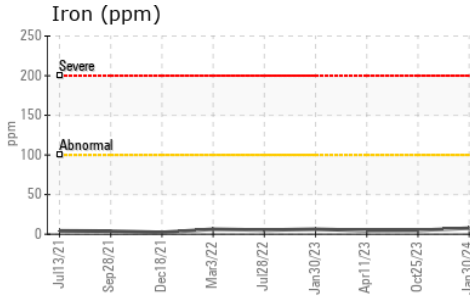


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>19.8</b>	16.3	12.1

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	<b>11.0</b>	▲ 8	7.6

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0096782  
**Lab Number** : 02615261  
**Unique Number** : 5724356  
**Test Package** : MOB 1  
**Received** : 13 Feb 2024  
**Tested** : 13 Feb 2024  
**Diagnosed** : 13 Feb 2024 - Wes Davis

**GFL Environmental - 574 - Vancouver Fleet**  
 70 Golden Drive,  
 Coquitlam, BC  
 CA V3K 6B5  
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 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.