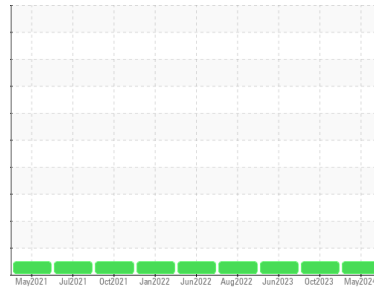




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id

**901077**

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>GFL0119008</b>	GFL0093879	GFL0078003
Sample Date	Client Info	<b>28 May 2024</b>	29 Oct 2023	01 Jun 2023
Machine Age	hrs	Client Info	<b>0</b>	11932
Oil Age	hrs	Client Info	<b>0</b>	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >3.0	<b>&lt;1.0</b>	<1.0	<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) >90	<b>11</b>	10	15
Chromium	ppm ASTM D5185(m) >20	<b>&lt;1</b>	<1	1
Nickel	ppm ASTM D5185(m) >2	<b>0</b>	<1	<1
Titanium	ppm ASTM D5185(m) >2	<b>0</b>	0	<1
Silver	ppm ASTM D5185(m) >2	<b>0</b>	<1	0
Aluminum	ppm ASTM D5185(m) >20	<b>1</b>	2	2
Lead	ppm ASTM D5185(m) >40	<b>0</b>	<1	<1
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	0
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>4</b>	2	1
Barium	ppm ASTM D5185(m) 0	<b>0</b>	<1	0
Molybdenum	ppm ASTM D5185(m) 50	<b>59</b>	59	58
Manganese	ppm ASTM D5185(m) 0	<b>0</b>	0	<1
Magnesium	ppm ASTM D5185(m) 950	<b>973</b>	953	989
Calcium	ppm ASTM D5185(m) 1050	<b>1072</b>	1043	1060
Phosphorus	ppm ASTM D5185(m) 995	<b>996</b>	973	1069
Zinc	ppm ASTM D5185(m) 1180	<b>1183</b>	1178	1216
Sulfur	ppm ASTM D5185(m) 2600	<b>2462</b>	2437	2584
Lithium	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

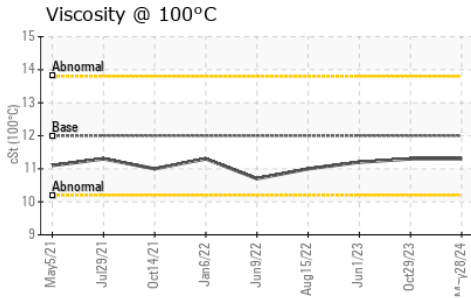
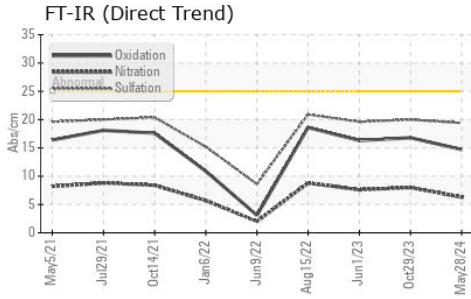
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >25	<b>4</b>	4	6
Sodium	ppm ASTM D5185(m)	<b>3</b>	4	5
Potassium	ppm ASTM D5185(m) >20	<b>&lt;1</b>	0	<1

## INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >6	<b>0</b>	0.2	0.2
Nitration	Abs/cm ASTM D7624* >20	<b>6.3</b>	8.0	7.6
Sulfation	Abs/.1mm ASTM D7415* >30	<b>19.4</b>	20.0	19.6



# OIL ANALYSIS REPORT

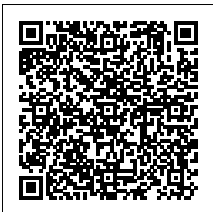
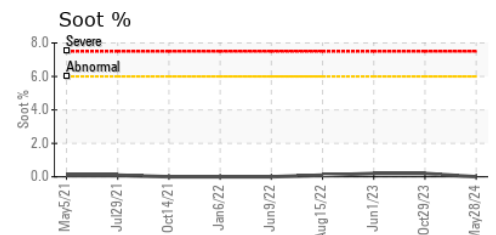
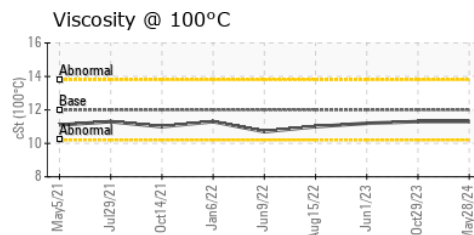
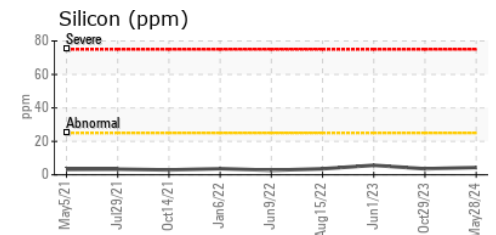
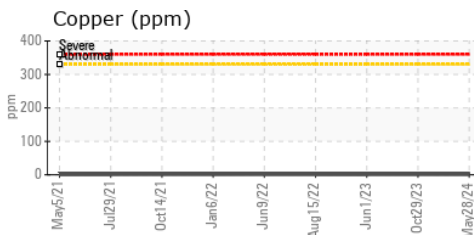
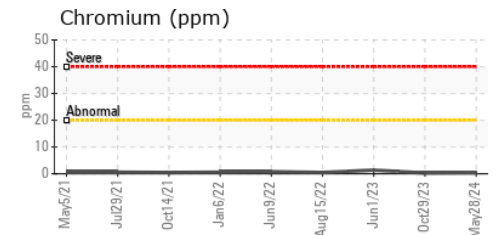
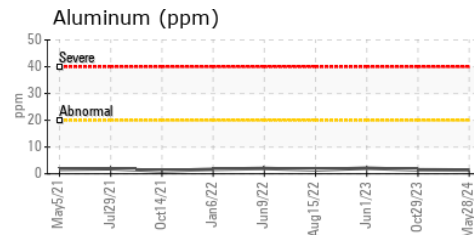
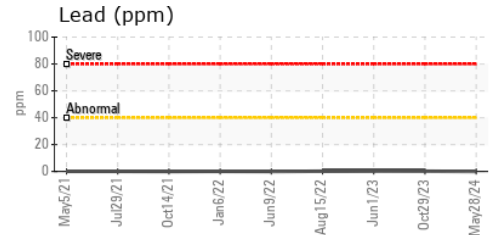
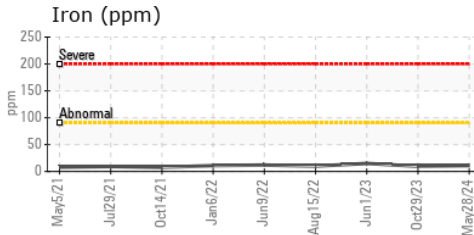


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>14.7</b>	16.8	16.3

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	VLITE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	---	NONE
Silt	scalar	Visual*	NONE	<b>VLITE</b>	---	NONE
Debris	scalar	Visual*	NONE	<b>VLITE</b>	---	VLITE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
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>11.3</b>	11.3	11.2

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0119008  
**Lab Number** : 02638392  
**Unique Number** : 5787554  
**Test Package** : MOB 1 ( Additional Tests: Visual )  
**Received** : 29 May 2024  
**Tested** : 29 May 2024  
**Diagnosed** : 29 May 2024 - Wes Davis

**GFL Environmental - 554 - Edmonton SW**  
 8409 -15th Street NW  
 Edmonton, AB  
 CA T6P 0B8  
 Contact: Tim Greig  
 tgreig@gflenv.com  
 T: (780)231-0521  
 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.