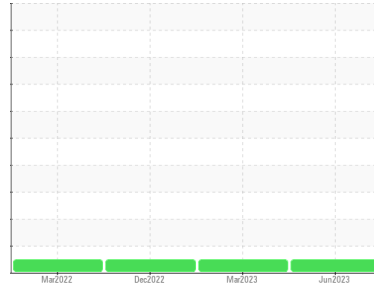




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**6006M**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (--- 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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

method	limit/base	current	history 1	history 2
Sample Number	Client Info	<b>GFL0015806</b>	GFL0067612	GFL0067623
Sample Date	Client Info	<b>28 Jun 2023</b>	13 Mar 2023	27 Dec 2022
Machine Age	hrs	<b>26609</b>	26568	600
Oil Age	hrs	<b>26568</b>	600	600
Oil Changed	Client Info	<b>N/A</b>	Changed	N/A
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

method	limit/base	current	history 1	history 2
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	history 1	history 2
Iron	ppm ASTM D5185m >100	<b>14</b>	7	9
Chromium	ppm ASTM D5185m >20	<b>2</b>	<1	<1
Nickel	ppm ASTM D5185m >4	<b>1</b>	0	0
Titanium	ppm ASTM D5185m	<b>2</b>	0	0
Silver	ppm ASTM D5185m >3	<b>2</b>	0	0
Aluminum	ppm ASTM D5185m >20	<b>2</b>	<1	1
Lead	ppm ASTM D5185m >40	<b>6</b>	<1	<1
Copper	ppm ASTM D5185m >330	<b>2</b>	<1	3
Tin	ppm ASTM D5185m >15	<b>2</b>	0	<1
Antimony	ppm ASTM D5185m	<b>---</b>	---	---
Vanadium	ppm ASTM D5185m	<b>1</b>	0	0
Cadmium	ppm ASTM D5185m	<b>2</b>	0	0

## ADDITIVES

method	limit/base	current	history 1	history 2
Boron	ppm ASTM D5185m 0	<b>4</b>	9	91
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>56</b>	56	62
Manganese	ppm ASTM D5185m 0	<b>2</b>	<1	<1
Magnesium	ppm ASTM D5185m 1010	<b>950</b>	861	878
Calcium	ppm ASTM D5185m 1070	<b>1107</b>	1026	1118
Phosphorus	ppm ASTM D5185m 1150	<b>989</b>	924	989
Zinc	ppm ASTM D5185m 1270	<b>1252</b>	1065	1177
Sulfur	ppm ASTM D5185m 2060	<b>3637</b>	3337	3488

## CONTAMINANTS

method	limit/base	current	history 1	history 2
Silicon	ppm ASTM D5185m >25	<b>4</b>	3	8
Sodium	ppm ASTM D5185m	<b>7</b>	3	2
Potassium	ppm ASTM D5185m >20	<b>6</b>	0	2

## INFRA-RED

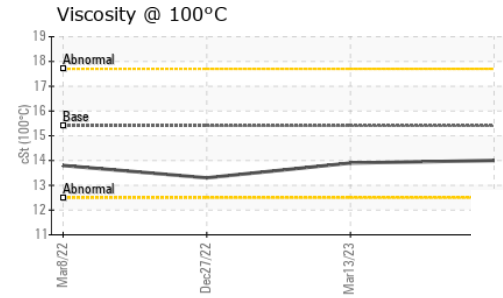
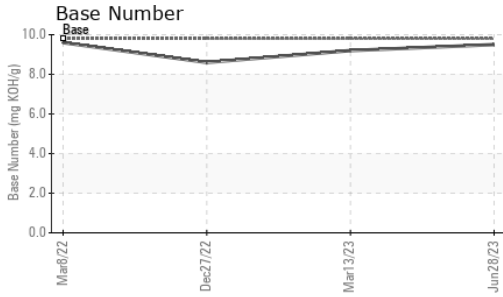
method	limit/base	current	history 1	history 2
Soot %	% *ASTM D7844 >3	<b>0.7</b>	0.9	0.3
Nitration	Abs/cm *ASTM D7624 >20	<b>5.6</b>	6.0	7.0
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>18.8</b>	19.0	18.4

## FLUID DEGRADATION

method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>13.1</b>	13.1	14.4
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>9.5</b>	9.2	8.6



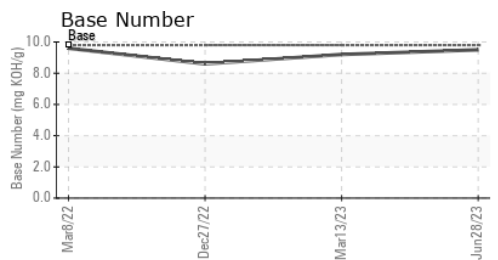
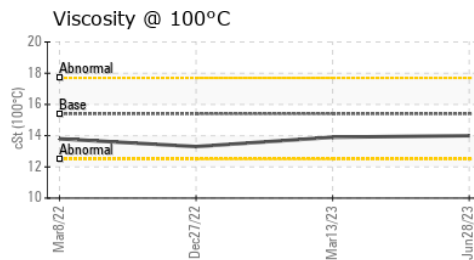
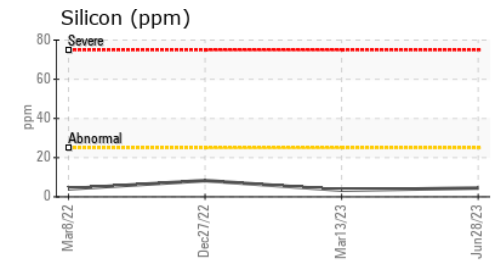
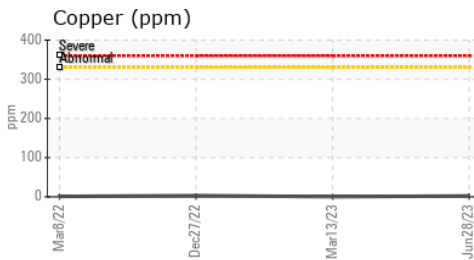
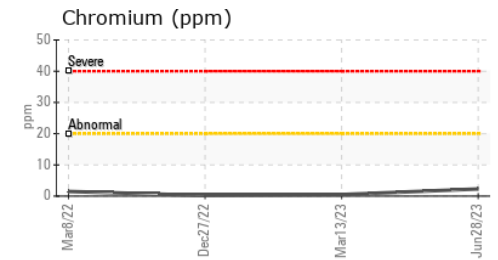
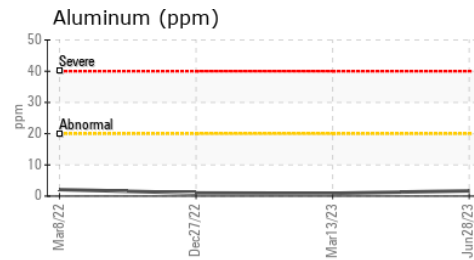
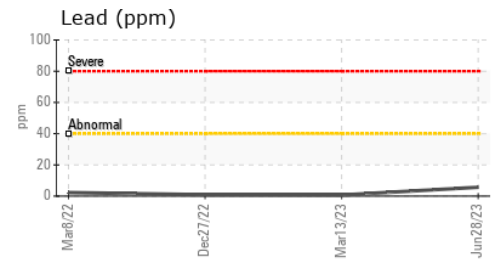
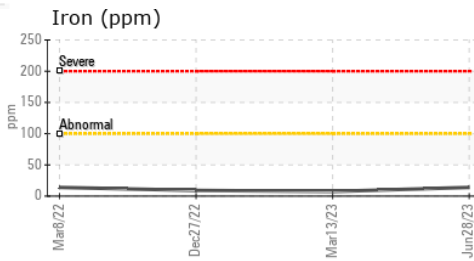
# OIL ANALYSIS REPORT



PARAMETER	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
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 D445	15.4	<b>14.0</b>	13.9	13.3

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0015806 Received : 03 Jul 2023  
 Lab Number : 05888888 Diagnosed : 05 Jul 2023  
 Unique Number : 10539371 Diagnostician : Wes Davis  
 Test Package : MOB 2

**GFL Environmental - 463 - Cheboygan**  
 501 N. Western Ave  
 Cheboygan, MI  
 US 49721  
 Contact: Chris Gee  
 cgee@gflenv.com  
 T: (231)597-8553  
 F:

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)