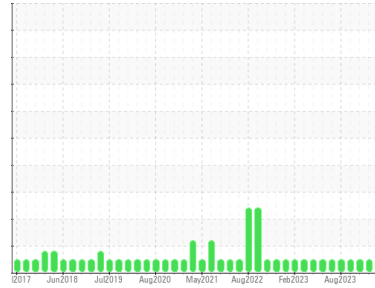




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**10693**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

### 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	history1	history2
Sample Number	Client Info	<b>GFL0099009</b>	GFL0098980	GFL0099039
Sample Date	Client Info	<b>26 Dec 2023</b>	29 Nov 2023	07 Nov 2023
Machine Age	hrs	<b>17674</b>	17356	17356
Oil Age	hrs	<b>17206</b>	17526	17206
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 >5	<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 D5185m >100	<b>23</b>	17	8
Chromium	ppm ASTM D5185m >20	<b>1</b>	<1	<1
Nickel	ppm ASTM D5185m >4	<b>&lt;1</b>	0	0
Titanium	ppm ASTM D5185m	<b>0</b>	<1	<1
Silver	ppm ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >20	<b>4</b>	2	2
Lead	ppm ASTM D5185m >40	<b>0</b>	0	0
Copper	ppm ASTM D5185m >330	<b>&lt;1</b>	<1	<1
Tin	ppm ASTM D5185m >15	<b>&lt;1</b>	0	0
Vanadium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	<1

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>2</b>	0	0
Barium	ppm ASTM D5185m 0	<b>0</b>	6	<1
Molybdenum	ppm ASTM D5185m 60	<b>54</b>	59	55
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	0	0
Magnesium	ppm ASTM D5185m 1010	<b>896</b>	867	865
Calcium	ppm ASTM D5185m 1070	<b>991</b>	1056	990
Phosphorus	ppm ASTM D5185m 1150	<b>1004</b>	986	907
Zinc	ppm ASTM D5185m 1270	<b>1233</b>	1134	1131
Sulfur	ppm ASTM D5185m 2060	<b>2911</b>	2769	3223

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>7</b>	6	4
Sodium	ppm ASTM D5185m	<b>5</b>	0	2
Potassium	ppm ASTM D5185m >20	<b>2</b>	3	2

## INFRA-RED

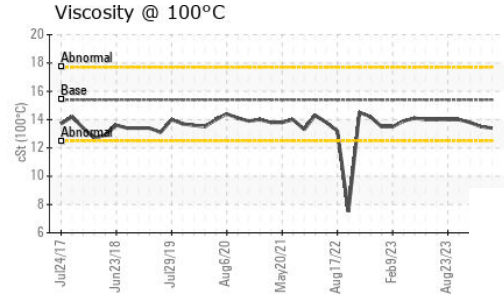
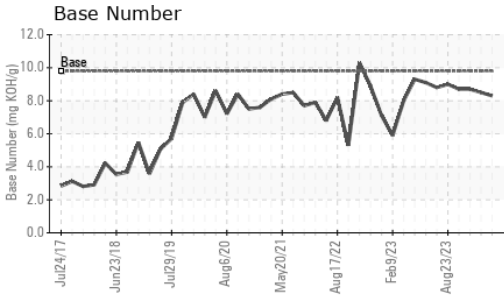
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.7</b>	0.5	0.3
Nitration	Abs/cm *ASTM D7624 >20	<b>7.4</b>	6.4	5.3
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>19.2</b>	18.5	18.0

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>14.2</b>	13.7	13.1
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>8.3</b>	8.5	8.7



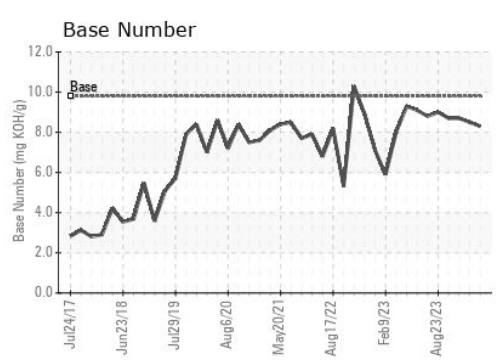
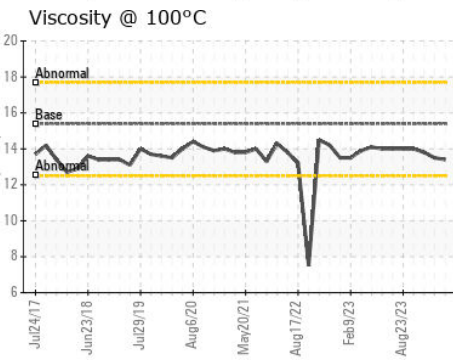
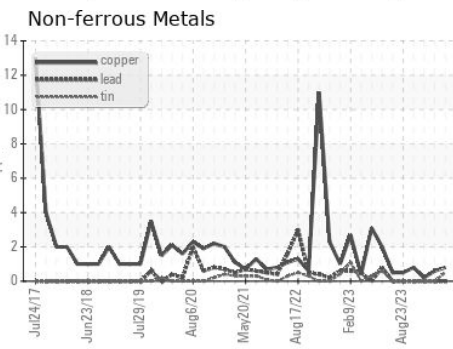
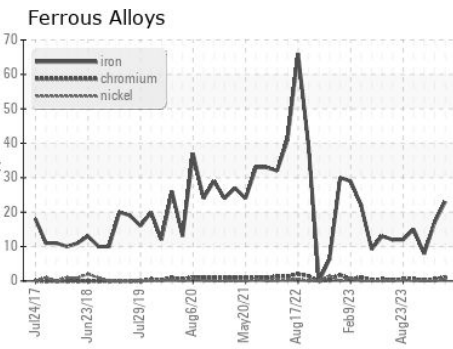
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
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	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.4	13.5

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0099009 **Received** : 03 Jan 2024  
**Lab Number** : 06049785 **Diagnosed** : 04 Jan 2024  
**Unique Number** : 10815734 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 084 - Clarksville**  
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 US 37042  
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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)