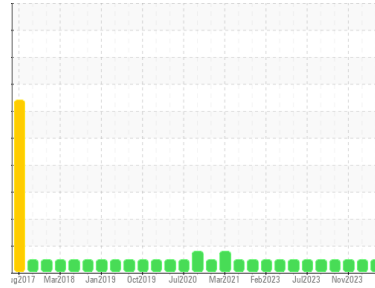




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**10699**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (5 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	history1	history2
Sample Number	Client Info	<b>GFL0112378</b>	GFL0107176	GFL0088735
Sample Date	Client Info	<b>21 Feb 2024</b>	30 Jan 2024	02 Nov 2023
Machine Age	hrs	<b>469</b>	307	2358
Oil Age	hrs	<b>514</b>	0	423
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
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>14</b>	10	17
Chromium	ppm ASTM D5185m >20	<b>&lt;1</b>	0	<1
Nickel	ppm ASTM D5185m >4	<b>0</b>	0	0
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	0	<1
Silver	ppm ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >20	<b>1</b>	1	2
Lead	ppm ASTM D5185m >40	<b>2</b>	<1	2
Copper	ppm ASTM D5185m >330	<b>2</b>	<1	2
Tin	ppm ASTM D5185m >15	<b>0</b>	<1	<1
Vanadium	ppm ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>8</b>	4	7
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>60</b>	57	61
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m 1010	<b>834</b>	828	816
Calcium	ppm ASTM D5185m 1070	<b>1077</b>	986	1139
Phosphorus	ppm ASTM D5185m 1150	<b>959</b>	967	912
Zinc	ppm ASTM D5185m 1270	<b>1125</b>	1147	1172
Sulfur	ppm ASTM D5185m 2060	<b>2617</b>	2761	2720

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>4</b>	4	6
Sodium	ppm ASTM D5185m	<b>3</b>	1	2
Potassium	ppm ASTM D5185m >20	<b>0</b>	1	<1

## INFRA-RED

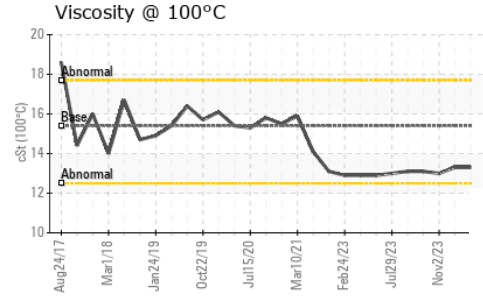
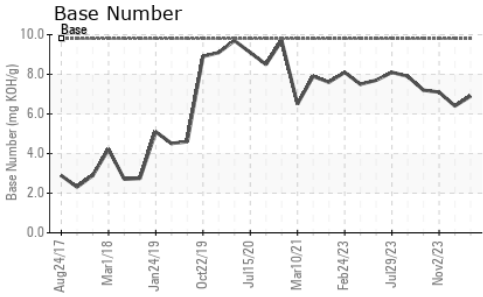
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.9</b>	0.7	1
Nitration	Abs/cm *ASTM D7624 >20	<b>10.3</b>	8.7	10.8
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>20.0</b>	18.5	20.5

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>17.3</b>	15.3	17.8
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>6.9</b>	6.4	7.1



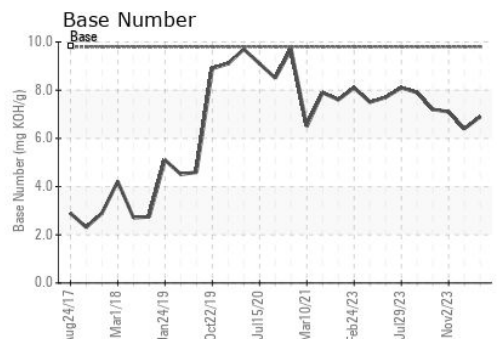
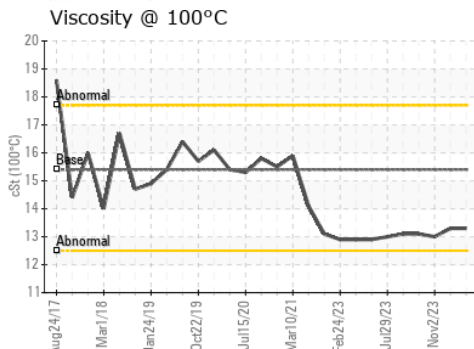
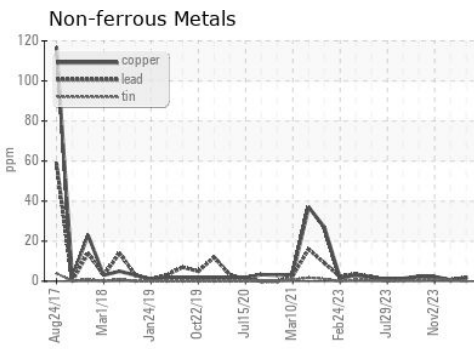
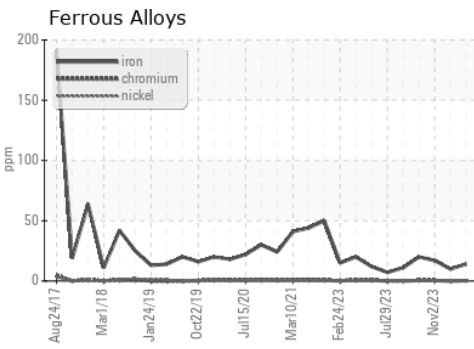
# OIL ANALYSIS REPORT



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	<b>13.3</b>	13.3	13.0

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0112378 **Received** : 26 Feb 2024  
**Lab Number** : 06099789 **Tested** : 27 Feb 2024  
**Unique Number** : 10898019 **Diagnosed** : 27 Feb 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 010 - Stockbridge**  
 1280 Rum Creek Parkway  
 Stockbridge, GA  
 US 30281  
 Contact: JOSHUA TINKER  
 joshuatinker@gflenv.com

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)

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F: