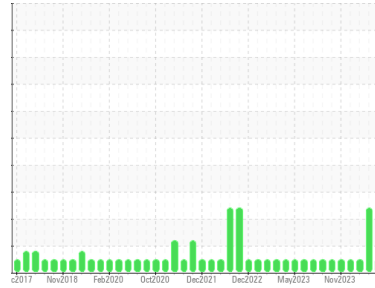




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**(G782HV)**  
 Machine Id  
**10693**

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	history1	history2
Sample Number	Client Info	<b>GFL0098939</b>	GFL0098971	GFL0099009
Sample Date	Client Info	<b>02 Feb 2024</b>	10 Jan 2024	26 Dec 2023
Machine Age	hrs	<b>17913</b>	17800	17674
Oil Age	hrs	<b>17800</b>	17206	17206
Oil Changed	Client Info	<b>N/A</b>	Changed	N/A
Sample Status		<b>NORMAL</b>	ABNORMAL	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 D5185m >75	<b>5</b>	10	23
Chromium	ppm ASTM D5185m >5	<b>&lt;1</b>	<1	1
Nickel	ppm ASTM D5185m >4	<b>0</b>	0	<1
Titanium	ppm ASTM D5185m >2	<b>&lt;1</b>	0	0
Silver	ppm ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >15	<b>2</b>	3	4
Lead	ppm ASTM D5185m >25	<b>0</b>	0	0
Copper	ppm ASTM D5185m >100	<b>&lt;1</b>	<1	<1
Tin	ppm ASTM D5185m >4	<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>2</b>	<1	2
Barium	ppm ASTM D5185m 0	<b>11</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>52</b>	58	54
Manganese	ppm ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm ASTM D5185m 1010	<b>782</b>	934	896
Calcium	ppm ASTM D5185m 1070	<b>1066</b>	1272	991
Phosphorus	ppm ASTM D5185m 1150	<b>891</b>	941	1004
Zinc	ppm ASTM D5185m 1270	<b>1102</b>	1175	1233
Sulfur	ppm ASTM D5185m 2060	<b>3085</b>	3163	2911

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>5</b>	4	7
Sodium	ppm ASTM D5185m	<b>22</b>	▲ 119	5
Potassium	ppm ASTM D5185m >20	<b>22</b>	▲ 130	2

## INFRA-RED

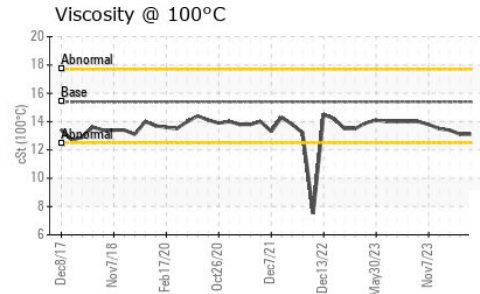
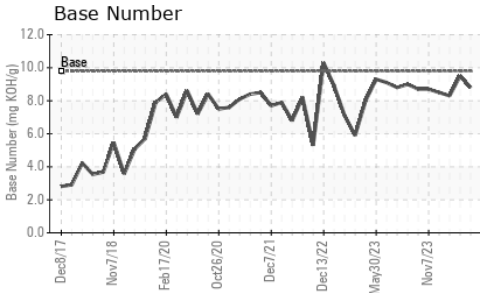
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >6	<b>0.2</b>	0.3	0.7
Nitration	Abs/cm *ASTM D7624 >20	<b>4.7</b>	5.6	7.4
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>16.9</b>	17.1	19.2

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>12.1</b>	12.3	14.2
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>8.8</b>	9.5	8.3



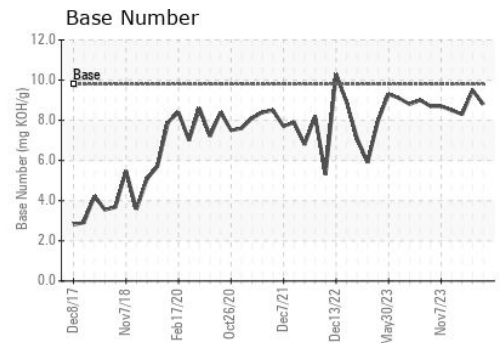
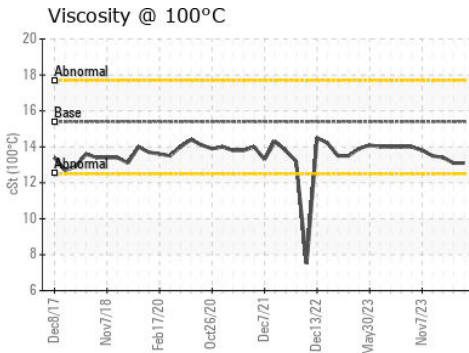
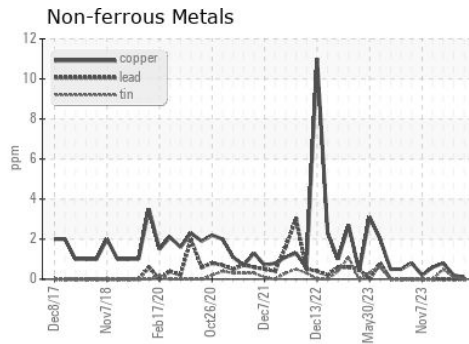
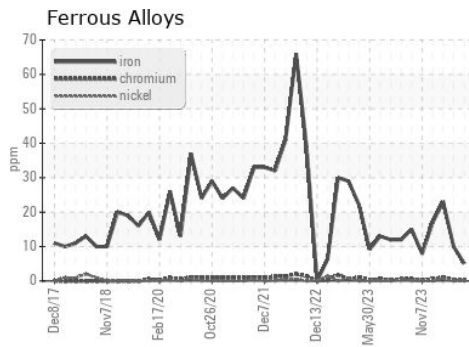
# OIL ANALYSIS REPORT



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	13.1	13.4

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0098939  
 Lab Number : 06089900  
 Unique Number : 10882753  
 Test Package : FLEET

Received : 15 Feb 2024  
 Tested : 16 Feb 2024  
 Diagnosed : 16 Feb 2024 - Wes Davis

**GFL Environmental - 084 - Clarksville**  
 699 Jack Miller Boulevard  
 Clarksville, TN  
 US 37042

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 F: (931)572-9674

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)