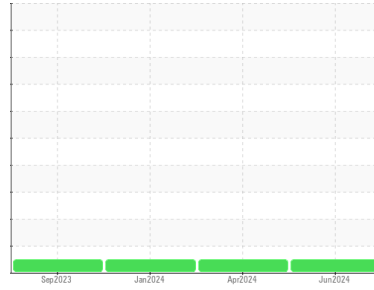




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**729099**  
 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>GFL0111201</b>	GFL0111237	GFL0102131
Sample Date	Client Info		<b>19 Jun 2024</b>	11 Apr 2024	12 Jan 2024
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>600</b>	600	600
Oil Changed	Client Info		<b>Changed</b>	Changed	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 >80	<b>18</b>	18	6
Chromium	ppm	ASTM D5185m >5	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >30	<b>2</b>	2	1
Lead	ppm	ASTM D5185m >30	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m >150	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m >5	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>1</b>	0	2
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>56</b>	59	58
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>1012</b>	986	1014
Calcium	ppm	ASTM D5185m 1070	<b>1147</b>	1105	1030
Phosphorus	ppm	ASTM D5185m 1150	<b>1066</b>	1038	1097
Zinc	ppm	ASTM D5185m 1270	<b>1346</b>	1247	1286
Sulfur	ppm	ASTM D5185m 2060	<b>3712</b>	3487	3230

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>4</b>	4	3
Sodium	ppm	ASTM D5185m	<b>4</b>	4	3
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	1	1

## INFRA-RED

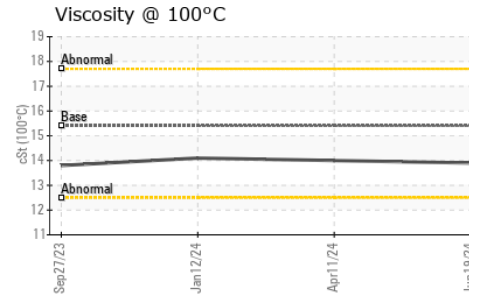
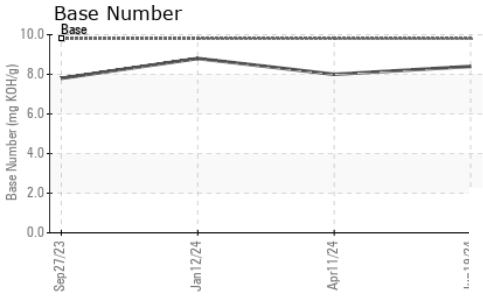
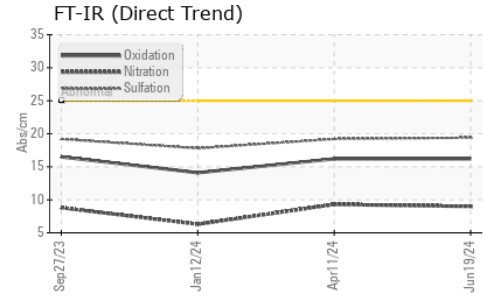
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.4</b>	0.5	0.2
Nitration	Abs/cm	*ASTM D7624 >20	<b>9.0</b>	9.3	6.3
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.4</b>	19.2	17.8

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>16.2</b>	16.2	14.1
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>8.4</b>	8.0	8.8



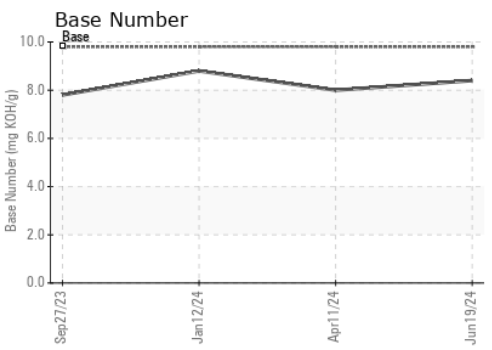
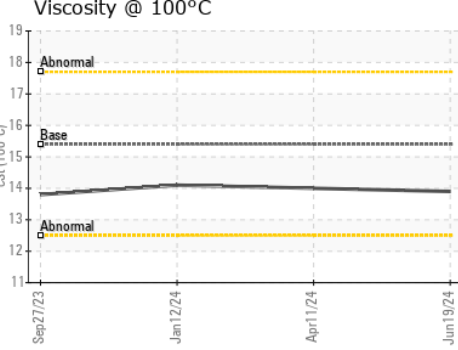
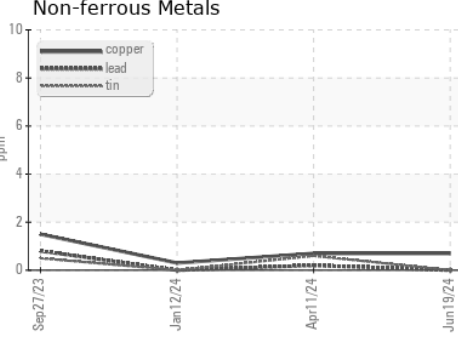
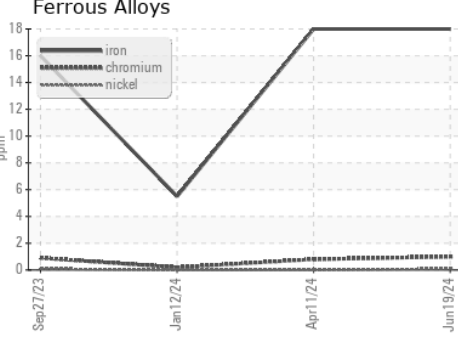
# OIL ANALYSIS REPORT



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	13.9	14.0

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0111201      **Received** : 01 Jul 2024  
**Lab Number** : 06224278      **Tested** : 02 Jul 2024  
**Unique Number** : 11102475      **Diagnosed** : 02 Jul 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 960B - Pittsfield HC**  
 1335 W. Washington  
 Pittsfield, IL  
 US 62363

Certificate L2367      **Contact:** David Bradshaw  
 To discuss this sample report, contact Customer Service at 1-800-237-1369.      david.bradshaw@gflenv.com  
 \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.      T:  
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)      F: