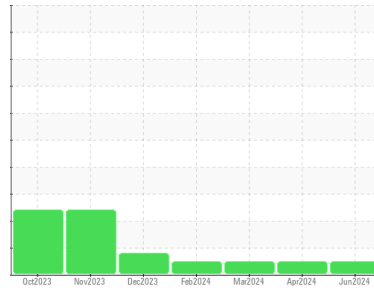




# OIL ANALYSIS REPORT

## Sample Rating Trend



NORMAL



Machine Id  
**728106-18**  
 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>GFL0123204</b>	GFL0104818	GFL0104886
Sample Date	Client Info		<b>25 Jun 2024</b>	22 Apr 2024	07 Mar 2024
Machine Age	mls	Client Info	<b>145540</b>	141192	139367
Oil Age	mls	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Not Changed</b>	Changed	Not 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>6</b>	25	17
Chromium	ppm	ASTM D5185m >5	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	<1
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	2
Lead	ppm	ASTM D5185m >30	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m >150	<b>&lt;1</b>	4	<1
Tin	ppm	ASTM D5185m >5	<b>&lt;1</b>	<1	2
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>0</b>	1	0
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>54</b>	58	55
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>857</b>	902	903
Calcium	ppm	ASTM D5185m 1070	<b>1002</b>	1001	1045
Phosphorus	ppm	ASTM D5185m 1150	<b>935</b>	909	874
Zinc	ppm	ASTM D5185m 1270	<b>1154</b>	1187	1168
Sulfur	ppm	ASTM D5185m 2060	<b>2907</b>	3177	3323

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>4</b>	5	4
Sodium	ppm	ASTM D5185m	<b>5</b>	9	8
Potassium	ppm	ASTM D5185m >20	<b>2</b>	<1	3

## INFRA-RED

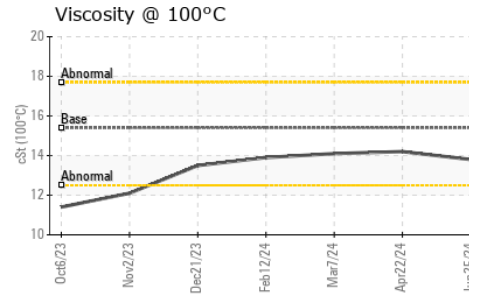
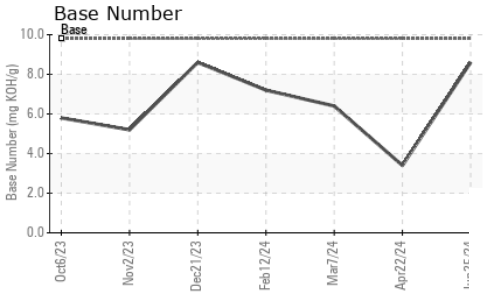
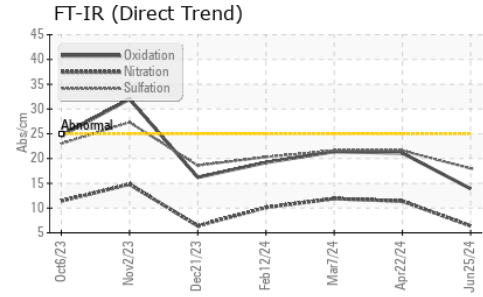
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.2</b>	0.6	0.5
Nitration	Abs/cm	*ASTM D7624 >20	<b>6.4</b>	11.4	11.9
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>18.0</b>	21.6	21.6

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>13.9</b>	21.1	21.4
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>8.6</b>	3.4	6.4



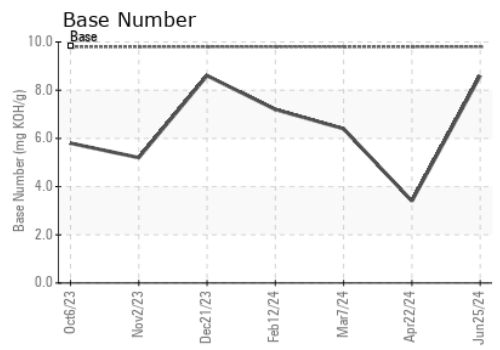
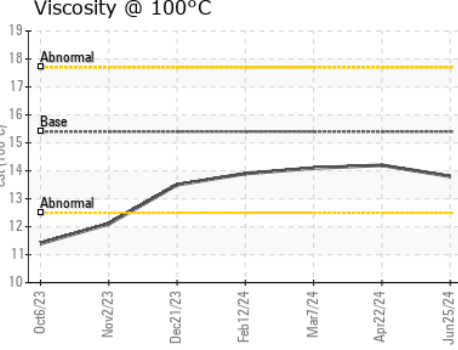
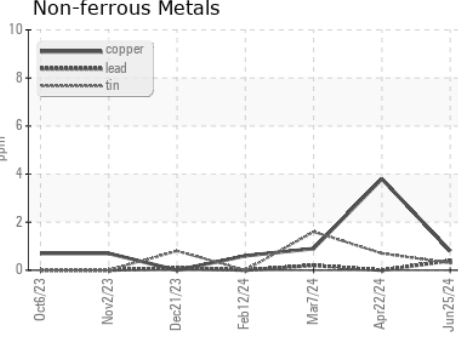
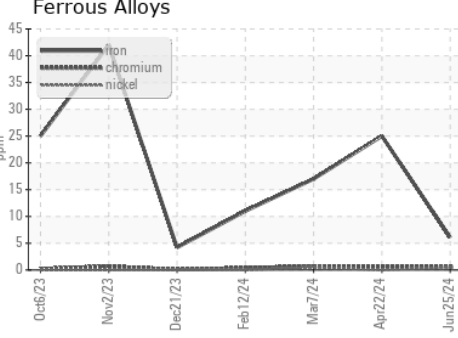
# OIL ANALYSIS REPORT



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>13.8</b>	14.2	14.1

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0123204  
**Lab Number** : **06232119**  
**Unique Number** : 11115612  
**Test Package** : FLEET

**GFL Environmental - 820 - Joplin Hauling**  
 3700 West 7th Street  
 Joplin, MO  
 US 64801

Certificate L2367  
 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)