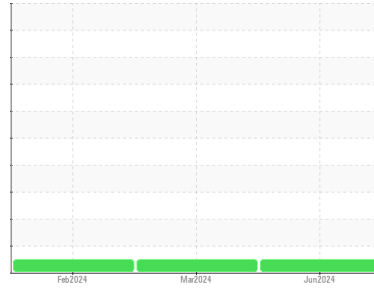




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**727147**  
 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>GFL0084830</b>	GFL0084809	GFL0084770
Sample Date	Client Info		<b>04 Jun 2024</b>	20 Mar 2024	02 Feb 2024
Machine Age	hrs	Client Info	<b>17838</b>	16857	16857
Oil Age	hrs	Client Info	<b>16857</b>	16857	6127
Oil Changed	Client Info		<b>Changed</b>	Changed	N/A
Sample Status			<b>NORMAL</b>	NORMAL	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>40</b>	54	55
Chromium	ppm	ASTM D5185m >5	<b>1</b>	1	1
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	1
Titanium	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >15	<b>5</b>	5	5
Lead	ppm	ASTM D5185m >25	<b>&lt;1</b>	2	2
Copper	ppm	ASTM D5185m >100	<b>&lt;1</b>	0	3
Tin	ppm	ASTM D5185m >4	<b>&lt;1</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>4</b>	4	2
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>60</b>	59	60
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	2
Magnesium	ppm	ASTM D5185m 1010	<b>959</b>	940	938
Calcium	ppm	ASTM D5185m 1070	<b>1061</b>	1075	1050
Phosphorus	ppm	ASTM D5185m 1150	<b>1012</b>	1008	1019
Zinc	ppm	ASTM D5185m 1270	<b>1268</b>	1215	1244
Sulfur	ppm	ASTM D5185m 2060	<b>3358</b>	3054	2728

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>13</b>	14	16
Sodium	ppm	ASTM D5185m	<b>65</b>	25	11
Potassium	ppm	ASTM D5185m >20	<b>14</b>	8	7

## INFRA-RED

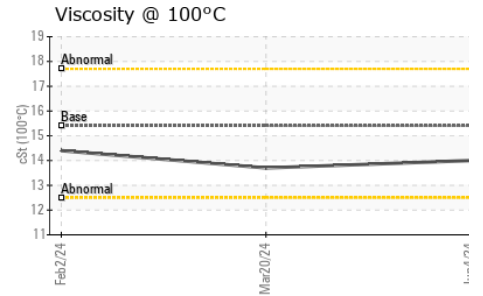
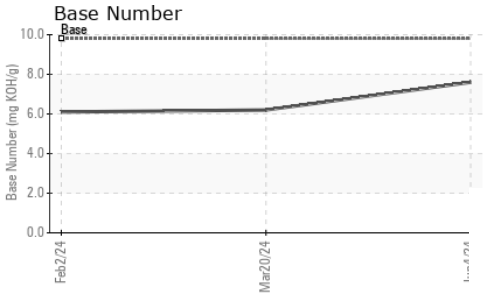
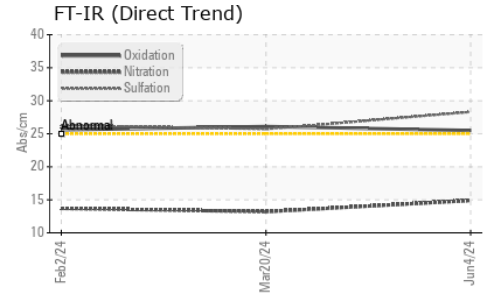
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >6	<b>2</b>	1	1.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>14.9</b>	13.2	13.7
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>28.3</b>	25.7	26.3

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>25.5</b>	26.1	25.6
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>7.6</b>	6.2	6.1



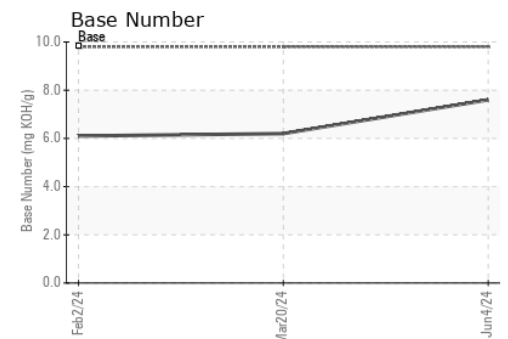
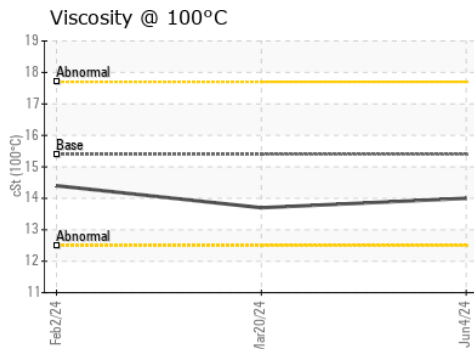
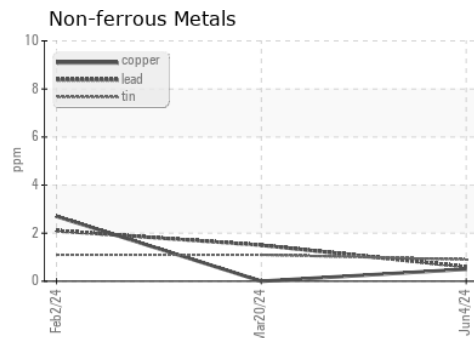
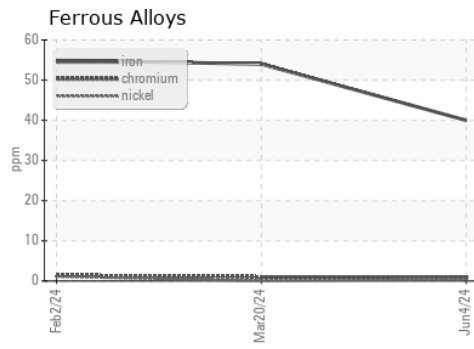
# OIL ANALYSIS REPORT



PARAMETER	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>14.0</b>	13.7	14.4

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0084830      **Received** : 19 Jun 2024  
**Lab Number** : **06214414**      **Tested** : 20 Jun 2024  
**Unique Number** : 11087278      **Diagnosed** : 24 Jun 2024 - Jonathan Hester  
**Test Package** : FLEET

**GFL Environmental - 959A - Urbana HC**  
 4808 cunningham Rd  
 Urbana, IL  
 US 61802  
 Contact: Kristine Tryon  
 Ktryon@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)