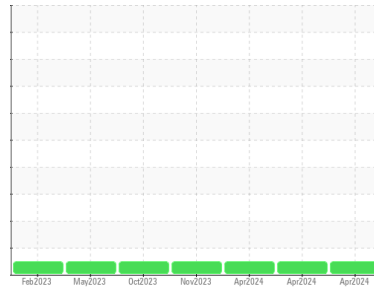




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Area  
**GFL035**  
 Machine Id  
**429135**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (38 QTS)**

### 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>GFL0116468</b>	GFL0116419	GFL0116444
Sample Date	Client Info	<b>25 Apr 2024</b>	12 Apr 2024	01 Apr 2024
Machine Age	hrs	Client Info	<b>0</b>	0
Oil Age	hrs	Client Info	<b>600</b>	600
Oil Changed	Client Info	<b>Not Chngd</b>	Not Chngd	Not Chngd
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 >90	<b>5</b>	26	22
Chromium	ppm	ASTM D5185m >20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m >2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>1</b>	3	2
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	2	<1
Copper	ppm	ASTM D5185m >330	<b>0</b>	0	<1
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	0
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>3</b>	7	5
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>60</b>	66	64
Manganese	ppm	ASTM D5185m 0	<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m 1010	<b>952</b>	968	931
Calcium	ppm	ASTM D5185m 1070	<b>1157</b>	1214	1210
Phosphorus	ppm	ASTM D5185m 1150	<b>1058</b>	1136	1044
Zinc	ppm	ASTM D5185m 1270	<b>1284</b>	1348	1304
Sulfur	ppm	ASTM D5185m 2060	<b>3826</b>	3503	3551

### CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<b>3</b>	5	4
Sodium	ppm	ASTM D5185m	<b>2</b>	4	4
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	3	2

### INFRA-RED

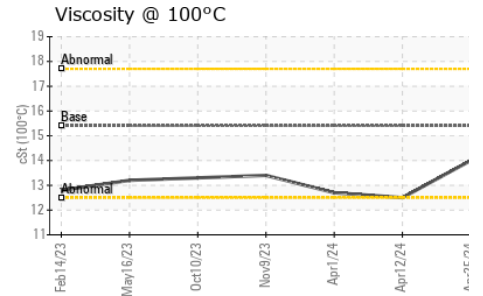
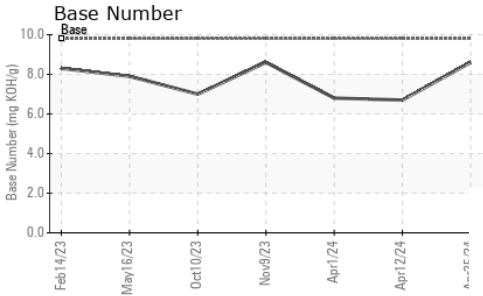
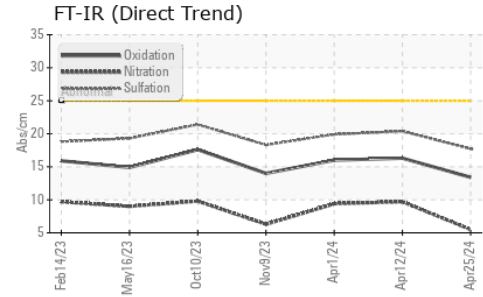
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844 >6	<b>0.1</b>	0.6	0.6
Nitration	Abs/cm	*ASTM D7624 >20	<b>5.5</b>	9.7	9.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>17.7</b>	20.4	19.9

### FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>13.4</b>	16.3	16.0
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>8.6</b>	6.7	6.8



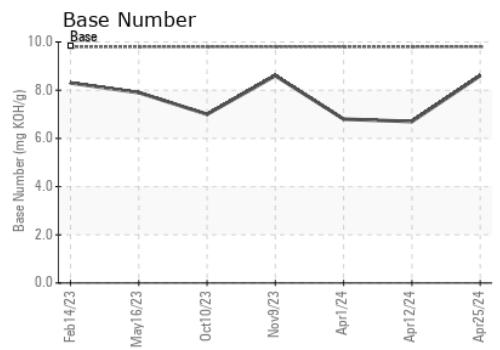
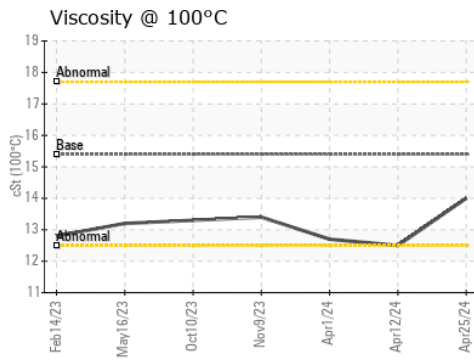
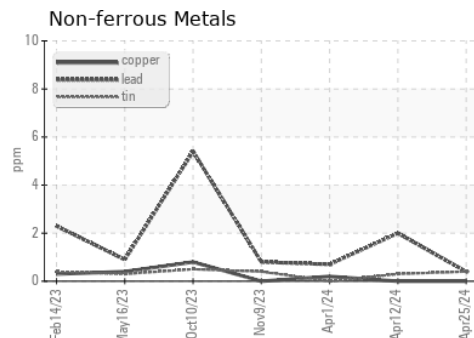
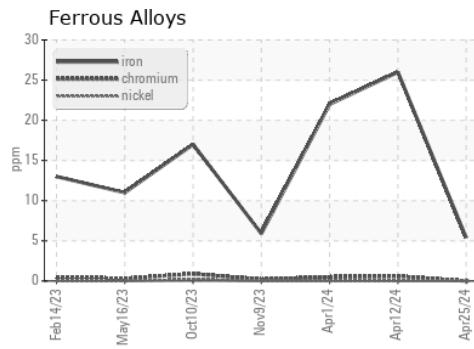
# OIL ANALYSIS REPORT



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	<b>14.0</b>	12.5	12.7

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0116468      **Received** : 26 Apr 2024  
**Lab Number** : **06161147**      **Tested** : 26 Apr 2024  
**Unique Number** : 10996570      **Diagnosed** : 26 Apr 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 035 - Greensboro**  
 1236 Elon Place  
 High Point, NC  
 US 27263  
 Contact: JORGE COSTA  
 jorge.costa@gflenv.com  
 T: (336)668-3712  
 F:

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)