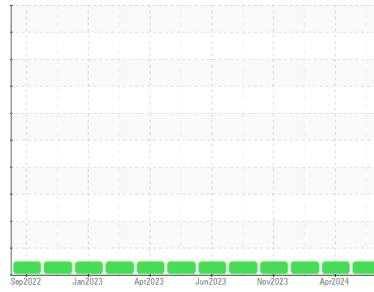




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id

**832004**

Component

**Natural Gas Engine**

Fluid

**PETRO CANADA DURON SHP 15W40 (27 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>GFL0121739</b>	GFL0106903	GFL0092177	
Sample Date	Client Info	<b>19 Jun 2024</b>	11 Apr 2024	16 Feb 2024	
Machine Age	hrs	Client Info	<b>5367</b>	4804	4334
Oil Age	hrs	Client Info	<b>0</b>	16259	16832
Oil Changed	Client Info	<b>Changed</b>	Changed	Changed	
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL	

### CONTAMINATION

method	limit/base	current	history1	history2	
Water	WC Method	>0.1	<b>NEG</b>	NEG	NEG

### WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>50	<b>5</b>	4	5
Chromium	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>2</b>	<1	2
Lead	ppm	ASTM D5185m	>30	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>35	<b>0</b>	0	0
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

### ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m	0	<b>11</b>	14	15
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>53</b>	51	50
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	1010	<b>610</b>	548	544
Calcium	ppm	ASTM D5185m	1070	<b>1702</b>	1613	1526
Phosphorus	ppm	ASTM D5185m	1150	<b>789</b>	718	702
Zinc	ppm	ASTM D5185m	1270	<b>1012</b>	920	941
Sulfur	ppm	ASTM D5185m	2060	<b>2879</b>	2590	2267

### CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>+100	<b>3</b>	3	3
Sodium	ppm	ASTM D5185m		<b>6</b>	4	5
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	0	1

### INFRA-RED

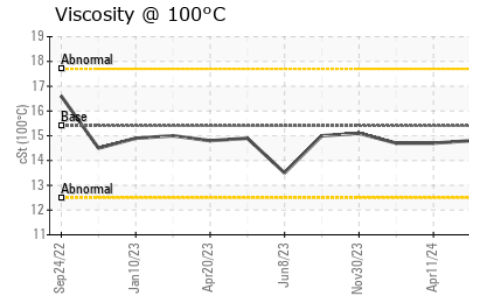
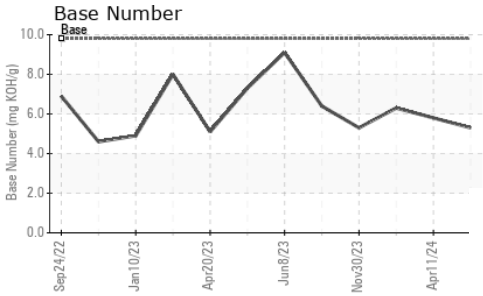
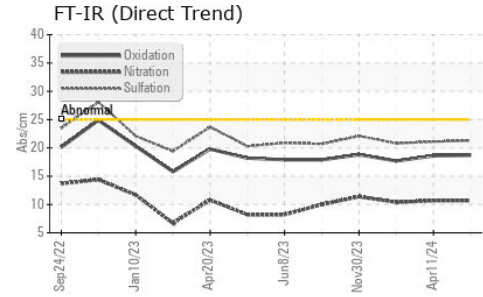
method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844		<b>0</b>	0	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.7</b>	10.7	10.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.3</b>	21.1	20.8

### FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.7</b>	18.6	17.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>5.3</b>	5.8	6.3



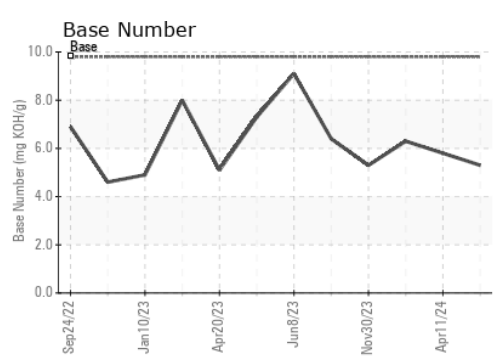
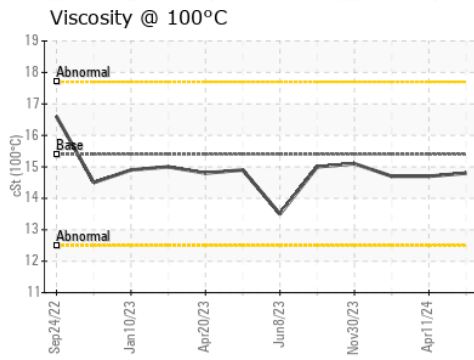
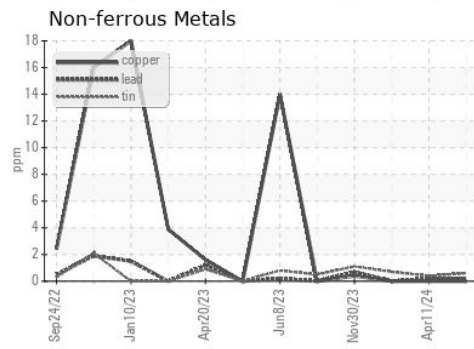
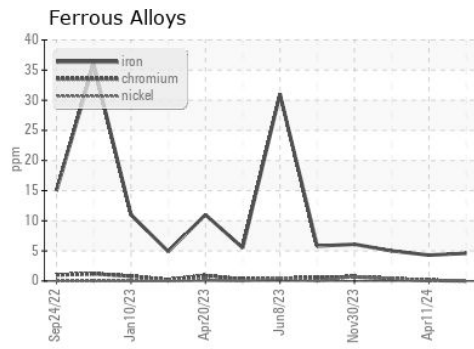
# OIL ANALYSIS REPORT



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	>0.1	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>14.8</b>	14.7

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0121739      **Received** : 21 Jun 2024  
**Lab Number** : **06216715**      **Tested** : 24 Jun 2024  
**Unique Number** : 11089579      **Diagnosed** : 24 Jun 2024 - Sean Felton  
**Test Package** : FLEET

**GFL Environmental - 856 - Houston South**  
 8515 Highway 6 South  
 Houston, TX  
 US 77083  
 Contact: Jose Gonzalez  
 jgonzalez2@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)