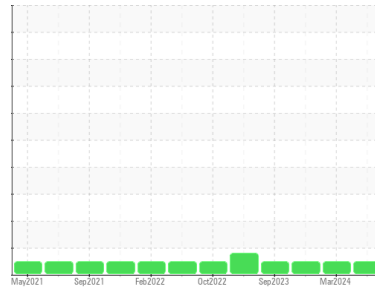




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

**748002**

Component

**Natural Gas Engine**

Fluid

**PETRO CANADA DURON GEO LD 15W40 (--- LTR)**

## 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>GFL0119145</b>	GFL0115478	GFL0106956	
Sample Date	Client Info	<b>03 Jul 2024</b>	22 Mar 2024	16 Dec 2023	
Machine Age	hrs	Client Info	<b>14827</b>	14169	13779
Oil Age	hrs	Client Info	<b>658</b>	390	577
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>20</b>	21	0
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>3</b>	2	2
Lead	ppm	ASTM D5185m	>30	<b>1</b>	2	0
Copper	ppm	ASTM D5185m	>35	<b>2</b>	<1	<1
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m	50	<b>5</b>	4	21
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>58</b>	60	46
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	560	<b>783</b>	886	580
Calcium	ppm	ASTM D5185m	1510	<b>1276</b>	1065	1419
Phosphorus	ppm	ASTM D5185m	780	<b>980</b>	1054	794
Zinc	ppm	ASTM D5185m	870	<b>1171</b>	1250	969
Sulfur	ppm	ASTM D5185m	2040	<b>2725</b>	3438	2464

## CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>+100	<b>4</b>	3	2
Sodium	ppm	ASTM D5185m		<b>27</b>	17	2
Potassium	ppm	ASTM D5185m	>20	<b>18</b>	10	0

## INFRA-RED

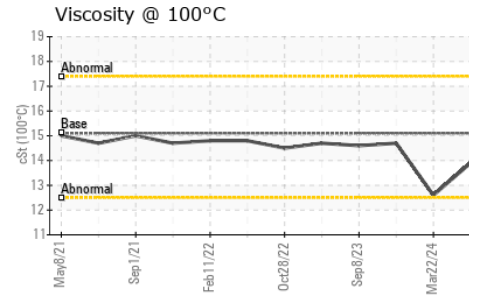
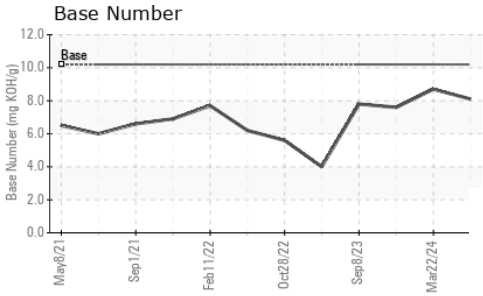
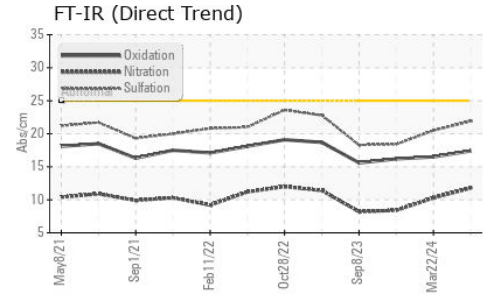
method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844		<b>1.1</b>	1.5	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.8</b>	10.3	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.9</b>	20.5	18.4

## FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.4</b>	16.5	16.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>8.1</b>	8.7	7.6



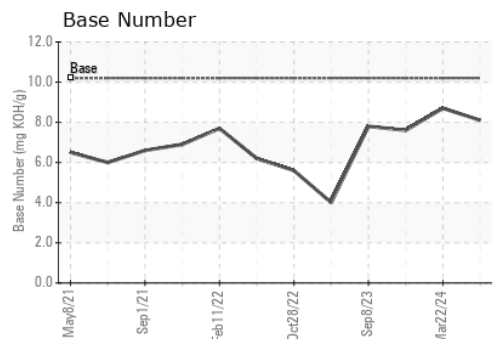
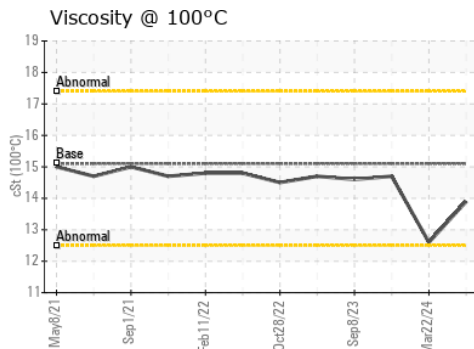
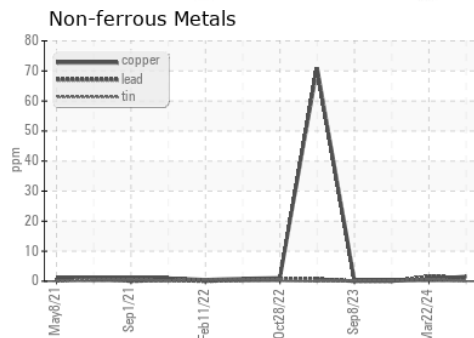
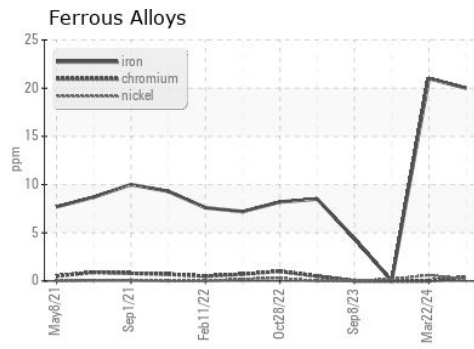
# OIL ANALYSIS REPORT



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	15.1	13.9	12.6

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0119145      **Received** : 08 Jul 2024  
**Lab Number** : 06229990      **Tested** : 09 Jul 2024  
**Unique Number** : 11113483      **Diagnosed** : 09 Jul 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 882 - Gainesville**  
 5002 SW 41st Blvd  
 Gainesville, FL  
 US 32608  
 Contact: ROBERT CLARK  
 robert.clark@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)