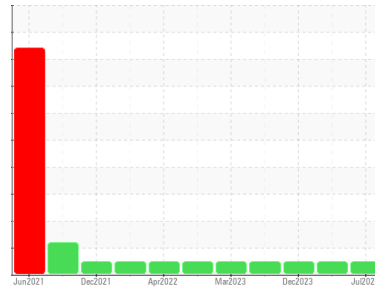




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**744006**

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>GFL0119141</b>	GFL0115495	GFL0094235
Sample Date	Client Info		<b>11 Jul 2024</b>	22 Mar 2024	08 Dec 2023
Machine Age	hrs	Client Info	<b>23957</b>	23236	22655
Oil Age	hrs	Client Info	<b>721</b>	581	468
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>16</b>	20	5
Chromium	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m >9	<b>4</b>	2	1
Lead	ppm	ASTM D5185m >30	<b>2</b>	1	<1
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	<1

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>7</b>	4	26
Barium	ppm	ASTM D5185m 5	<b>&lt;1</b>	0	11
Molybdenum	ppm	ASTM D5185m 50	<b>61</b>	59	50
Manganese	ppm	ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 560	<b>658</b>	873	543
Calcium	ppm	ASTM D5185m 1510	<b>1511</b>	1050	1468
Phosphorus	ppm	ASTM D5185m 780	<b>791</b>	1040	757
Zinc	ppm	ASTM D5185m 870	<b>1091</b>	1228	913
Sulfur	ppm	ASTM D5185m 2040	<b>2622</b>	3374	2723

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>4</b>	3	3
Sodium	ppm	ASTM D5185m	<b>26</b>	17	4
Potassium	ppm	ASTM D5185m >20	<b>25</b>	10	3

## INFRA-RED

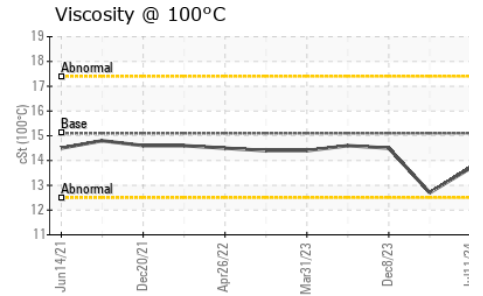
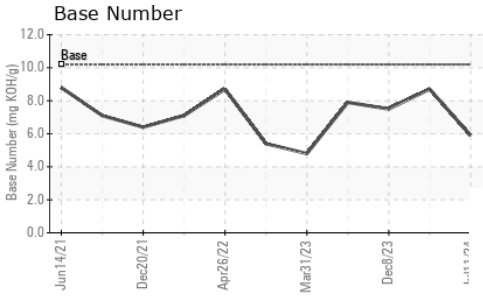
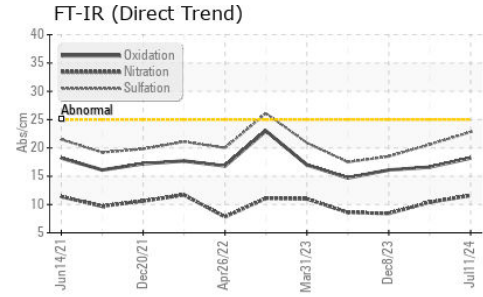
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0.5</b>	1.5	0
Nitration	Abs/cm	*ASTM D7624 >20	<b>11.6</b>	10.4	8.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>22.8</b>	20.6	18.5

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>18.2</b>	16.6	16.1
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>5.9</b>	8.7	7.5



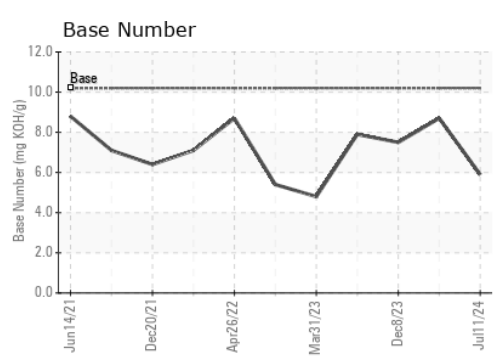
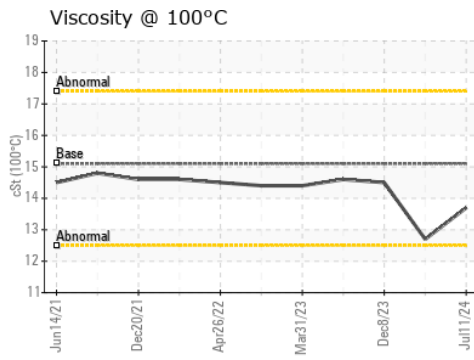
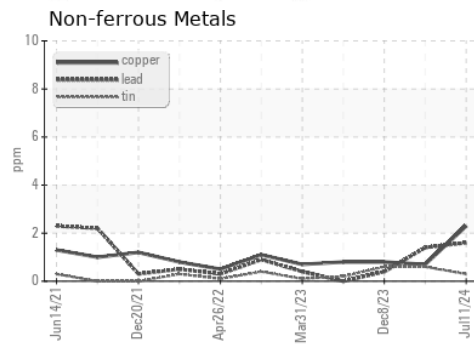
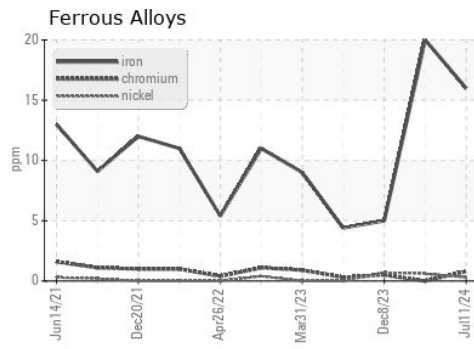
# OIL ANALYSIS REPORT



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	13.7	12.7	14.5

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0119141  
**Lab Number** : 06235598  
**Unique Number** : 11124432  
**Test Package** : FLEET  
**Received** : 15 Jul 2024  
**Tested** : 15 Jul 2024  
**Diagnosed** : 15 Jul 2024 - Wes Davis

**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)