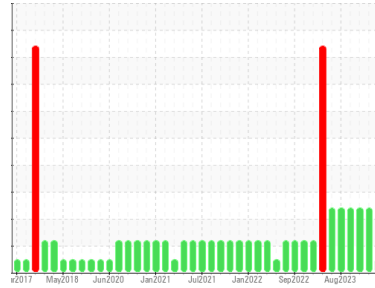




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**2618C**

Component  
**Natural Gas Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (12 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>GFL0112933</b>	GFL0098153	GFL0098122
Sample Date	Client Info	<b>21 Mar 2024</b>	13 Feb 2024	04 Dec 2023
Machine Age	hrs	<b>10732</b>	10732	10732
Oil Age	hrs	<b>284</b>	501	582
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	ABNORMAL	ABNORMAL

## 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>8</b>	8	13
Chromium	ppm ASTM D5185m >4	<b>&lt;1</b>	<1	1
Nickel	ppm ASTM D5185m >2	<b>0</b>	<1	<1
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm ASTM D5185m >3	<b>0</b>	<1	<1
Aluminum	ppm ASTM D5185m >9	<b>2</b>	2	3
Lead	ppm ASTM D5185m >30	<b>&lt;1</b>	2	6
Copper	ppm ASTM D5185m >35	<b>&lt;1</b>	0	<1
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 50	<b>7</b>	8	9
Barium	ppm ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 50	<b>53</b>	52	63
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m 560	<b>567</b>	562	559
Calcium	ppm ASTM D5185m 1510	<b>1605</b>	1510	1571
Phosphorus	ppm ASTM D5185m 780	<b>745</b>	722	700
Zinc	ppm ASTM D5185m 870	<b>978</b>	995	1031
Sulfur	ppm ASTM D5185m 2040	<b>2423</b>	2591	2659

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >+100	<b>9</b>	10	16
Sodium	ppm ASTM D5185m	<b>52</b>	▲ 112	▲ 295
Potassium	ppm ASTM D5185m >20	<b>261</b>	▲ 395	▲ 603

## INFRA-RED

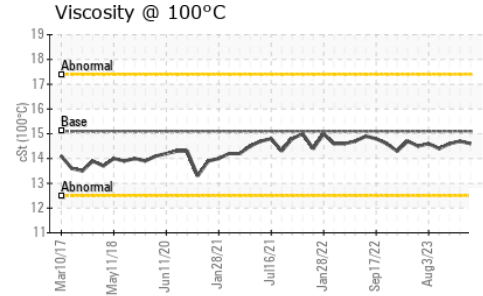
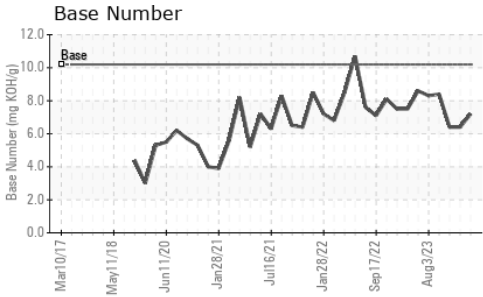
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	<b>0</b>	0	0
Nitration	Abs/cm *ASTM D7624 >20	<b>9.6</b>	11.4	11.3
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>20.6</b>	22.0	22.7

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>17.1</b>	17.9	18.2
Base Number (BN)	mg KOH/g ASTM D2896 10.2	<b>7.2</b>	6.4	6.4



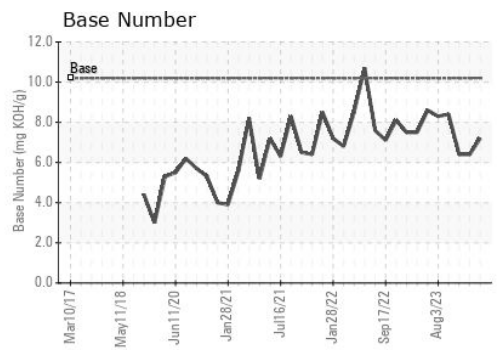
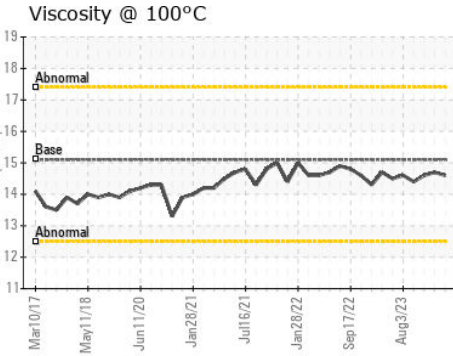
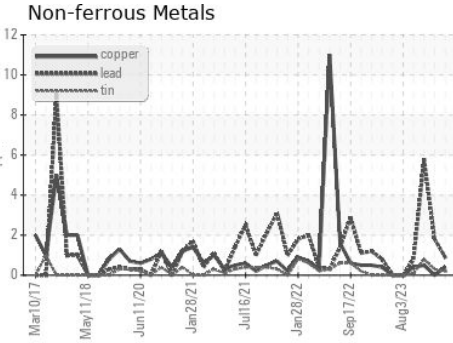
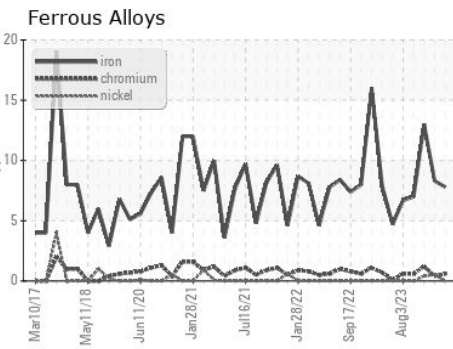
# OIL ANALYSIS REPORT



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	<b>14.6</b>	14.7	14.6

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0112933      **Received** : 22 Mar 2024  
**Lab Number** : **06126215**      **Tested** : 24 Mar 2024  
**Unique Number** : 10940366      **Diagnosed** : 24 Mar 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 017 - Durham**  
 148 Stone Park Court  
 Durham, NC  
 US 27703  
 Contact:  
 bill.waring@wearcheck.com  
 T: (919)596-1363  
 F: (919)598-1852

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)