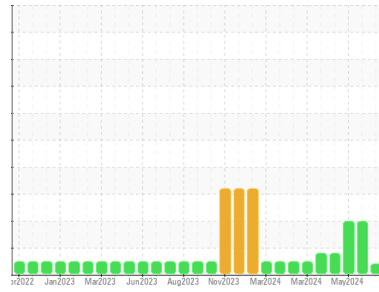




# OIL ANALYSIS REPORT

Sample Rating Trend



## VISCOSITY



Machine Id  
**731116**

Component  
**Natural Gas Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (--- GAL)**

### DIAGNOSIS

#### Recommendation

No corrective action is recommended at this time. 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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

### SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>GFL0120201</b>	GFL0120164	GFL0120175
Sample Date	Client Info	<b>13 Jun 2024</b>	23 May 2024	16 May 2024
Machine Age	hrs	<b>7189</b>	7051	7027
Oil Age	hrs	<b>0</b>	1200	0
Oil Changed	Client Info	<b>Not Changed</b>	Not Changed	Not Changed
Sample Status		<b>ATTENTION</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>4</b>	▲ 53	▲ 68
Chromium	ppm ASTM D5185m >4	<b>0</b>	4	4
Nickel	ppm ASTM D5185m >2	<b>0</b>	2	2
Titanium	ppm ASTM D5185m	<b>0</b>	<1	<1
Silver	ppm ASTM D5185m >3	<b>0</b>	<1	<1
Aluminum	ppm ASTM D5185m >9	<b>4</b>	8	7
Lead	ppm ASTM D5185m >30	<b>0</b>	10	3
Copper	ppm ASTM D5185m >35	<b>1</b>	2	2
Tin	ppm ASTM D5185m >4	<b>0</b>	1	1
Vanadium	ppm ASTM D5185m	<b>0</b>	<1	<1
Cadmium	ppm ASTM D5185m	<b>0</b>	<1	0

### ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 50	<b>44</b>	4	6
Barium	ppm ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 50	<b>1</b>	58	62
Manganese	ppm ASTM D5185m 0	<b>0</b>	2	1
Magnesium	ppm ASTM D5185m 560	<b>862</b>	522	558
Calcium	ppm ASTM D5185m 1510	<b>1284</b>	1760	1707
Phosphorus	ppm ASTM D5185m 780	<b>745</b>	736	871
Zinc	ppm ASTM D5185m 870	<b>870</b>	966	1039
Sulfur	ppm ASTM D5185m 2040	<b>2711</b>	3466	2941

### CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >+100	<b>2</b>	19	22
Sodium	ppm ASTM D5185m	<b>2</b>	15	26
Potassium	ppm ASTM D5185m >20	<b>3</b>	3	4

### INFRA-RED

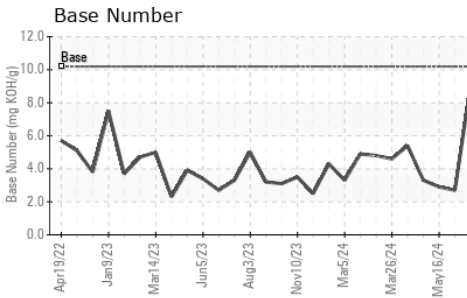
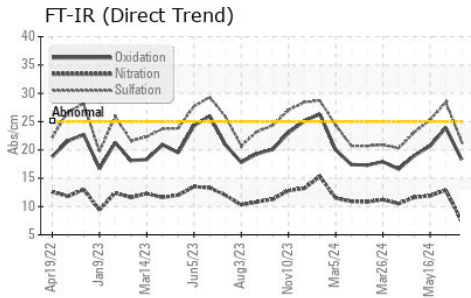
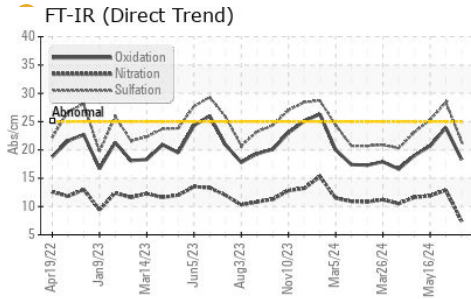
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	<b>0.1</b>	0	0.1
Nitration	Abs/cm *ASTM D7624 >20	<b>7.4</b>	12.9	11.9
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>21.5</b>	28.4	25.3

### FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>18.3</b>	23.9	20.7
Base Number (BN)	mg KOH/g ASTM D2896 10.2	<b>9.0</b>	▲ 2.7	▲ 2.9



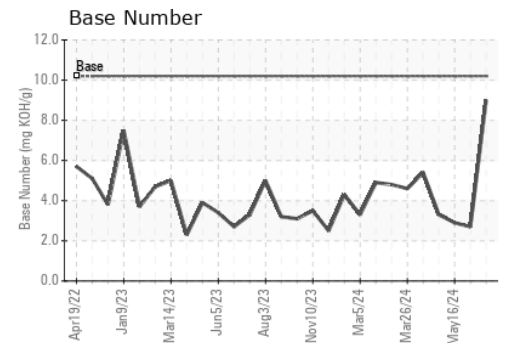
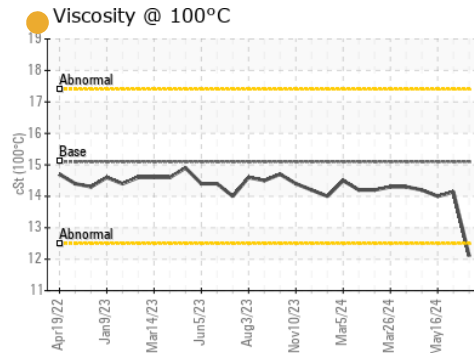
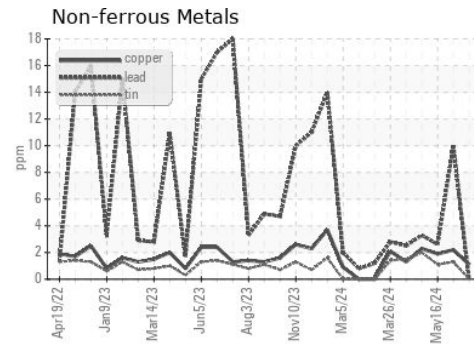
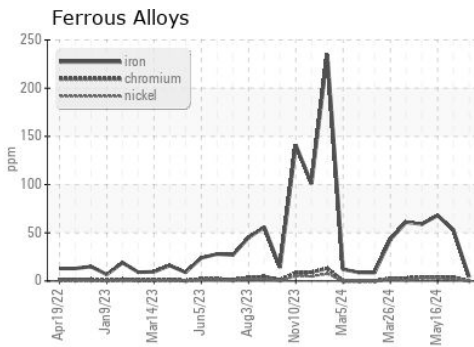
# OIL ANALYSIS REPORT



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	12.1	14.14

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0120201  
**Lab Number** : 06213201  
**Unique Number** : 11086065  
**Test Package** : FLEET ( Additional Tests : FUELDILUTION, PercentFuel )

**GFL Environmental - 836 - Kansas City Hauling**  
 7801 East Truman Road  
 Kansas City, MO  
 US 64126  
 Contact: Loyce Stewart  
 loyce.stewart@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)