



# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**533000**

Component  
**Natural Gas Engine**

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

## DIAGNOSIS

### Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0090356</b>	---	---
Sample Date	Client Info		<b>25 Aug 2023</b>	---	---
Machine Age	hrs	Client Info	<b>1476</b>	---	---
Oil Age	hrs	Client Info	<b>1476</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>NORMAL</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>51</b>	---	---
Chromium	ppm	ASTM D5185m >4	<b>8</b>	---	---
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185m	<b>0</b>	---	---
Silver	ppm	ASTM D5185m >3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m >9	<b>61</b>	---	---
Lead	ppm	ASTM D5185m >30	<b>11</b>	---	---
Copper	ppm	ASTM D5185m >35	<b>13</b>	---	---
Tin	ppm	ASTM D5185m >4	<b>2</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>9</b>	---	---
Barium	ppm	ASTM D5185m 5	<b>4</b>	---	---
Molybdenum	ppm	ASTM D5185m 50	<b>116</b>	---	---
Manganese	ppm	ASTM D5185m 0	<b>5</b>	---	---
Magnesium	ppm	ASTM D5185m 560	<b>758</b>	---	---
Calcium	ppm	ASTM D5185m 1510	<b>1504</b>	---	---
Phosphorus	ppm	ASTM D5185m 780	<b>748</b>	---	---
Zinc	ppm	ASTM D5185m 870	<b>958</b>	---	---
Sulfur	ppm	ASTM D5185m 2040	<b>3535</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>76</b>	---	---
Sodium	ppm	ASTM D5185m	<b>4</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>108</b>	---	---

## INFRA-RED

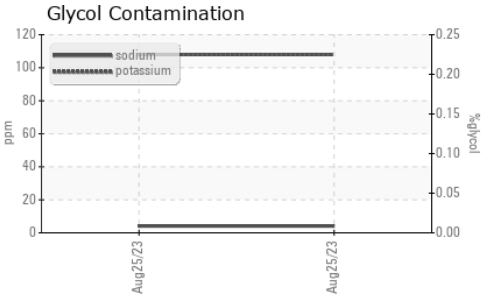
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0.1</b>	---	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>10.9</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>25.5</b>	---	---

## FLUID DEGRADATION

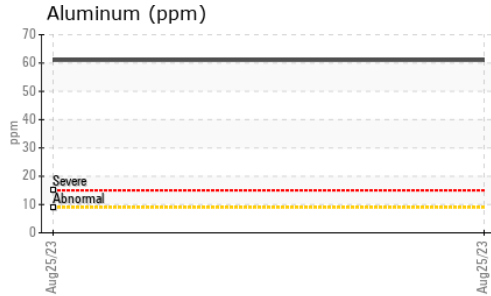
	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>21.2</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>2.6</b>	---	---



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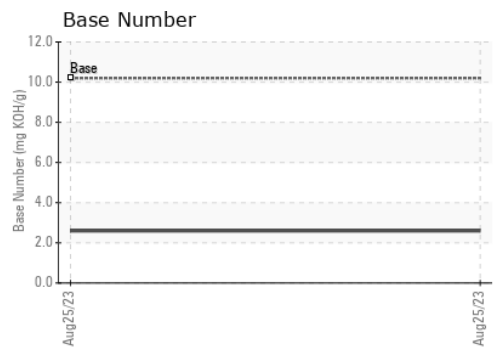
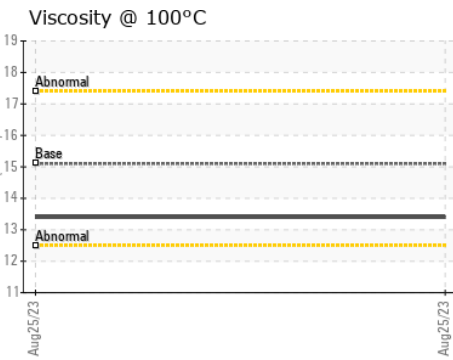
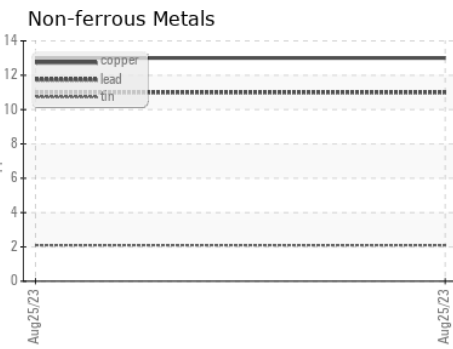
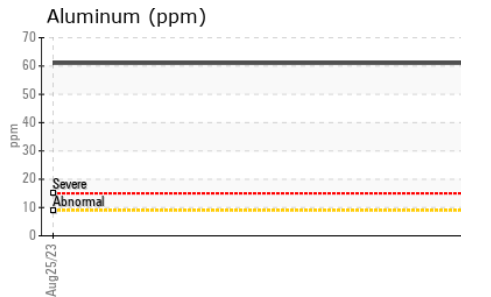
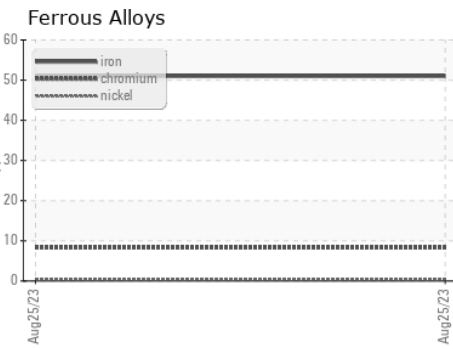
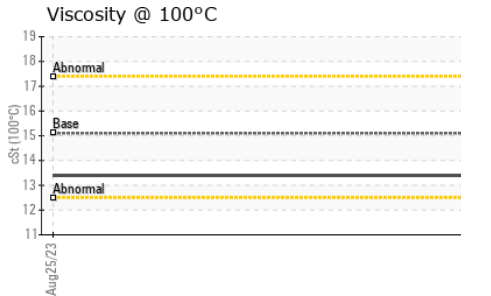


VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	---	---
Free Water	scalar	*Visual		<b>NEG</b>	---	---



FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.1	<b>13.4</b>	---	---

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0090356 **Received** : 30 Aug 2023  
**Lab Number** : **05938125** **Diagnosed** : 31 Aug 2023  
**Unique Number** : 10628737 **Diagnostician** : Don Baldrige  
**Test Package** : FLEET

**GFL Environmental - 963 - Peoria HC Disposal**  
 1113 N. Swords Ave.  
 West Peoria, IL  
 US 61604  
 Contact: Corey Dozard  
 cdozard@gflenv.com

Certificate L2367  
 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)