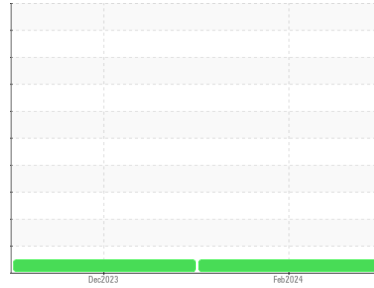




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
(TMV9215)
 Machine Id
934065
 Component
1 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. (Customer Sample Comment: Engine oil sample)

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. No other contaminants were detected in the oil.

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		GFL0103937	GFL0100547	---
Sample Date	Client Info		15 Feb 2024	27 Dec 2023	---
Machine Age	mls	Client Info	1005	585	---
Oil Age	mls	Client Info	1005	585	---
Oil Changed		Client Info	N/A	Changed	---
Sample Status			NORMAL	NORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	---

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>50	17	47	---
Chromium	ppm	ASTM D5185m	>4	1	2	---
Nickel	ppm	ASTM D5185m	>2	<1	2	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>9	29	56	---
Lead	ppm	ASTM D5185m	>30	<1	<1	---
Copper	ppm	ASTM D5185m	>35	3	17	---
Tin	ppm	ASTM D5185m	>4	1	2	---
Vanadium	ppm	ASTM D5185m		<1	<1	---
Cadmium	ppm	ASTM D5185m		0	0	---

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	50	10	11	---
Barium	ppm	ASTM D5185m	5	0	2	---
Molybdenum	ppm	ASTM D5185m	50	52	57	---
Manganese	ppm	ASTM D5185m	0	2	18	---
Magnesium	ppm	ASTM D5185m	560	566	790	---
Calcium	ppm	ASTM D5185m	1510	1523	1201	---
Phosphorus	ppm	ASTM D5185m	780	696	711	---
Zinc	ppm	ASTM D5185m	870	918	922	---
Sulfur	ppm	ASTM D5185m	2040	2295	2349	---

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>+100	8	38	---
Sodium	ppm	ASTM D5185m		6	6	---
Potassium	ppm	ASTM D5185m	>20	93	190	---

INFRA-RED

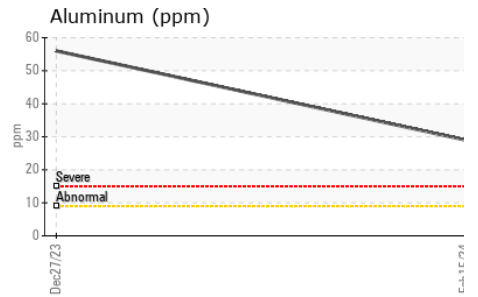
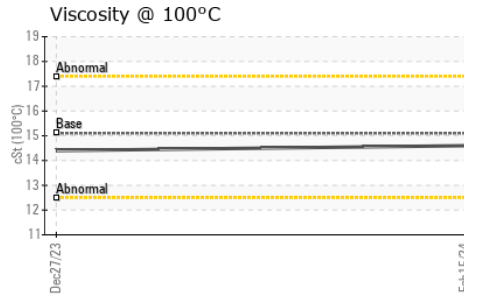
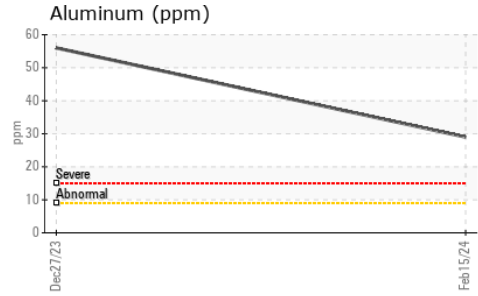
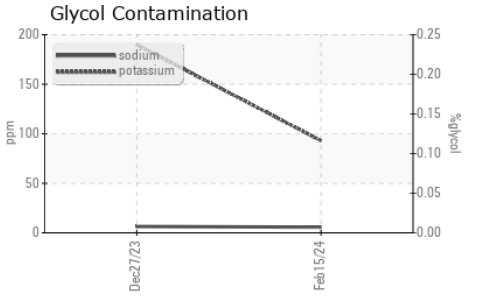
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844		0	0	---
Nitration	Abs/cm	*ASTM D7624	>20	10.4	12.1	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.2	23.7	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.4	21.7	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	5.8	3.8	---



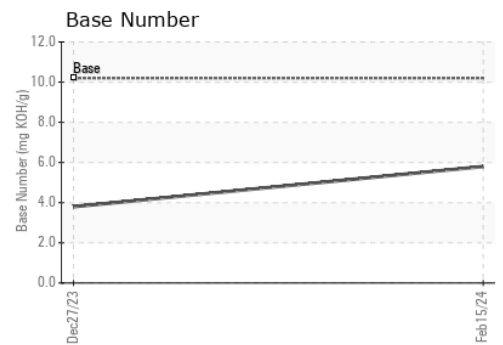
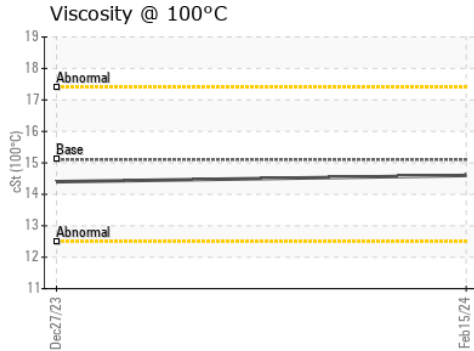
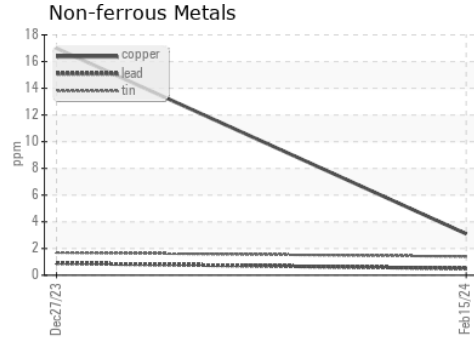
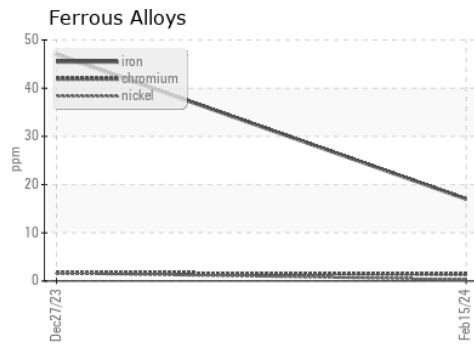
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.6	14.4

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0103937 **Received** : 22 Feb 2024
Lab Number : 06097510 **Tested** : 23 Feb 2024
Unique Number : 10890363 **Diagnosed** : 24 Feb 2024 - Don Baldrige
Test Package : FLEET

GFL Environmental - 865 - East Mount Hauling
 7213 East Mount Houston Road
 Houston, TX
 US 77050
 Contact: TECHNICIAN ACCOUNT
 wcgfldemo@gmail.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)