



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
(TFY1477)

Machine Id
934058

Component
Natural Gas Engine

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

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. (Customer Sample Comment: Engine oil sample)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0103943	GFL0100543	---
Sample Date		Client Info		14 Feb 2024	19 Dec 2023	---
Machine Age	hrs	Client Info		1485	1033	---
Oil Age	hrs	Client Info		1485	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Not Chngd	Changed	---
Filter Changed		Client Info		Not Chngd	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	16	18	---
Chromium	ppm	ASTM D5185m	>4	1	1	---
Nickel	ppm	ASTM D5185m	>2	<1	<1	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>9	28	27	---
Lead	ppm	ASTM D5185m	>30	<1	0	---
Copper	ppm	ASTM D5185m	>35	3	3	---
Tin	ppm	ASTM D5185m	>4	1	2	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

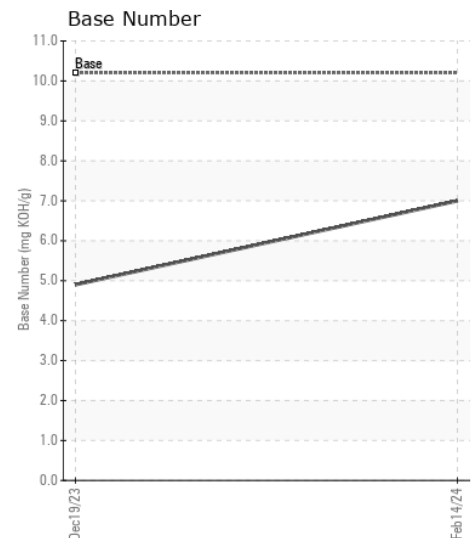
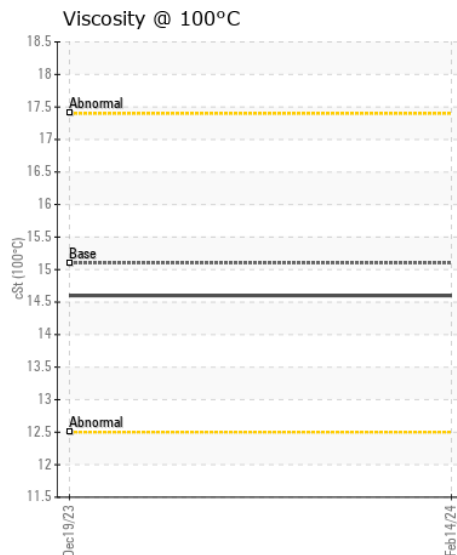
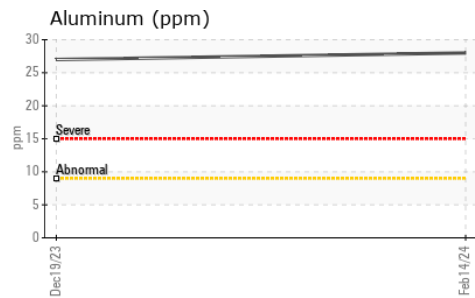
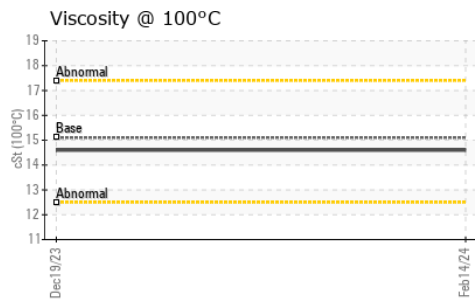
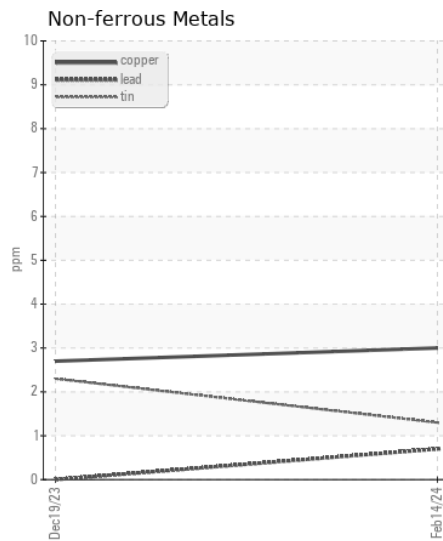
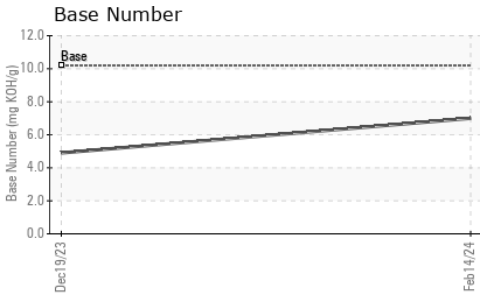
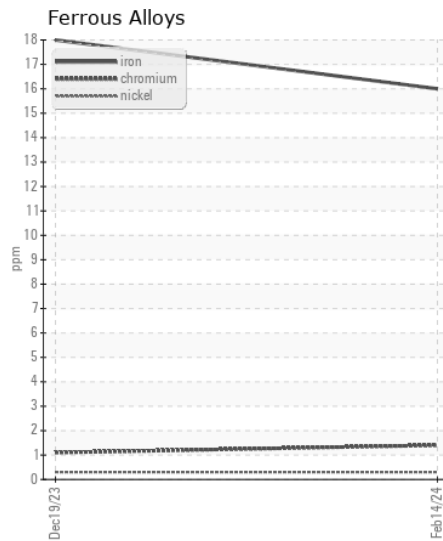
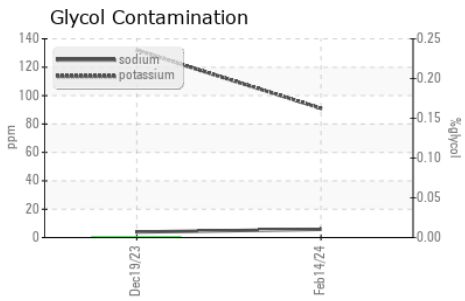
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>+100	11	7	---
Potassium	ppm	ASTM D5185m	>20	91	132	---
Water		WC Method	>0.1	NEG	NEG	---
Glycol		WC Method		---	0.0	---
Soot %	%	*ASTM D7844		0.2	0	---
Nitration	Abs/cm	*ASTM D7624	>20	7.1	10.7	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.2	20.4	---
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	---

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.

Sodium	ppm	ASTM D5185m		6	4	---
Boron	ppm	ASTM D5185m	50	10	10	---
Barium	ppm	ASTM D5185m	5	0	0	---
Molybdenum	ppm	ASTM D5185m	50	52	53	---
Manganese	ppm	ASTM D5185m	0	2	2	---
Magnesium	ppm	ASTM D5185m	560	572	570	---
Calcium	ppm	ASTM D5185m	1510	1513	1431	---
Phosphorus	ppm	ASTM D5185m	780	699	730	---
Zinc	ppm	ASTM D5185m	870	915	980	---
Sulfur	ppm	ASTM D5185m	2040	2303	2393	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.2	17.9	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	7.0	4.9	---
Visc @ 100°C	cSt	ASTM D445	15.1	14.6	14.6	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0103943
Lab Number : 06097513
Unique Number : 10890366
Test Package : FLEET

Received : 22 Feb 2024
Tested : 23 Feb 2024
Diagnosed : 24 Feb 2024 - Don Baldrige

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)

T:
F: