



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
834093

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (29 QTS)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0108087	GFL0102426	---
Sample Date		Client Info		07 Feb 2024	15 Dec 2023	---
Machine Age	hrs	Client Info		255	226	---
Oil Age	hrs	Client Info		226	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Not Changd	N/A	---
Filter Changed		Client Info		Not Changd	N/A	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	53	56	---
Chromium	ppm	ASTM D5185m	>4	2	1	---
Nickel	ppm	ASTM D5185m	>2	1	2	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>9	32	21	---
Lead	ppm	ASTM D5185m	>30	2	<1	---
Copper	ppm	ASTM D5185m	>35	19	21	---
Tin	ppm	ASTM D5185m	>4	2	1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

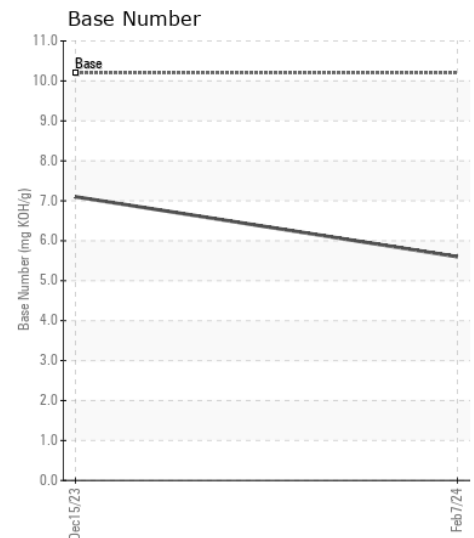
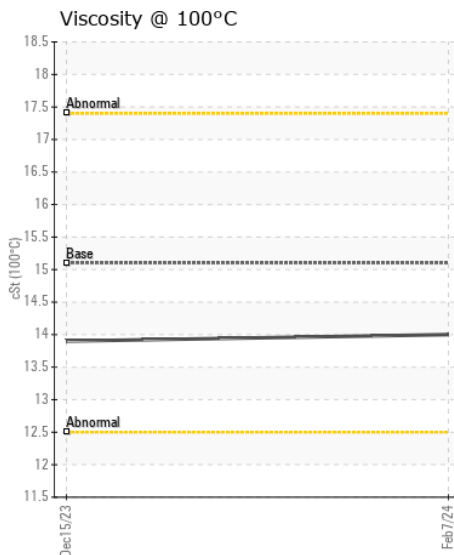
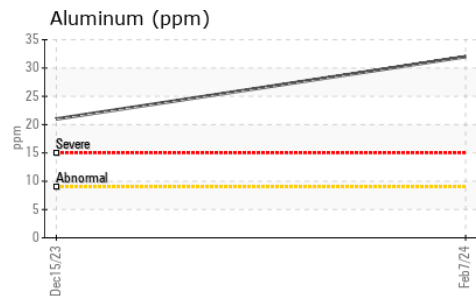
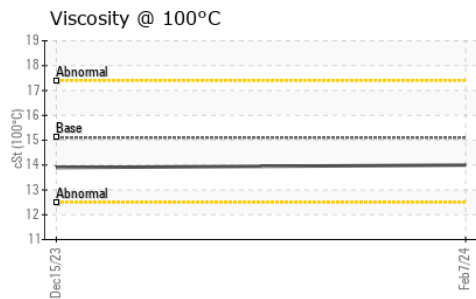
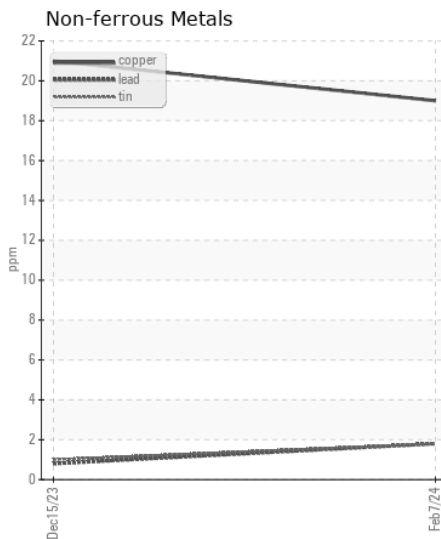
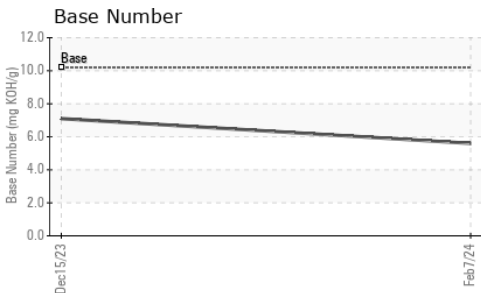
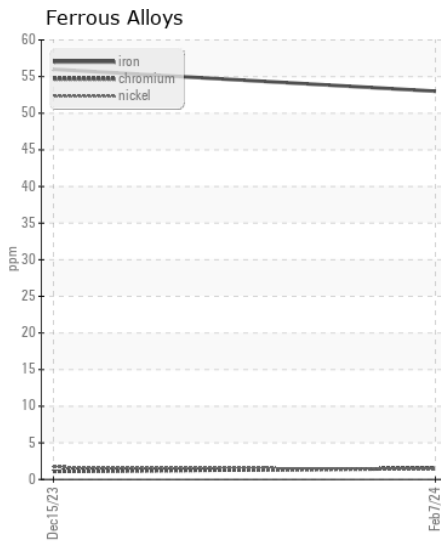
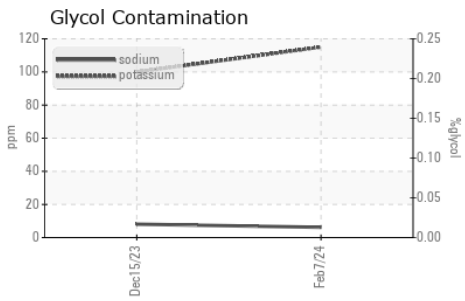
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>+100	39	44	---
Potassium	ppm	ASTM D5185m	>20	115	▲ 100	---
Water		WC Method	>0.1	NEG	NEG	---
Soot %	%	*ASTM D7844		0	0.6	---
Nitration	Abs/cm	*ASTM D7624	>20	10.1	8.5	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.6	20.5	---
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 suitable for further service.

Sodium	ppm	ASTM D5185m		6	8	---
Boron	ppm	ASTM D5185m	50	22	32	---
Barium	ppm	ASTM D5185m	5	3	4	---
Molybdenum	ppm	ASTM D5185m	50	52	53	---
Manganese	ppm	ASTM D5185m	0	14	15	---
Magnesium	ppm	ASTM D5185m	560	778	811	---
Calcium	ppm	ASTM D5185m	1510	1090	1172	---
Phosphorus	ppm	ASTM D5185m	780	730	826	---
Zinc	ppm	ASTM D5185m	870	877	932	---
Sulfur	ppm	ASTM D5185m	2040	2339	2515	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.9	17.3	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	5.6	7.1	---
Visc @ 100°C	cSt	ASTM D445	15.1	14.0	13.9	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : GFL0108087

Lab Number : 06089386

Unique Number : 10876831

Test Package : FLEET

Received : 14 Feb 2024

Tested : 15 Feb 2024

Diagnosed : 16 Feb 2024 - Don Baldrige

GFL Environmental - 836 - Kansas City Hauling

7801 East Truman Road

Kansas City, MO

US 64126

Contact: Christopher Gilkey

cgilkey@gflenv.com

T:

F:

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)