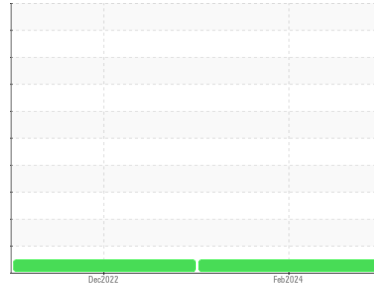




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
849010

Component
Natural Gas Engine

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

DIAGNOSIS

Recommendation

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

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0086723	GFL0065039	---
Sample Date	Client Info	01 Feb 2024	03 Dec 2022	---
Machine Age	hrs Client Info	11211	8822	---
Oil Age	hrs Client Info	11211	8822	---
Oil Changed	Client Info	Changed	Not Changd	---
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	20	19	---
Chromium	ppm ASTM D5185m >4	3	2	---
Nickel	ppm ASTM D5185m >2	<1	0	---
Titanium	ppm ASTM D5185m	0	0	---
Silver	ppm ASTM D5185m >3	0	0	---
Aluminum	ppm ASTM D5185m >9	2	2	---
Lead	ppm ASTM D5185m >30	2	7	---
Copper	ppm ASTM D5185m >35	2	2	---
Tin	ppm ASTM D5185m >4	<1	<1	---
Vanadium	ppm ASTM D5185m	<1	0	---
Cadmium	ppm ASTM D5185m	0	0	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 50	10	73	---
Barium	ppm ASTM D5185m 5	0	2	---
Molybdenum	ppm ASTM D5185m 50	58	61	---
Manganese	ppm ASTM D5185m 0	<1	<1	---
Magnesium	ppm ASTM D5185m 560	614	599	---
Calcium	ppm ASTM D5185m 1510	1583	1793	---
Phosphorus	ppm ASTM D5185m 780	866	831	---
Zinc	ppm ASTM D5185m 870	1022	1056	---
Sulfur	ppm ASTM D5185m 2040	2616	2793	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >+100	9	11	---
Sodium	ppm ASTM D5185m	17	12	---
Potassium	ppm ASTM D5185m >20	8	2	---

INFRA-RED

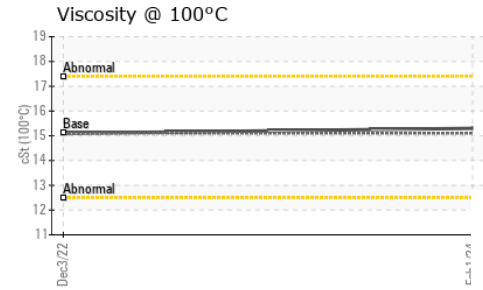
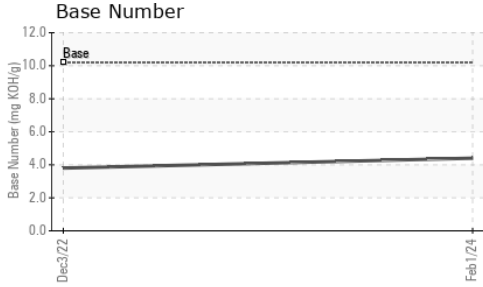
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	0	0.1	---
Nitration	Abs/cm *ASTM D7624 >20	11.8	13.4	---
Sulfation	Abs/.1mm *ASTM D7415 >30	29.2	26.9	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	26.7	22.9	---
Base Number (BN)	mg KOH/g ASTM D2896 10.2	4.4	3.8	---



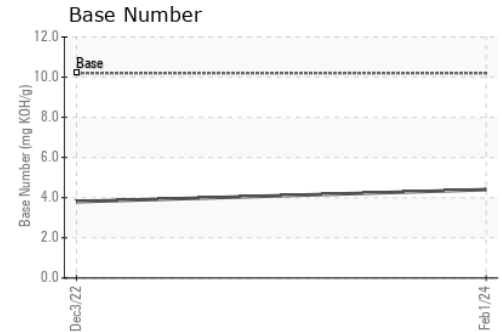
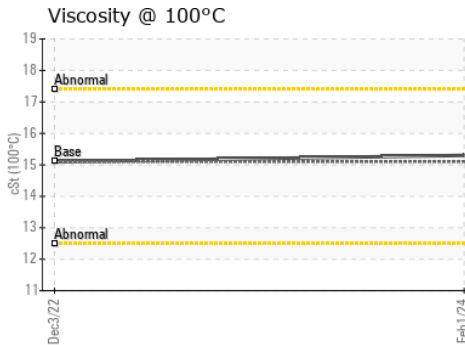
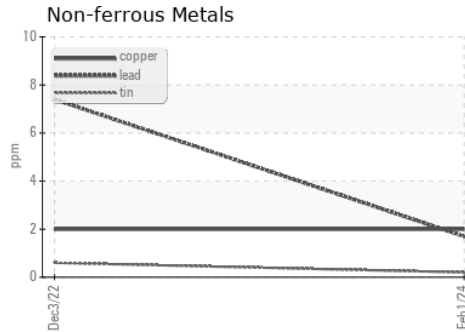
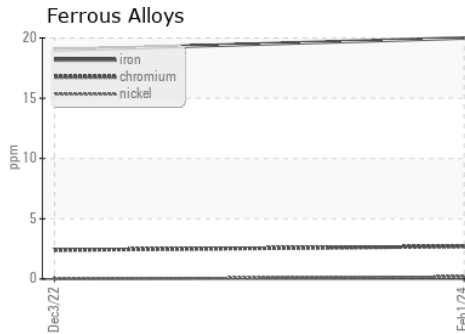
OIL ANALYSIS REPORT



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	15.3	15.1	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0086723
Lab Number : 06081050
Unique Number : 10863141
Test Package : FLEET

Received : 06 Feb 2024
Tested : 06 Feb 2024
Diagnosed : 07 Feb 2024 - Don Baldrige

GFL Environmental - 932 - Muskego HC
 W144 S6400 College Ct.
 Muskego, WI
 US 53150

Contact: Brian Schlomann
 brian.schlomann@gflenv.com

T: (262)510-4586

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)