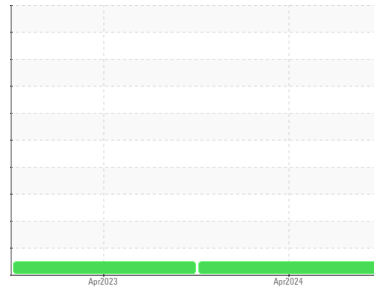




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

847001

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		GFL0108396	GFL0065046	---
Sample Date	Client Info		10 Apr 2024	20 Apr 2023	---
Machine Age	hrs	Client Info	16051	14254	---
Oil Age	hrs	Client Info	16051	14254	---
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	13	17	---
Chromium	ppm	ASTM D5185m >4	2	2	---
Nickel	ppm	ASTM D5185m >2	<1	0	---
Titanium	ppm	ASTM D5185m	<1	0	---
Silver	ppm	ASTM D5185m >3	0	0	---
Aluminum	ppm	ASTM D5185m >9	2	4	---
Lead	ppm	ASTM D5185m >30	<1	<1	---
Copper	ppm	ASTM D5185m >35	212	<1	---
Tin	ppm	ASTM D5185m >4	<1	<1	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	<1	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	12	7	---
Barium	ppm	ASTM D5185m 5	0	0	---
Molybdenum	ppm	ASTM D5185m 50	57	59	---
Manganese	ppm	ASTM D5185m 0	<1	<1	---
Magnesium	ppm	ASTM D5185m 560	556	619	---
Calcium	ppm	ASTM D5185m 1510	1687	1808	---
Phosphorus	ppm	ASTM D5185m 780	773	765	---
Zinc	ppm	ASTM D5185m 870	980	1042	---
Sulfur	ppm	ASTM D5185m 2040	2642	2772	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	17	5	---
Sodium	ppm	ASTM D5185m	26	10	---
Potassium	ppm	ASTM D5185m >20	4	0	---
Glycol	%	*ASTM D2982	0.0	---	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0	0	---
Nitration	Abs/cm	*ASTM D7624 >20	11.1	13.1	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	21.9	24.5	---

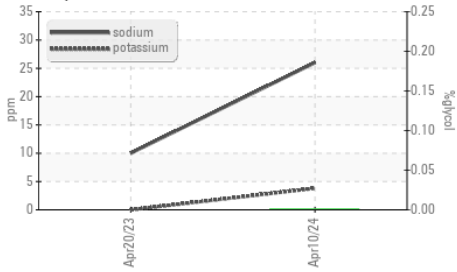
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	18.5	19.9	---
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	4.5	4.3	---

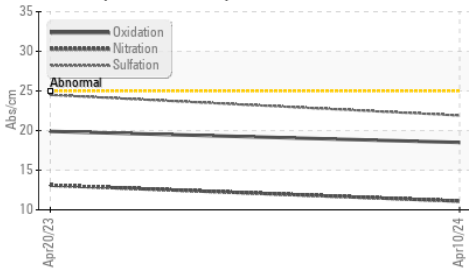


OIL ANALYSIS REPORT

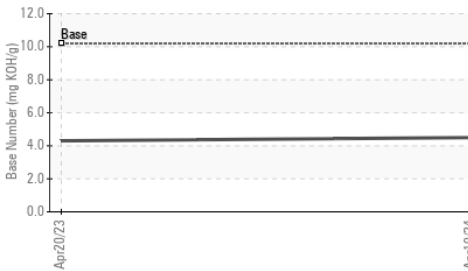
Glycol Contamination



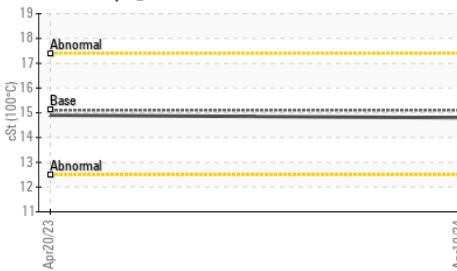
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

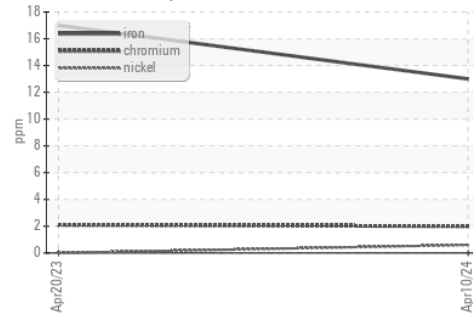


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

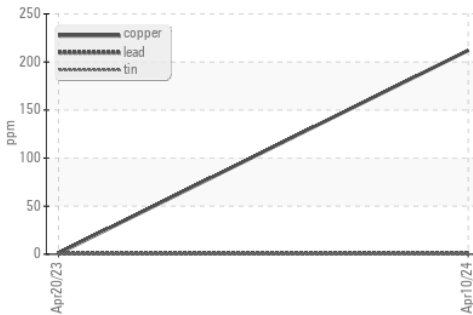
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.8	14.9

GRAPHS

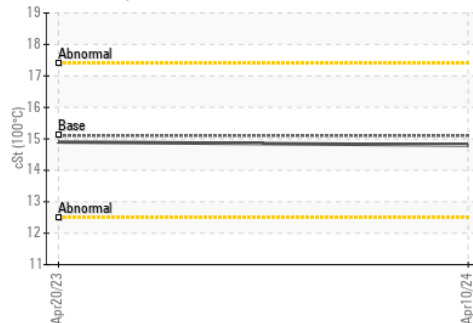
Ferrous Alloys



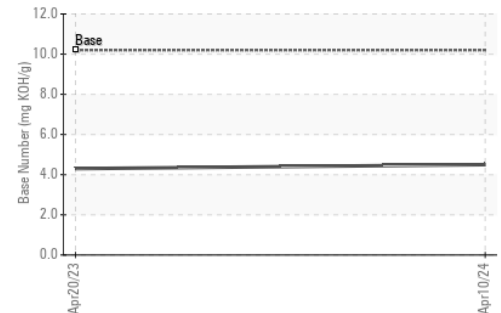
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0108396
Lab Number : **06148454**
Unique Number : 10978532
Test Package : FLEET (Additional Tests: Glycol)

Received : 15 Apr 2024
Tested : 17 Apr 2024
Diagnosed : 17 Apr 2024 - Wes Davis

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

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)

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 T: (262)510-4586

F: