



OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
734025

Component
Natural Gas Engine

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

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

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. 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		GFL0117750	---	---
Sample Date	Client Info		10 Apr 2024	---	---
Machine Age	hrs	Client Info	597	---	---
Oil Age	hrs	Client Info	597	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			NORMAL	---	---

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	40	---
Chromium	ppm	ASTM D5185m	>4	2	---
Nickel	ppm	ASTM D5185m	>2	2	---
Titanium	ppm	ASTM D5185m		<1	---
Silver	ppm	ASTM D5185m	>3	0	---
Aluminum	ppm	ASTM D5185m	>9	10	---
Lead	ppm	ASTM D5185m	>30	2	---
Copper	ppm	ASTM D5185m	>35	19	---
Tin	ppm	ASTM D5185m	>4	2	---
Vanadium	ppm	ASTM D5185m		0	---
Cadmium	ppm	ASTM D5185m		<1	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	14	---
Barium	ppm	ASTM D5185m	5	0	---
Molybdenum	ppm	ASTM D5185m	50	55	---
Manganese	ppm	ASTM D5185m	0	12	---
Magnesium	ppm	ASTM D5185m	560	687	---
Calcium	ppm	ASTM D5185m	1510	1215	---
Phosphorus	ppm	ASTM D5185m	780	675	---
Zinc	ppm	ASTM D5185m	870	898	---
Sulfur	ppm	ASTM D5185m	2040	2549	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+100	34	---
Sodium	ppm	ASTM D5185m		5	---
Potassium	ppm	ASTM D5185m	>20	57	---

INFRA-RED

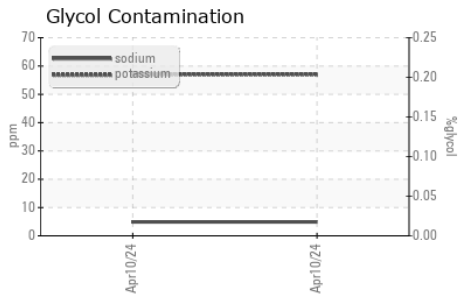
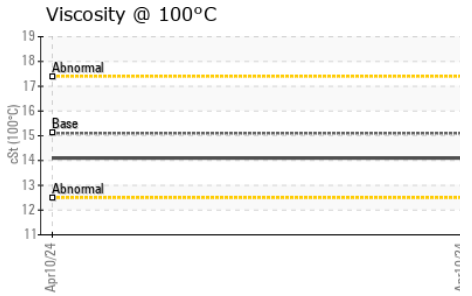
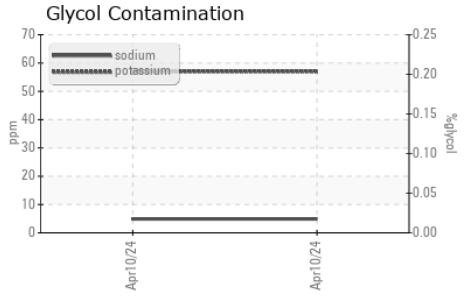
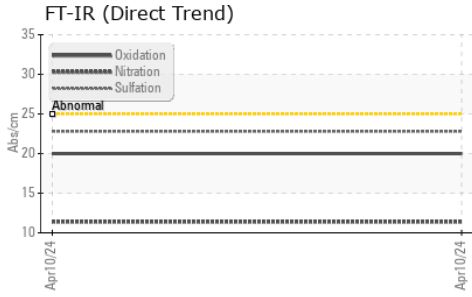
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0	---
Nitration	Abs/cm	*ASTM D7624	>20	11.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.8	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.0	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	4.1	---



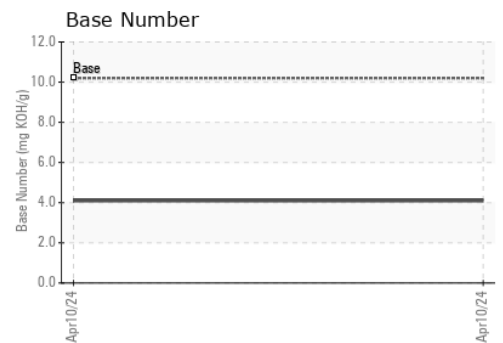
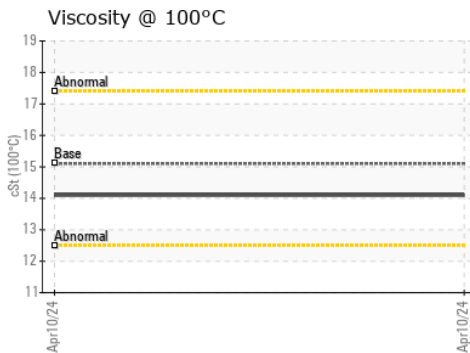
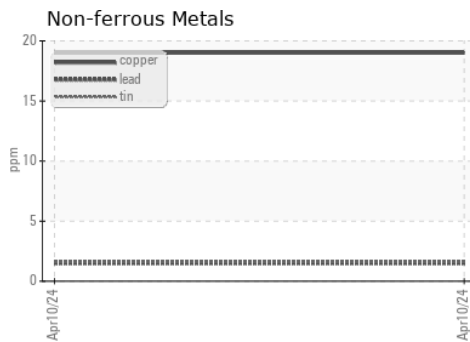
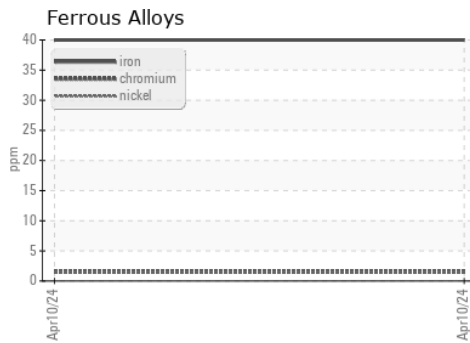
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.1	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0117750
Lab Number : 06155134
Unique Number : 10990557
Test Package : FLEET (Additional Tests: Glycol)

Received : 19 Apr 2024
Tested : 24 Apr 2024
Diagnosed : 24 Apr 2024 - Sean Felton

GFL Environmental - 865 - East Mount Hauling
 7213 East Mount Houston Road
 Houston, TX
 US 77050

Contact: Saul Castillo
 saul.castillo@gflenv.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)

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F: