



OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

514092

Component

Diesel Engine

Fluid

AC DELCO 10W30 MOTOR OIL (--- 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

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 acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0110956	---	---
Sample Date	Client Info		05 Apr 2024	---	---
Machine Age	hrs	Client Info	578	---	---
Oil Age	hrs	Client Info	578	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			NORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	---	---
Water	WC Method	>0.2	NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	43	---	---
Chromium	ppm	ASTM D5185m >20	2	---	---
Nickel	ppm	ASTM D5185m >4	1	---	---
Titanium	ppm	ASTM D5185m	<1	---	---
Silver	ppm	ASTM D5185m >3	<1	---	---
Aluminum	ppm	ASTM D5185m >20	9	---	---
Lead	ppm	ASTM D5185m >40	2	---	---
Copper	ppm	ASTM D5185m >330	42	---	---
Tin	ppm	ASTM D5185m >15	2	---	---
Vanadium	ppm	ASTM D5185m	<1	---	---
Cadmium	ppm	ASTM D5185m	<1	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	67	---	---
Barium	ppm	ASTM D5185m	6	---	---
Molybdenum	ppm	ASTM D5185m	12	---	---
Manganese	ppm	ASTM D5185m	6	---	---
Magnesium	ppm	ASTM D5185m	751	---	---
Calcium	ppm	ASTM D5185m	1351	---	---
Phosphorus	ppm	ASTM D5185m	729	---	---
Zinc	ppm	ASTM D5185m	876	---	---
Sulfur	ppm	ASTM D5185m	2969	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	50	---	---
Sodium	ppm	ASTM D5185m	4	---	---
Potassium	ppm	ASTM D5185m >20	40	---	---
Glycol	%	*ASTM D2982	NEG	---	---

INFRA-RED

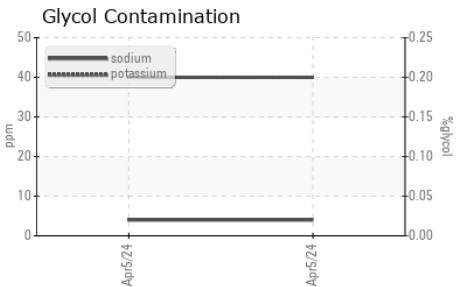
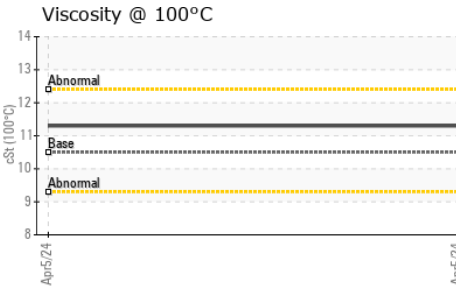
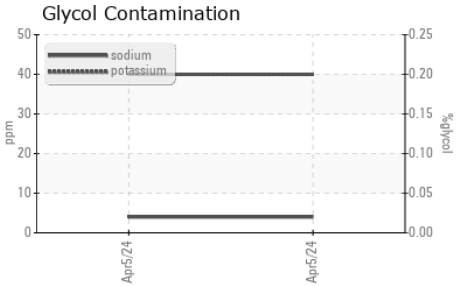
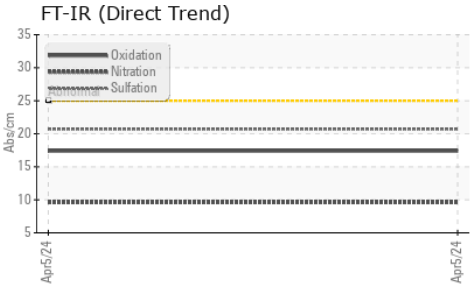
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.2	---	---
Nitration	Abs/cm	*ASTM D7624 >20	9.6	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	20.7	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	17.4	---	---
Base Number (BN)	mg KOH/g	ASTM D2896 5.0	6.3	---	---



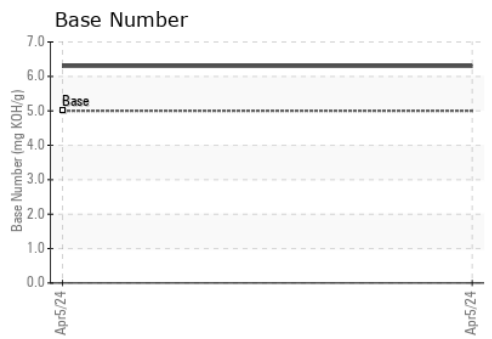
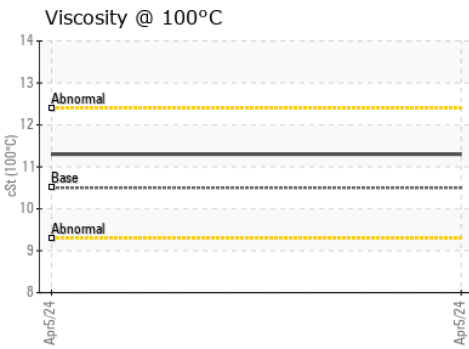
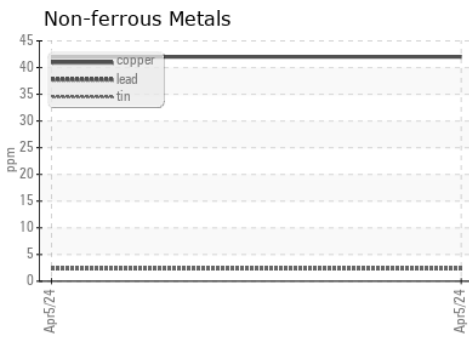
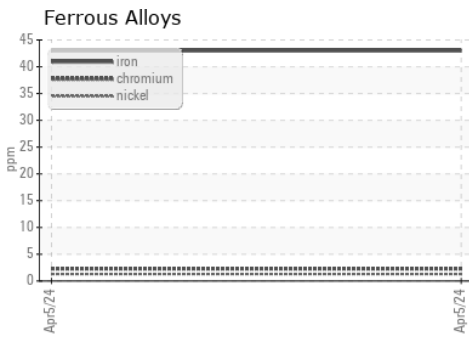
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PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	10.5	11.3	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0110956 **Received** : 10 Apr 2024
Lab Number : 06144047 **Tested** : 12 Apr 2024
Unique Number : 10968855 **Diagnosed** : 12 Apr 2024 - Jonathan Hester
Test Package : FLEET (Additional Tests: Glycol)

GFL Environmental - 629 - Northern A1
 3947 US 131 N
 Kalkaska, MI
 US 49646-8428
 Contact: MITCH HERSHBERGER

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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