



OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
446028
 Component
Diesel Engine
 Fluid
{not provided} (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.
 Please specify the brand, type, and viscosity of the oil on your next sample.

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 acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0113034	---	---
Sample Date	Client Info	06 Mar 2024	---	---
Machine Age	hrs Client Info	20662	---	---
Oil Age	hrs Client Info	0	---	---
Oil Changed	Client Info	N/A	---	---
Sample Status		NORMAL	---	---

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >3.0	<1.0	---	---
Water	WC Method >0.2	NEG	---	---
Glycol	WC Method	NEG	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >165	57	---	---
Chromium	ppm ASTM D5185m >5	5	---	---
Nickel	ppm ASTM D5185m >4	<1	---	---
Titanium	ppm ASTM D5185m >2	0	---	---
Silver	ppm ASTM D5185m >2	0	---	---
Aluminum	ppm ASTM D5185m >20	10	---	---
Lead	ppm ASTM D5185m >150	<1	---	---
Copper	ppm ASTM D5185m >90	8	---	---
Tin	ppm ASTM D5185m >5	<1	---	---
Vanadium	ppm ASTM D5185m	<1	---	---
Cadmium	ppm ASTM D5185m	0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	10	---	---
Barium	ppm ASTM D5185m	0	---	---
Molybdenum	ppm ASTM D5185m	64	---	---
Manganese	ppm ASTM D5185m	1	---	---
Magnesium	ppm ASTM D5185m	608	---	---
Calcium	ppm ASTM D5185m	1822	---	---
Phosphorus	ppm ASTM D5185m	707	---	---
Zinc	ppm ASTM D5185m	975	---	---
Sulfur	ppm ASTM D5185m	2231	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >35	15	---	---
Sodium	ppm ASTM D5185m	9	---	---
Potassium	ppm ASTM D5185m >20	<1	---	---

INFRA-RED

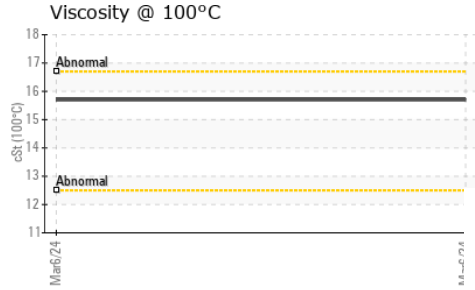
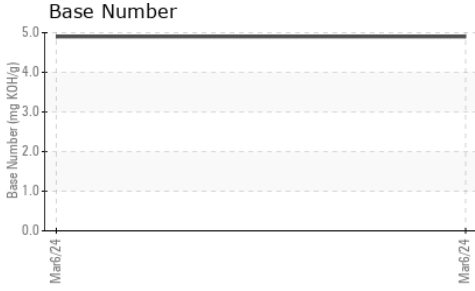
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >7.5	0.1	---	---
Nitration	Abs/cm *ASTM D7624 >20	12.4	---	---
Sulfation	Abs/.1mm *ASTM D7415 >30	23.2	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	20.9	---	---
Base Number (BN)	mg KOH/g ASTM D2896	4.9	---	---



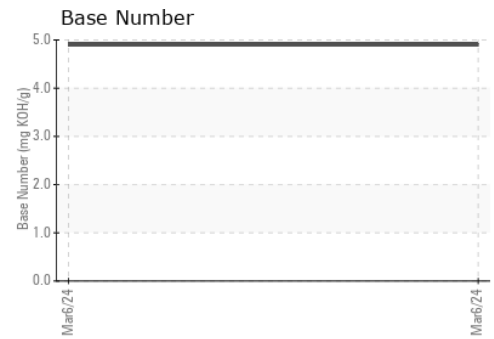
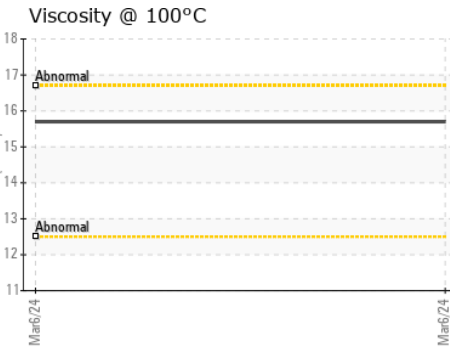
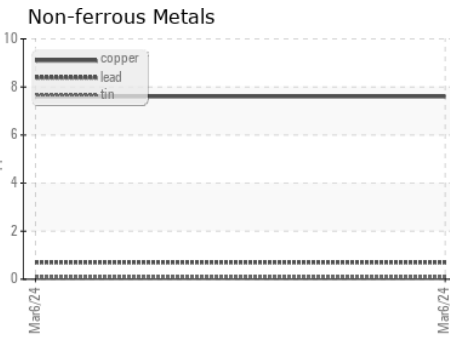
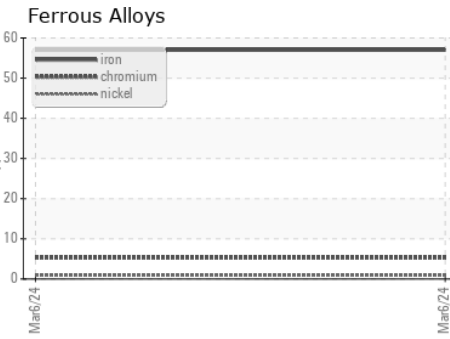
OIL ANALYSIS REPORT



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	>0.2	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.7	---	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0113034
Lab Number : 06111896
Unique Number : 10915393
Test Package : FLEET

Received : 07 Mar 2024
Tested : 08 Mar 2024
Diagnosed : 10 Mar 2024 - Don Baldrige

GFL Environmental - 924 - Madison HC
 300 Raemisch Road
 Waunakee, WI
 US 53597
 Contact: Ben Briggs
 ben.briggs@gflenv.com
 T: (608)770-9196
 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)