



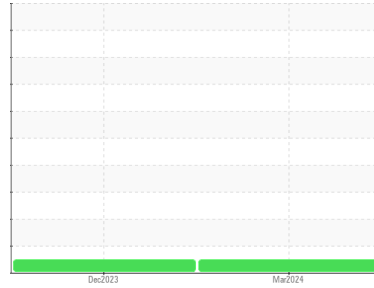
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
(YA154629)
Machine Id
10981
Component
Diesel Engine
Fluid
NOT GIVEN (--- 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 suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			GFL0116380	GFL0098777	---
Sample Date	Client Info			28 Mar 2024	15 Dec 2023	---
Machine Age	hrs	Client Info		0	0	---
Oil Age	hrs	Client Info		0	0	---
Oil Changed	Client Info			N/A	N/A	---
Sample Status				NORMAL	NORMAL	---

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>75	5	9	---
Chromium	ppm	ASTM D5185m	>5	<1	<1	---
Nickel	ppm	ASTM D5185m	>4	<1	0	---
Titanium	ppm	ASTM D5185m	>2	0	0	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>15	3	3	---
Lead	ppm	ASTM D5185m	>25	0	0	---
Copper	ppm	ASTM D5185m	>100	36	5	---
Tin	ppm	ASTM D5185m	>4	0	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
Cadmium	ppm	ASTM D5185m		0	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		48	12	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		74	57	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		201	883	---
Calcium	ppm	ASTM D5185m		1808	965	---
Phosphorus	ppm	ASTM D5185m		968	942	---
Zinc	ppm	ASTM D5185m		1136	1116	---
Sulfur	ppm	ASTM D5185m		3943	2656	---

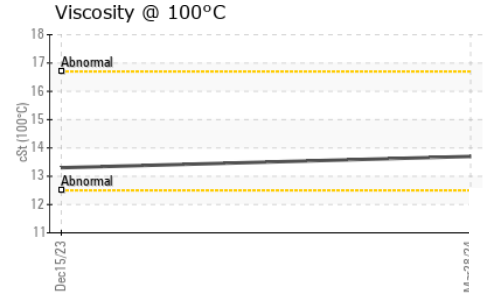
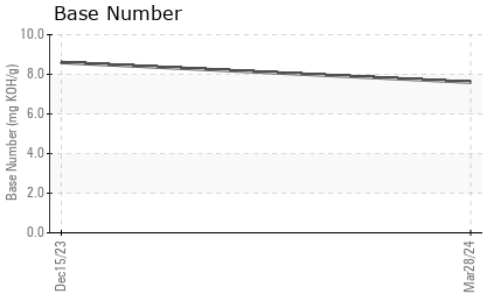
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	10	6	---
Sodium	ppm	ASTM D5185m		77	30	---
Potassium	ppm	ASTM D5185m	>20	12	3	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>6	0.1	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	7.1	5.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	16.9	17.0	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.8	12.8	---
Base Number (BN)	mg KOH/g	ASTM D2896		7.6	8.6	---



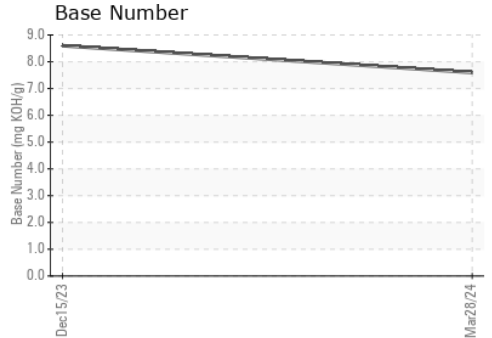
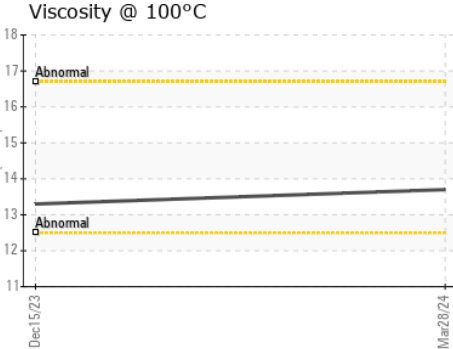
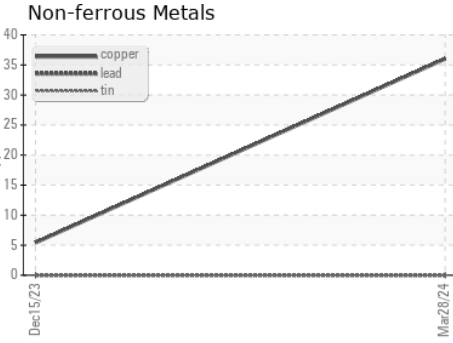
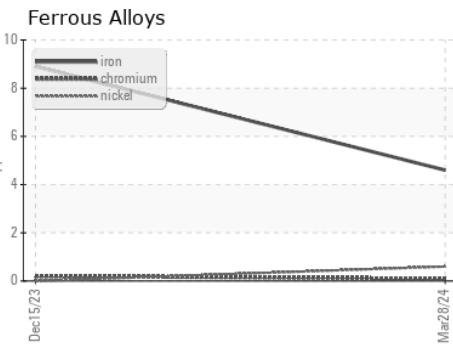
OIL ANALYSIS REPORT



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	13.7	13.3	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0116380
Lab Number : **06132975**
Unique Number : 10952440
Test Package : FLEET

Received : 29 Mar 2024
Tested : 31 Mar 2024
Diagnosed : 31 Mar 2024 - Wes Davis

GFL Environmental - 19DR - Deep Run/TriEast
 2287 Leslie R Stroud Road
 Kinston, NC
 US 28504-9477
 Contact: Spencer Ligon
 spencer.ligon@gflenv.com
 T: (800)207-6618
 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)