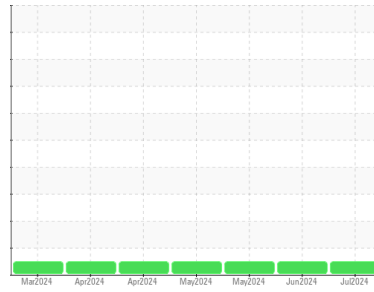




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
834009
 Component
Natural Gas Engine
 Fluid
{not provided} (--- GAL)

DIAGNOSIS

Recommendation

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

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 suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0127189	GFL0122080	GFL0116589
Sample Date	Client Info	11 Jul 2024	14 Jun 2024	21 May 2024
Machine Age	hrs	988	817	651
Oil Age	hrs	822	166	651
Oil Changed	Client Info	Not Chngd	Not Chngd	Changed
Sample Status		NORMAL	NORMAL	NORMAL

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >50	50	45	50
Chromium	ppm ASTM D5185m >4	2	1	2
Nickel	ppm ASTM D5185m >2	2	2	2
Titanium	ppm ASTM D5185m	<1	<1	<1
Silver	ppm ASTM D5185m >3	<1	<1	1
Aluminum	ppm ASTM D5185m >9	7	8	8
Lead	ppm ASTM D5185m >30	2	2	2
Copper	ppm ASTM D5185m >35	18	16	20
Tin	ppm ASTM D5185m >4	2	2	2
Vanadium	ppm ASTM D5185m	<1	<1	<1
Cadmium	ppm ASTM D5185m	0	0	<1

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	6	9	8
Barium	ppm ASTM D5185m	4	4	3
Molybdenum	ppm ASTM D5185m	67	59	62
Manganese	ppm ASTM D5185m	13	13	14
Magnesium	ppm ASTM D5185m	845	897	838
Calcium	ppm ASTM D5185m	1494	1406	1440
Phosphorus	ppm ASTM D5185m	765	868	768
Zinc	ppm ASTM D5185m	1078	1081	1037
Sulfur	ppm ASTM D5185m	2260	3041	2615

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >+100	25	27	32
Sodium	ppm ASTM D5185m	<1	6	4
Potassium	ppm ASTM D5185m >20	16	16	17

INFRA-RED

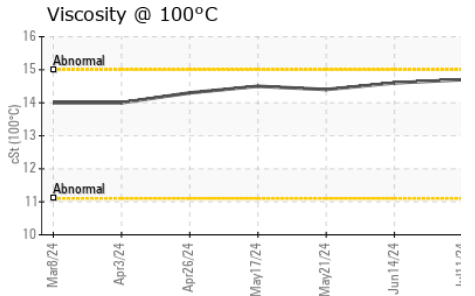
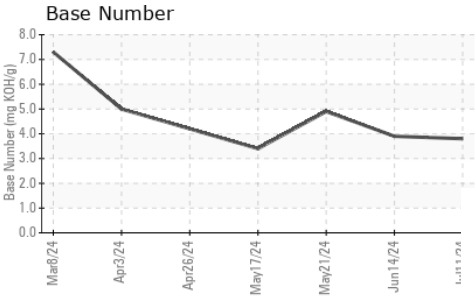
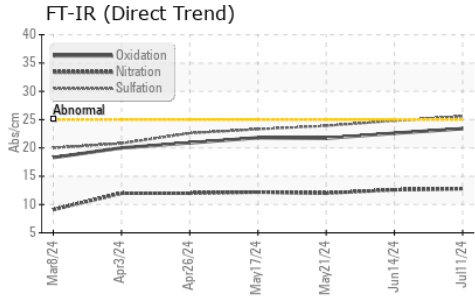
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	0	0	0.4
Nitration	Abs/cm *ASTM D7624 >20	12.8	12.6	12.0
Sulfation	Abs/.1mm *ASTM D7415 >30	25.6	24.8	23.9

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	23.4	22.6	21.7
Base Number (BN)	mg KOH/g ASTM D2896	3.8	3.9	4.9



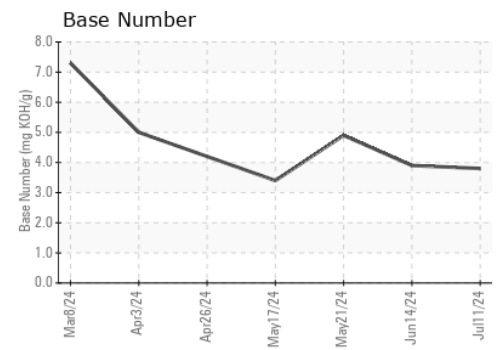
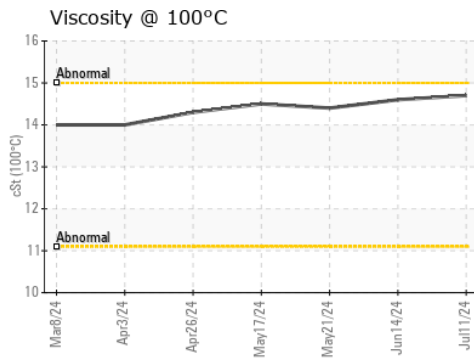
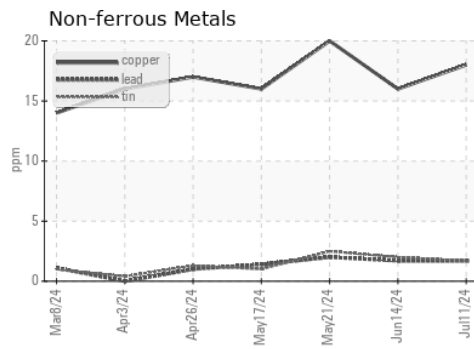
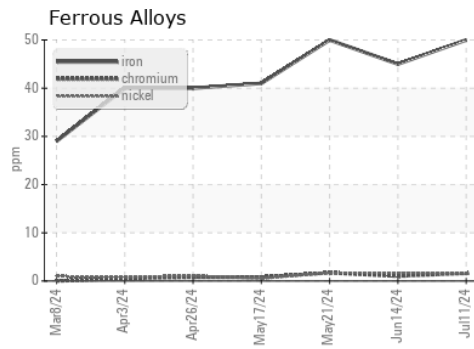
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.7	14.6	14.4

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0127189
Lab Number : 06235560
Unique Number : 11124394
Test Package : FLEET
Received : 15 Jul 2024
Tested : 15 Jul 2024
Diagnosed : 15 Jul 2024 - Wes Davis

GFL Environmental - 652 - Fredericksburg Hauling
 10954 Houser Drive
 Fredericksburg, VA
 US 22408
 Contact: WILLIAM MILO
 wmilo@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)