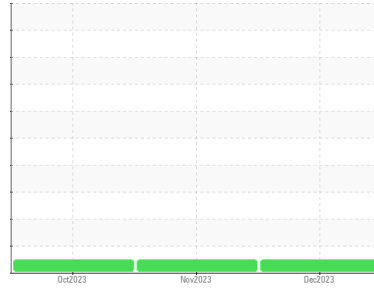




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
834050
 Component
Natural Gas 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

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		GFL0102513	GFL0098641	GFL0098665
Sample Date	Client Info		12 Dec 2023	20 Nov 2023	26 Oct 2023
Machine Age	hrs	Client Info	525	393	264
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	Not Changd	Not Changd
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	53	61	54
Chromium	ppm	ASTM D5185m >5	<1	<1	<1
Nickel	ppm	ASTM D5185m >4	2	2	1
Titanium	ppm	ASTM D5185m >5	0	<1	<1
Silver	ppm	ASTM D5185m >3	<1	<1	0
Aluminum	ppm	ASTM D5185m >25	3	2	3
Lead	ppm	ASTM D5185m >40	<1	1	1
Copper	ppm	ASTM D5185m >150	17	20	17
Tin	ppm	ASTM D5185m >4	1	2	1
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	<1	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	23	16	22
Barium	ppm	ASTM D5185m	3	0	2
Molybdenum	ppm	ASTM D5185m	65	51	50
Manganese	ppm	ASTM D5185m	9	10	9
Magnesium	ppm	ASTM D5185m	753	699	688
Calcium	ppm	ASTM D5185m	1053	985	921
Phosphorus	ppm	ASTM D5185m	745	627	744
Zinc	ppm	ASTM D5185m	948	862	862
Sulfur	ppm	ASTM D5185m	2475	2391	2590

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	29	35	33
Sodium	ppm	ASTM D5185m	5	<1	4
Potassium	ppm	ASTM D5185m >20	3	3	4

INFRA-RED

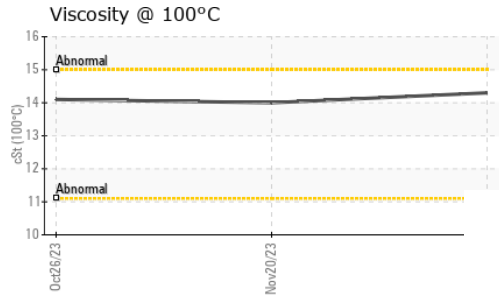
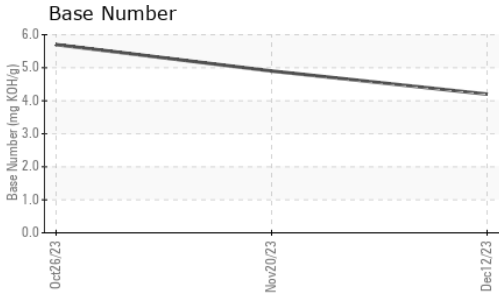
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0	0	0
Nitration	Abs/cm	*ASTM D7624 >20	10.6	11.5	9.7
Sulfation	Abs/.1mm	*ASTM D7415 >30	21.7	21.0	19.6

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	19.6	19.6	18.1
Base Number (BN)	mg KOH/g	ASTM D2896	4.2	4.9	5.7



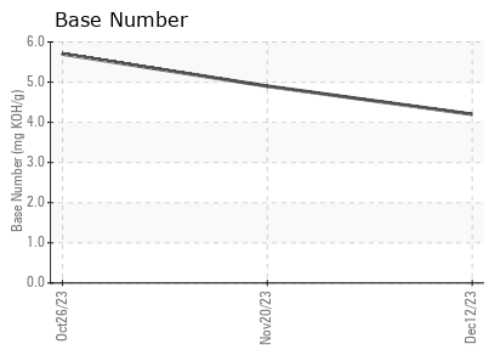
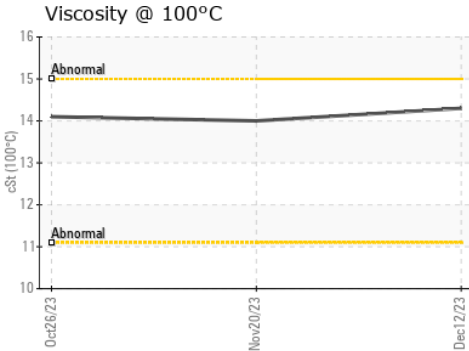
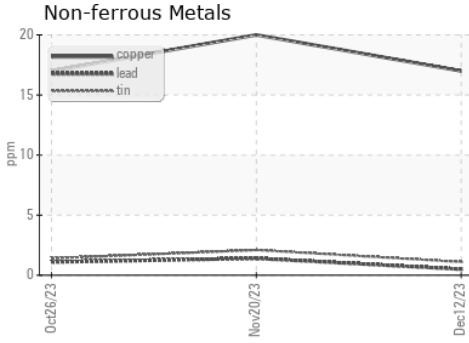
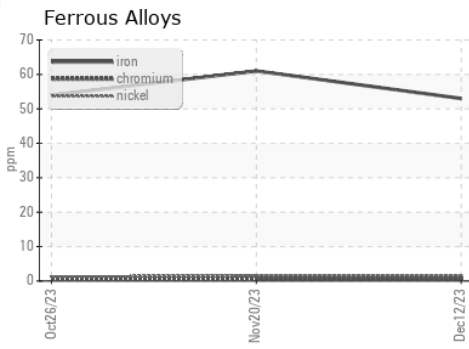
OIL ANALYSIS REPORT



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	14.3	14.0	14.1

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0102513 **Received** : 22 Dec 2023
Lab Number : **06043773** **Diagnosed** : 27 Dec 2023
Unique Number : 10804381 **Diagnostician** : Wes Davis
Test Package : FLEET

GFL Environmental - 837 - Harrison TS
 22820 S State Route 291
 Harrisonville, MO
 US 64701
 Contact: BRYAN SWANSON
 bryanswanson@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)