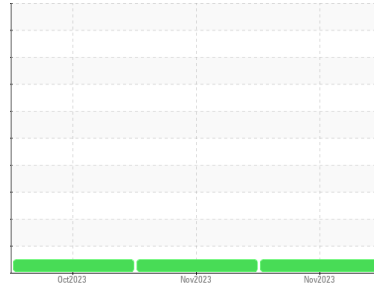




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
834055
 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	GFL0102556	GFL0098585	GFL0098653	
Sample Date	Client Info	29 Nov 2023	21 Nov 2023	26 Oct 2023	
Machine Age	hrs	Client Info	585	532	393
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info	Not Changed	N/A	N/A	
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	47	48	42
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	2	1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	<1	<1
Aluminum	ppm	ASTM D5185m	>9	4	2	3
Lead	ppm	ASTM D5185m	>30	<1	1	2
Copper	ppm	ASTM D5185m	>35	21	24	19
Tin	ppm	ASTM D5185m	>4	1	2	2
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	<1	0

ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m		6	8	15
Barium	ppm	ASTM D5185m		0	0	3
Molybdenum	ppm	ASTM D5185m		51	53	50
Manganese	ppm	ASTM D5185m		12	14	12
Magnesium	ppm	ASTM D5185m		740	772	791
Calcium	ppm	ASTM D5185m		1127	1216	1159
Phosphorus	ppm	ASTM D5185m		632	613	685
Zinc	ppm	ASTM D5185m		869	892	929
Sulfur	ppm	ASTM D5185m		2324	2372	2411

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>+100	32	37	32
Sodium	ppm	ASTM D5185m		4	<1	3
Potassium	ppm	ASTM D5185m	>20	4	3	3

INFRA-RED

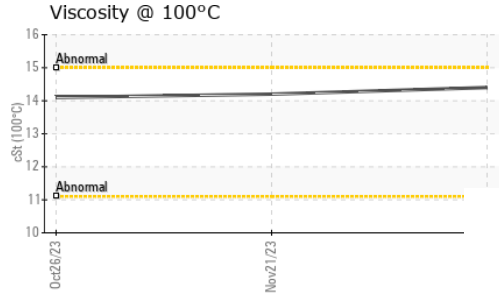
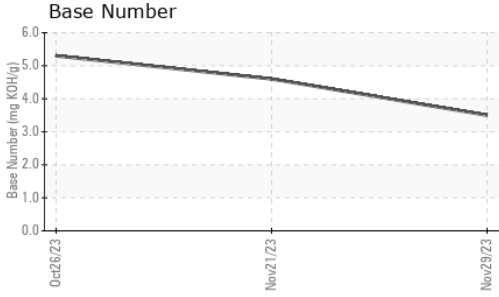
method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	12.6	12.7	11.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.1	22.5	20.9

FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.7	20.9	19.7
Base Number (BN)	mg KOH/g	ASTM D2896		3.5	4.6	5.3



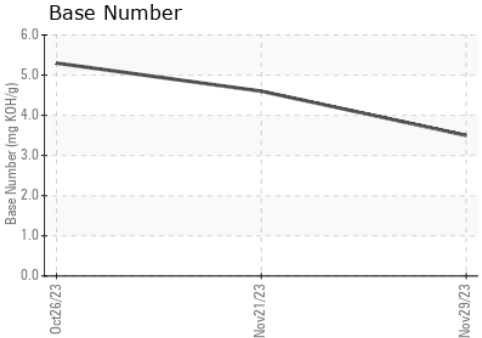
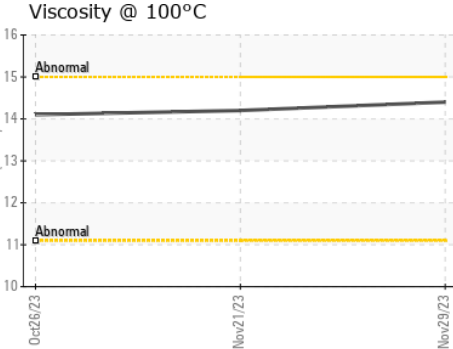
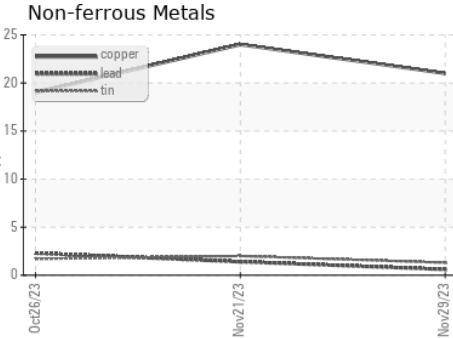
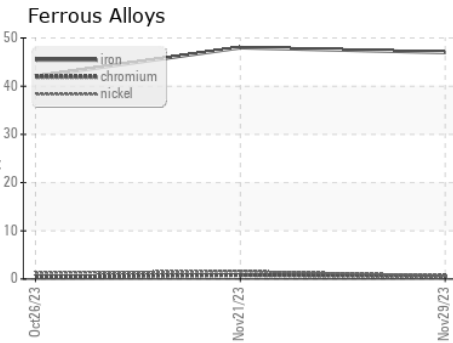
OIL ANALYSIS REPORT



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	14.4	14.2	14.1

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0102556 **Received** : 11 Dec 2023
Lab Number : **06031262** **Diagnosed** : 13 Dec 2023
Unique Number : 10781053 **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)

T:
F: