



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
834029
Component
Natural Gas Engine
Fluid
{not provided} (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0108250	GFL0098237	GFL0098042
Sample Date		Client Info		09 Feb 2024	06 Jan 2024	03 Jan 2024
Machine Age	hrs	Client Info		1402	1402	0
Oil Age	hrs	Client Info		1402	1402	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Chngd	N/A	N/A
Filter Changed		Client Info		Not Chngd	N/A	N/A
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	14	14	36
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	1	<1	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>9	2	1	2
Lead	ppm	ASTM D5185m	>30	1	<1	2
Copper	ppm	ASTM D5185m	>35	4	3	15
Tin	ppm	ASTM D5185m	>4	1	<1	2
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

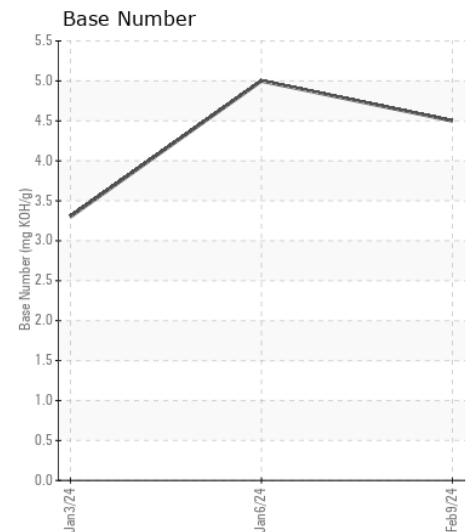
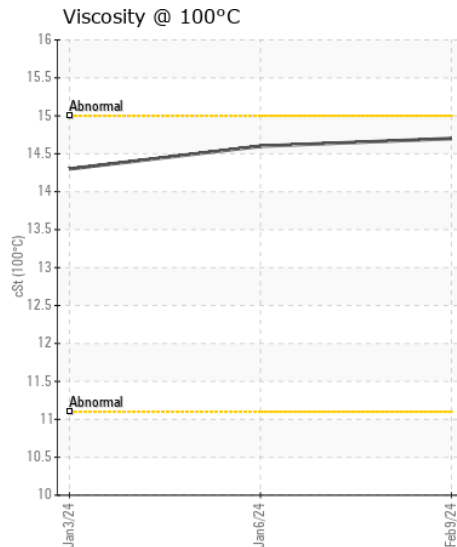
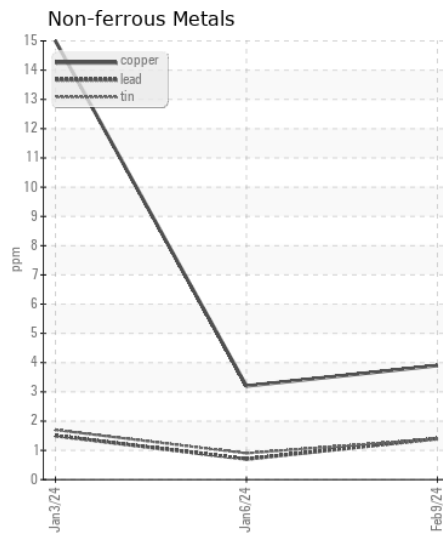
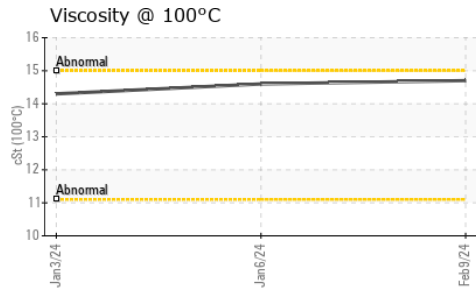
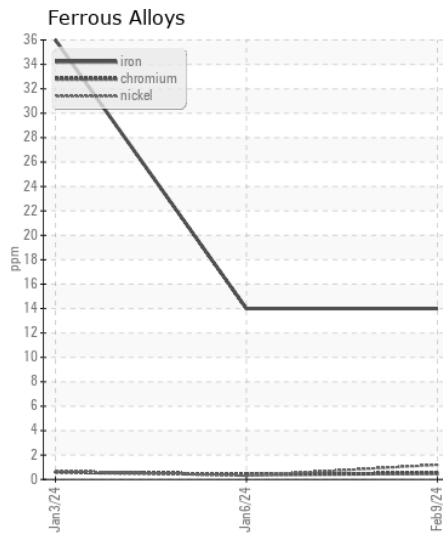
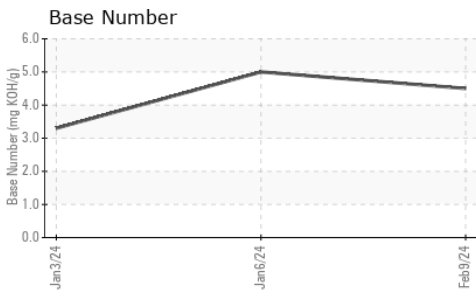
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>+100	6	8	▲ 30
Potassium	ppm	ASTM D5185m	>20	2	<1	1
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	11.0	11.4	13.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.6	20.5	25.2
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG

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.

Sodium	ppm	ASTM D5185m		4	6	5
Boron	ppm	ASTM D5185m		11	9	6
Barium	ppm	ASTM D5185m		14	0	2
Molybdenum	ppm	ASTM D5185m		51	52	53
Manganese	ppm	ASTM D5185m		2	2	13
Magnesium	ppm	ASTM D5185m		527	592	817
Calcium	ppm	ASTM D5185m		1453	1541	1270
Phosphorus	ppm	ASTM D5185m		709	746	695
Zinc	ppm	ASTM D5185m		888	971	903
Sulfur	ppm	ASTM D5185m		2565	2384	2182
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.0	18.3	23.5
Base Number (BN)	mg KOH/g	ASTM D2896		4.5	5.0	3.3
Visc @ 100°C	cSt	ASTM D445		14.7	14.6	14.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0108250
Lab Number : 06085674
Unique Number : 10873119
Test Package : FLEET

Received : 12 Feb 2024
Tested : 12 Feb 2024
Diagnosed : 13 Feb 2024 - Sean Felton

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

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F: