



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
(YA171054)
Machine Id
932030
Component
Natural Gas Engine
Fluid
{not provided} (--- GAL)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0123417	GFL0082487	---
Sample Date		Client Info		18 Jun 2024	14 Nov 2023	---
Machine Age	hrs	Client Info		1212	1212	---
Oil Age	hrs	Client Info		1212	1212	---
Filter Age	hrs	Client Info		1212	1212	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	10	6	---
Chromium	ppm	ASTM D5185m	>4	<1	<1	---
Nickel	ppm	ASTM D5185m	>2	0	0	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>9	4	2	---
Lead	ppm	ASTM D5185m	>30	12	2	---
Copper	ppm	ASTM D5185m	>35	4	2	---
Tin	ppm	ASTM D5185m	>4	0	1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

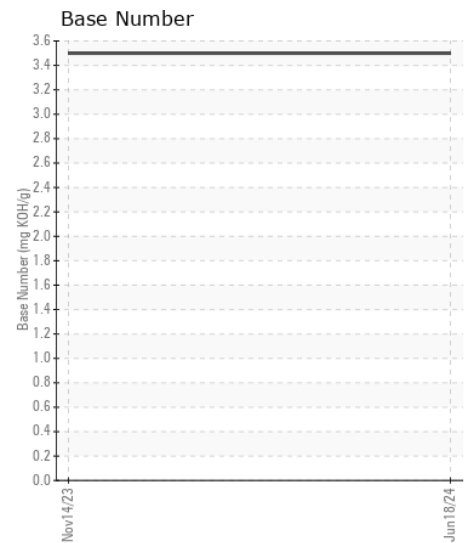
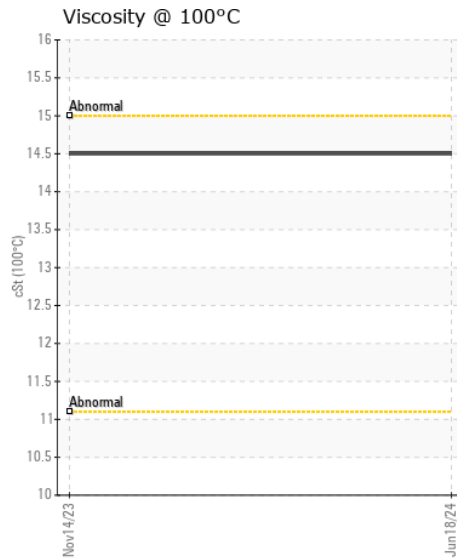
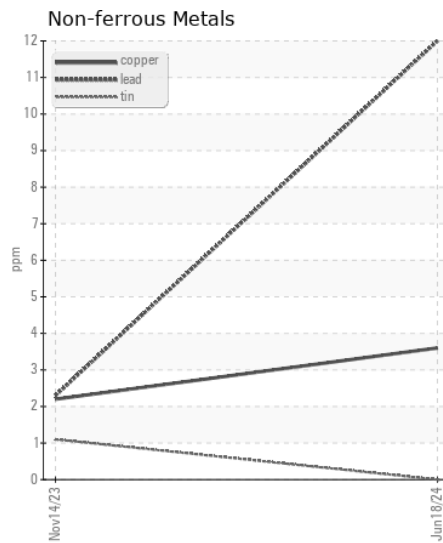
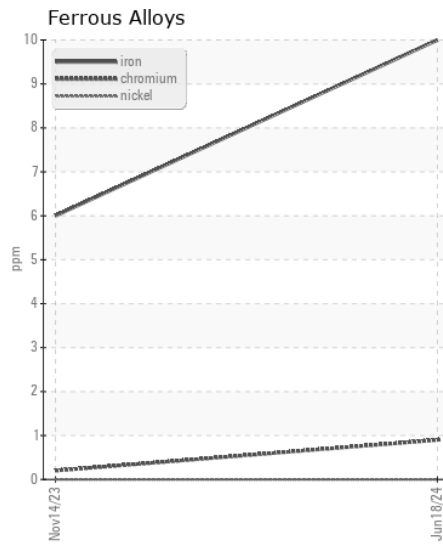
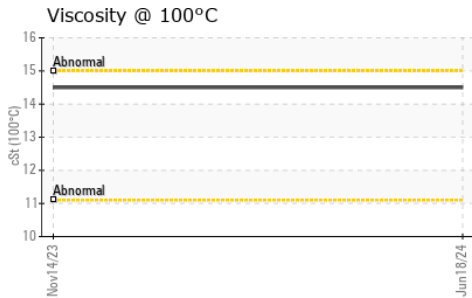
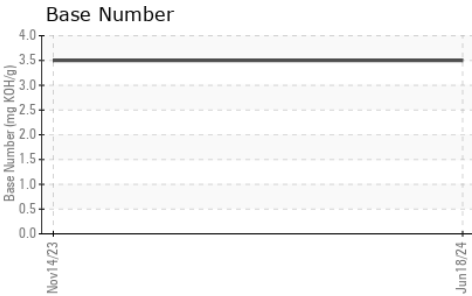
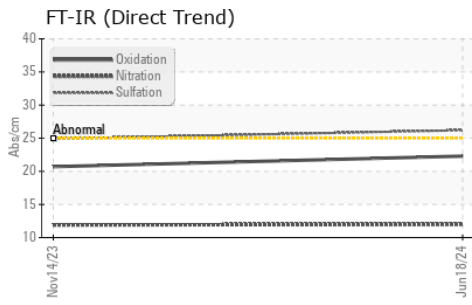
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>+100	7	12	---
Potassium	ppm	ASTM D5185m	>20	8	5	---
Water		WC Method	>0.1	NEG	NEG	---
Soot %	%	*ASTM D7844		0	0	---
Nitration	Abs/cm	*ASTM D7624	>20	12.0	11.9	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.2	24.9	---
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	---

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		10	6	---
Boron	ppm	ASTM D5185m		6	3	---
Barium	ppm	ASTM D5185m		<1	<1	---
Molybdenum	ppm	ASTM D5185m		56	55	---
Manganese	ppm	ASTM D5185m		<1	1	---
Magnesium	ppm	ASTM D5185m		619	585	---
Calcium	ppm	ASTM D5185m		1950	1572	---
Phosphorus	ppm	ASTM D5185m		858	740	---
Zinc	ppm	ASTM D5185m		1107	965	---
Sulfur	ppm	ASTM D5185m		3013	2343	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.3	20.7	---
Base Number (BN)	mg KOH/g	ASTM D2896		3.5	3.5	---
Visc @ 100°C	cSt	ASTM D445		14.5	14.5	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0123417
Lab Number : 06215563
Unique Number : 11088427
Test Package : FLEET

Received : 20 Jun 2024
Tested : 21 Jun 2024
Diagnosed : 21 Jun 2024 - Wes Davis

GFL Environmental - 007 - Brunswick
 2809 Galloway Road
 Bolivia, NC
 US 28422
 Contact: DONALD CRAVEN
 dcraven@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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