



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
(4827UA)
Machine Id
834031
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.

WEAR

All component wear rates are normal.

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.

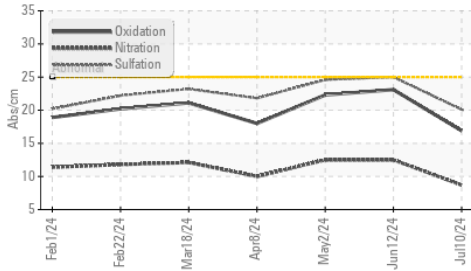
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0127216	GFL0116547	GFL0116605
Sample Date		Client Info		10 Jul 2024	12 Jun 2024	02 May 2024
Machine Age	hrs	Client Info		1368	1207	929
Oil Age	hrs	Client Info		161	1207	929
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Not Changd
Filter Changed		Client Info		Changed	Changed	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

Iron	ppm	ASTM D5185m	>50	10	44	42
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>9	3	2	2
Lead	ppm	ASTM D5185m	>30	<1	2	0
Copper	ppm	ASTM D5185m	>35	3	14	16
Tin	ppm	ASTM D5185m	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

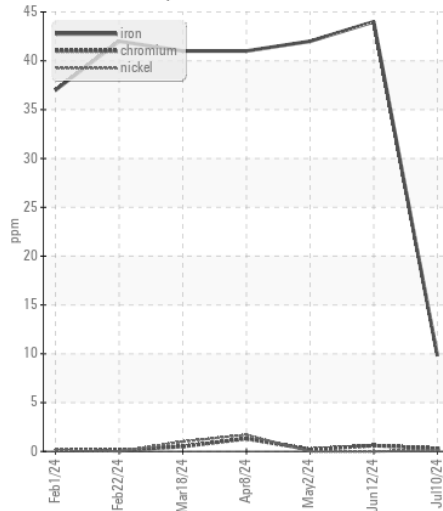
Silicon	ppm	ASTM D5185m	>+100	7	25	31
Potassium	ppm	ASTM D5185m	>20	2	3	2
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	8.7	12.5	12.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.1	25.0	24.6
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	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

Sodium	ppm	ASTM D5185m		2	5	4
Boron	ppm	ASTM D5185m		21	7	5
Barium	ppm	ASTM D5185m		<1	2	2
Molybdenum	ppm	ASTM D5185m		55	59	55
Manganese	ppm	ASTM D5185m		1	11	12
Magnesium	ppm	ASTM D5185m		587	742	794
Calcium	ppm	ASTM D5185m		1530	1390	1343
Phosphorus	ppm	ASTM D5185m		731	721	721
Zinc	ppm	ASTM D5185m		971	1024	941
Sulfur	ppm	ASTM D5185m		2278	2569	2599
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.9	23.1	22.3
Base Number (BN)	mg KOH/g	ASTM D2896		7.1	3.4	3.4
Visc @ 100°C	cSt	ASTM D445		15.1	14.6	14.5

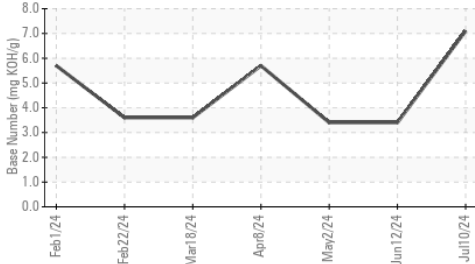
FT-IR (Direct Trend)



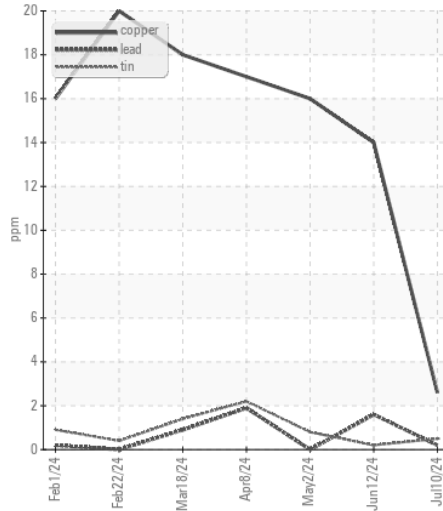
Ferrous Alloys



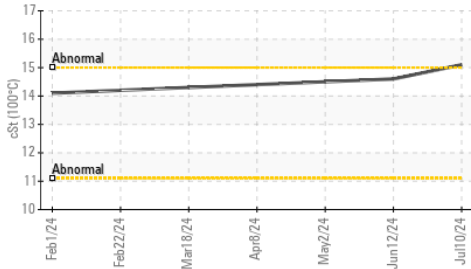
Base Number



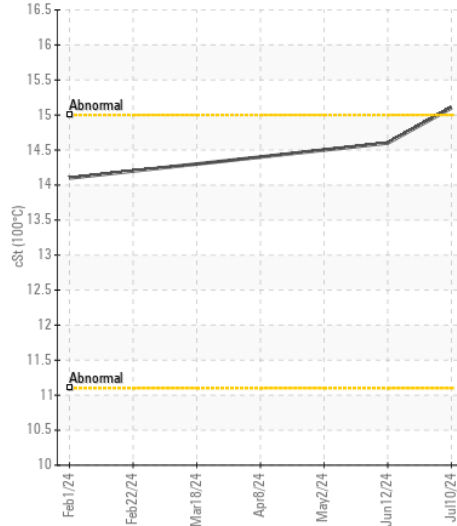
Non-ferrous Metals



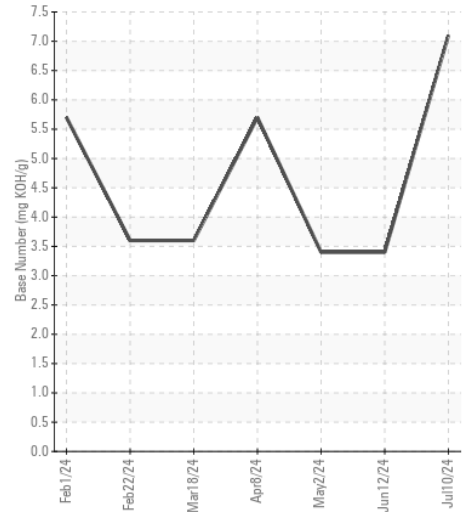
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0127216
Lab Number : 06235543
Unique Number : 11124377
Test Package : FLEET

Received : 15 Jul 2024
Tested : 15 Jul 2024
Diagnosed : 16 Jul 2024 - Don Baldrige

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