



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**834009**  
 Component  
**Natural Gas Engine**  
 Fluid  
**{not provided} (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor. Please specify the component make and model with your next sample. 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**

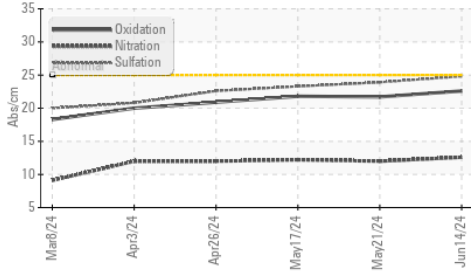
There is no indication of any contamination in the oil.

**FLUID CONDITION**

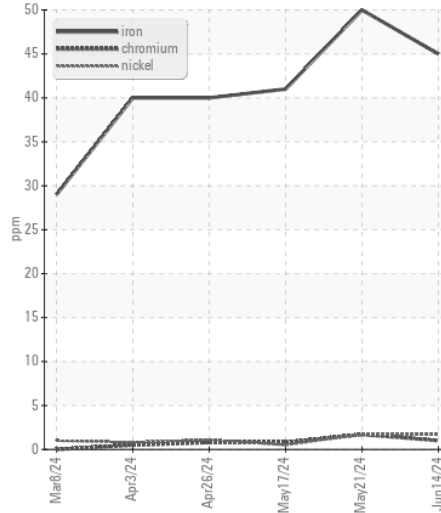
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0122080</b>	GFL0116589	GFL0122043
Sample Date		Client Info		<b>14 Jun 2024</b>	21 May 2024	17 May 2024
Machine Age	hrs	Client Info		<b>817</b>	651	617
Oil Age	hrs	Client Info		<b>166</b>	651	617
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changed</b>	Changed	Not Changed
Filter Changed		Client Info		<b>Not Changed</b>	Changed	Not Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>50	<b>45</b>	50	41
Chromium	ppm	ASTM D5185m	>4	<b>1</b>	2	<1
Nickel	ppm	ASTM D5185m	>2	<b>2</b>	2	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	1	<1
Aluminum	ppm	ASTM D5185m	>9	<b>8</b>	8	6
Lead	ppm	ASTM D5185m	>30	<b>2</b>	2	1
Copper	ppm	ASTM D5185m	>35	<b>16</b>	20	16
Tin	ppm	ASTM D5185m	>4	<b>2</b>	2	1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silicon	ppm	ASTM D5185m	>+100	<b>27</b>	32	29
Potassium	ppm	ASTM D5185m	>20	<b>16</b>	17	11
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0</b>	0.4	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.6</b>	12.0	12.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.8</b>	23.9	23.3
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG
Sodium	ppm	ASTM D5185m		<b>6</b>	4	4
Boron	ppm	ASTM D5185m		<b>9</b>	8	6
Barium	ppm	ASTM D5185m		<b>4</b>	3	4
Molybdenum	ppm	ASTM D5185m		<b>59</b>	62	55
Manganese	ppm	ASTM D5185m		<b>13</b>	14	13
Magnesium	ppm	ASTM D5185m		<b>897</b>	838	793
Calcium	ppm	ASTM D5185m		<b>1406</b>	1440	1372
Phosphorus	ppm	ASTM D5185m		<b>868</b>	768	711
Zinc	ppm	ASTM D5185m		<b>1081</b>	1037	940
Sulfur	ppm	ASTM D5185m		<b>3041</b>	2615	2650
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>22.6</b>	21.7	21.8
Base Number (BN)	mg KOH/g	ASTM D2896		<b>3.9</b>	4.9	3.4
Visc @ 100°C	cSt	ASTM D445		<b>14.6</b>	14.4	14.5

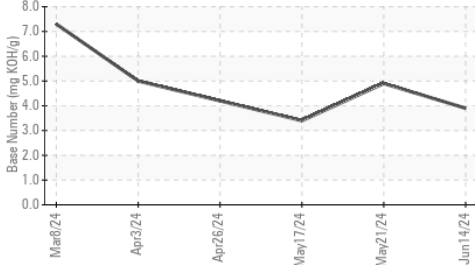
**FT-IR (Direct Trend)**



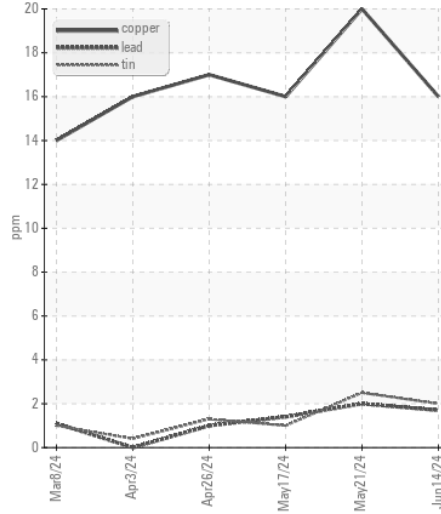
**Ferrous Alloys**



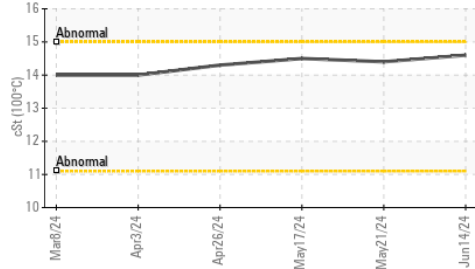
**Base Number**



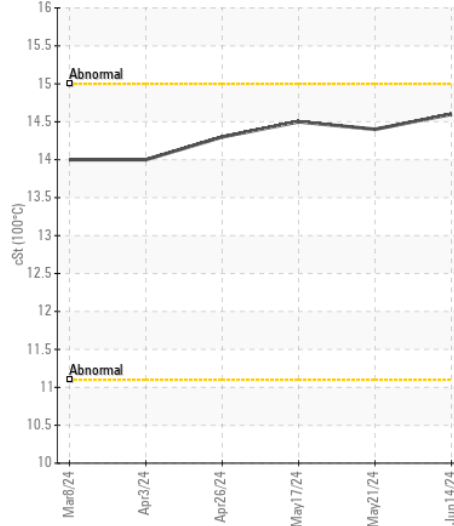
**Non-ferrous Metals**



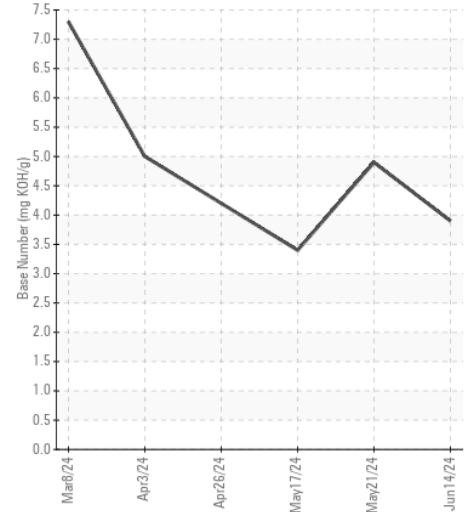
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0122080  
**Lab Number** : 06213255  
**Unique Number** : 11086119  
**Test Package** : FLEET

**Received** : 18 Jun 2024  
**Tested** : 19 Jun 2024  
**Diagnosed** : 19 Jun 2024 - Wes Davis

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