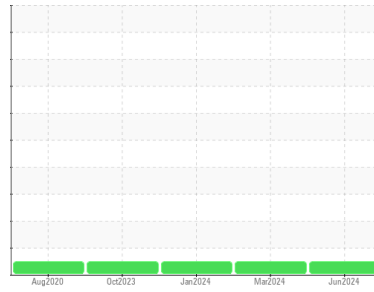




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
223023-632101

Component
Gasoline Engine

Fluid
GASOLINE ENGINE OIL SAE 5W20 (--- 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

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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			GFL0122573	GFL0111972	GFL0102583
Sample Date	Client Info			18 Jun 2024	01 Mar 2024	16 Jan 2024
Machine Age	mls Client Info			397573	388118	385220
Oil Age	mls Client Info			0	0	0
Oil Changed	Client Info			Not Changed	Not Changed	Not Changed
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>4.0		<1.0	<1.0	<1.0
Water	WC Method	>0.2		NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>150	12	13	15
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>40	4	3	4
Lead	ppm	ASTM D5185m	>50	0	0	0
Copper	ppm	ASTM D5185m	>155	0	0	<1
Tin	ppm	ASTM D5185m	>10	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	75	21	22	22
Barium	ppm	ASTM D5185m	5	0	0	3
Molybdenum	ppm	ASTM D5185m	100	52	53	56
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m	12	423	408	356
Calcium	ppm	ASTM D5185m	2100	1271	1279	1185
Phosphorus	ppm	ASTM D5185m	650	625	567	586
Zinc	ppm	ASTM D5185m	850	734	715	640
Sulfur	ppm	ASTM D5185m	2500	2430	2004	2252

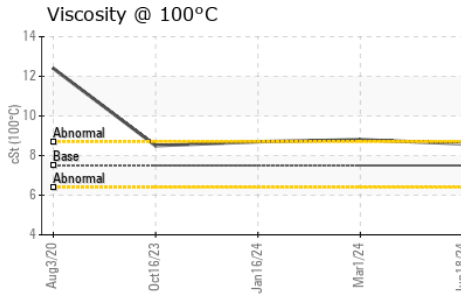
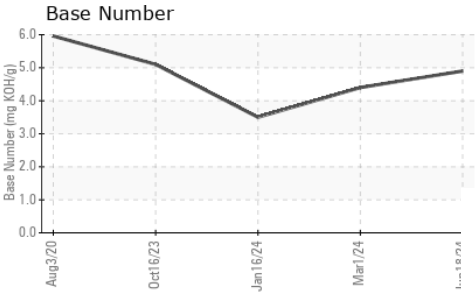
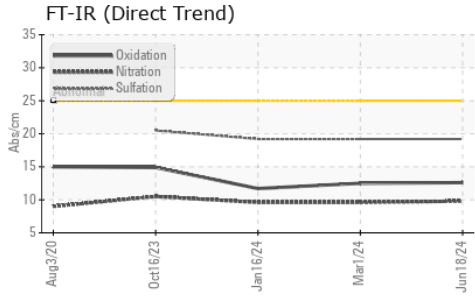
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>30	7	6	6
Sodium	ppm	ASTM D5185m	>50	8	2	<1
Potassium	ppm	ASTM D5185m	>20	4	0	2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	9.8	9.6	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.2	19.2	19.2

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.6	12.5	11.7
Base Number (BN)	mg KOH/g	ASTM D2896		4.9	4.4	3.5



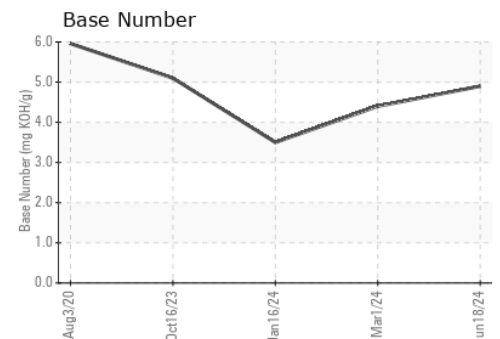
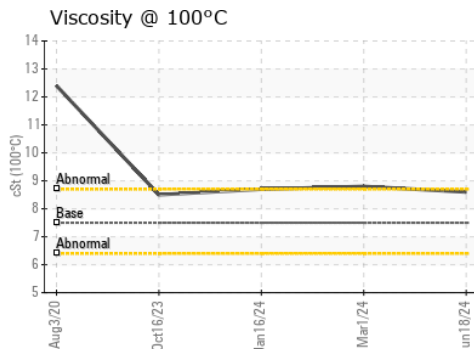
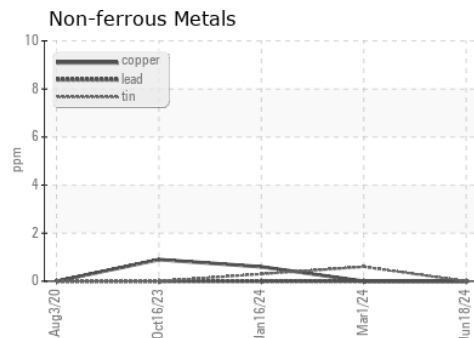
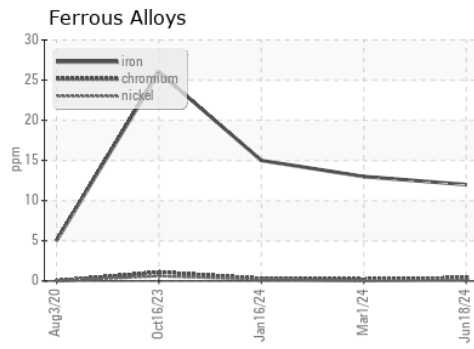
OIL ANALYSIS REPORT



PARAMETER	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	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445 7.5	8.6	8.8	8.7

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0122573 **Received** : 19 Jun 2024
Lab Number : **06214458** **Tested** : 20 Jun 2024
Unique Number : 11087322 **Diagnosed** : 20 Jun 2024 - Wes Davis
Test Package : FLEET

GFL Environmental - 892 - Pauls Valley Hauling
 1910 S CHICKASAW STREET
 Pauls Valley, OK
 US 73075
 Contact: Tony Graham
 tgraham2@wcamerica.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)