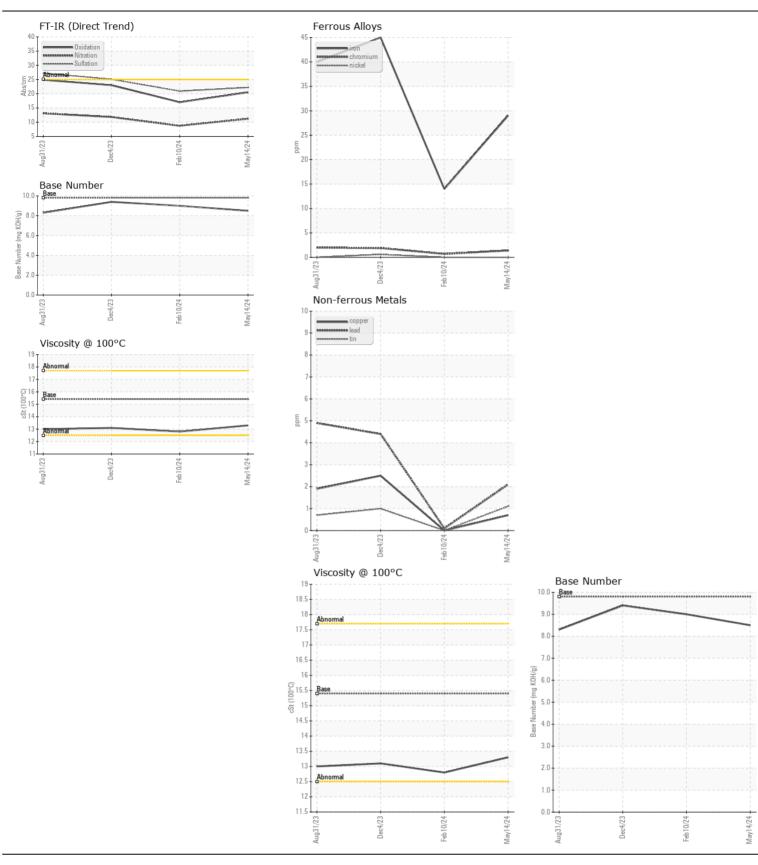
**WEAR** CONTAMINATION **FLUID CONDITION**  **NORMAL NORMAL NORMAL** 

Machine Id 725067

Component Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0098395	GFL0098403	GFL009840
	Sample Date		Client Info		14 May 2024	10 Feb 2024	04 Dec 202
	Machine Age	hrs	Client Info		8500	7916	7656
	Oil Age	hrs	Client Info		8500	7916	7656
	Filter Age	hrs	Client Info		0	7916	7656
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	29	14	45
	Chromium	ppm	ASTM D5185m	>20	1	<1	2
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>4	0	0	<1
	Titanium	ppm	ASTM D5185m		0	0	<1
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m	>20	4	3	5
	Lead	ppm	ASTM D5185m	>40	2	<1	4
	Copper	ppm	ASTM D5185m	>330	<1	0	2
	Tin	ppm	ASTM D5185m	>15	1	0	1
	Vanadium	ppm	ASTM D5185m		0	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	4	3	6
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	37	39	18
	Fuel		WC Method	>5	<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	1.1	0.6	1.2
	Nitration	Abs/cm	*ASTM D7624	>20	11.2	8.7	11.8
	Sulfation	Abs/.1mm	*ASTM D7415	>30	22.2	20.9	25.1
	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	NORM
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2	1	0
	Boron	ppm	ASTM D5185m	0	52	71	149
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	0	12
	Molybdenum	ppm	ASTM D5185m	60	74	73	101
	Manganese	ppm	ASTM D5185m	0	<1	0	<1
	Magnesium	ppm	ASTM D5185m	1010	994	986	759
	Calcium	ppm	ASTM D5185m	1070	1187	1229	1340
	Phosphorus	ppm	ASTM D5185m	1150	1099	1059	861
	Zinc	ppm	ASTM D5185m	1270	1278	1282	985
	Sulfur	ppm	ASTM D5185m	2060	3585	3473	3103
	Oxidation	Abs/.1mm	*ASTM D7414	>25	20.5	17.0	23.0
	Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.5	9.0	9.4
	Visc @ 100°C	cSt	ASTM D445		13.3	12.8	13.1







Certificate L2367

Laboratory Sample No.

: GFL0098395 Lab Number : 06187134 Unique Number : 11043886 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 21 May 2024 **Tested** 

: 23 May 2024 Diagnosed : 23 May 2024 - Wes Davis

GFL Environmental - 409 - Wood Island LF

E10081 State Hwy M28 Wetmore, MI

US 49895 Contact: Service Manager

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: