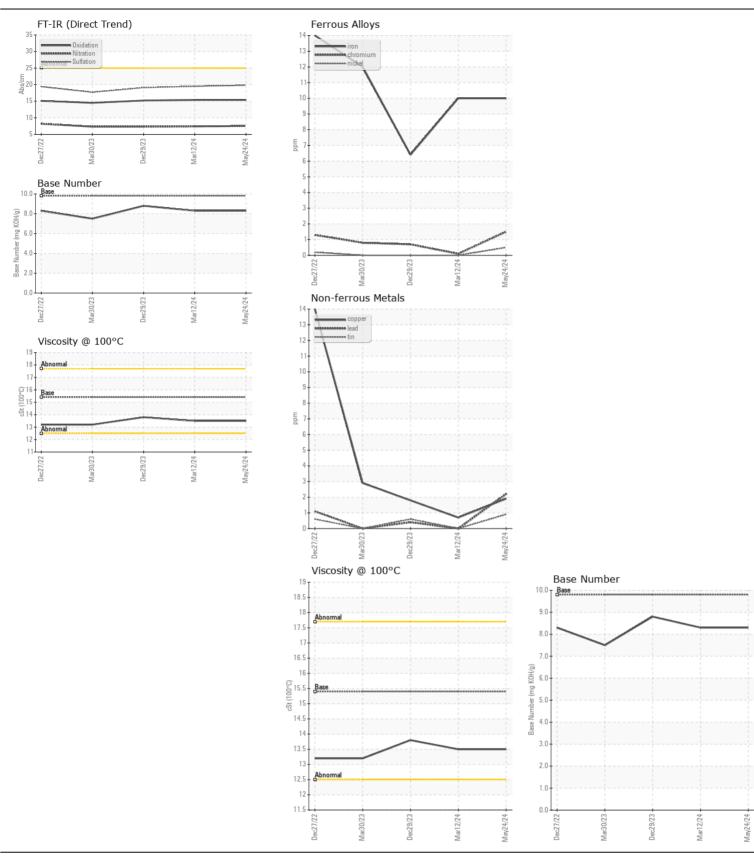
WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL

Machine Id

927051 Component Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0123761	GFL0113004	GFL010839
	Sample Date		Client Info		24 May 2024	12 Mar 2024	29 Dec 202
	Machine Age	hrs	Client Info		17256	16680	16068
	Oil Age	hrs	Client Info		17256	16680	16068
	Filter Age	hrs	Client Info		17256	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
VEAR	Iron	ppm	ASTM D5185m	>110	10	10	6
	Chromium	ppm	ASTM D5185m	>4	2	<1	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1	0	0
	Titanium	ppm	ASTM D5185m		<1	0	0
	Silver	ppm	ASTM D5185m	>2	1	0	0
	Aluminum	ppm	ASTM D5185m	>25	2	<1	<1
	Lead	ppm	ASTM D5185m		2	0	<1
	Copper	ppm	ASTM D5185m	>85	2	<1	2
	Tin	ppm	ASTM D5185m		<1	0	<1
	Vanadium	ppm	ASTM D5185m		<1	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>30	7	8	10
75117 (IIIII (7111511	Potassium	ppm	ASTM D5185m		3	0	<1
There is no indication of any contamination in the oil.	Fuel	1-1-	WC Method		<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.3	0.3	0.4
	Nitration	Abs/cm	*ASTM D7624	>20	7.5	7.4	7.3
	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.8	19.5	19.1
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONI
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORN
	Odor	scalar	*Visual	NORML	NORML	NORML	NORN
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		4	5	4
	Boron	ppm	ASTM D5185m	0	3	<1	1
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		<1	0	0
	Molybdenum	ppm	ASTM D5185m		62	62	58
	Manganese	ppm	ASTM D5185m		<1	0	0
	Magnesium	ppm	ASTM D5185m		992	1071	976
	Calcium	ppm	ASTM D5185m		1104	1175	1054
	Phosphorus	ppm	ASTM D5185m		1050	1102	1089
	Zinc	ppm	ASTM D5185m		1269	1377	1235
	Sulfur	ppm	ASTM D5185m		3183	3701	3098
	Oxidation	Abs/.1mm	*ASTM D7414		15.4	15.4	15.2
	Base Number (BN)		ASTM D2896		8.3	8.3	8.8
	Visc @ 100°C	cSt	ASTM D445		13.5	13.5	13.8







Certificate L2367

Laboratory Sample No.

: GFL0123761 Lab Number : 06191936 Unique Number : 11048688 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 28 May 2024 **Tested**

: 29 May 2024 Diagnosed : 30 May 2024 - Don Baldridge

GFL Environmental - 918 - Hartland HC

630 E Industrial Drive Hartland, WI US 53029

Contact: David McCall david.mccall@gflenv.com T: (262)369-3069

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)