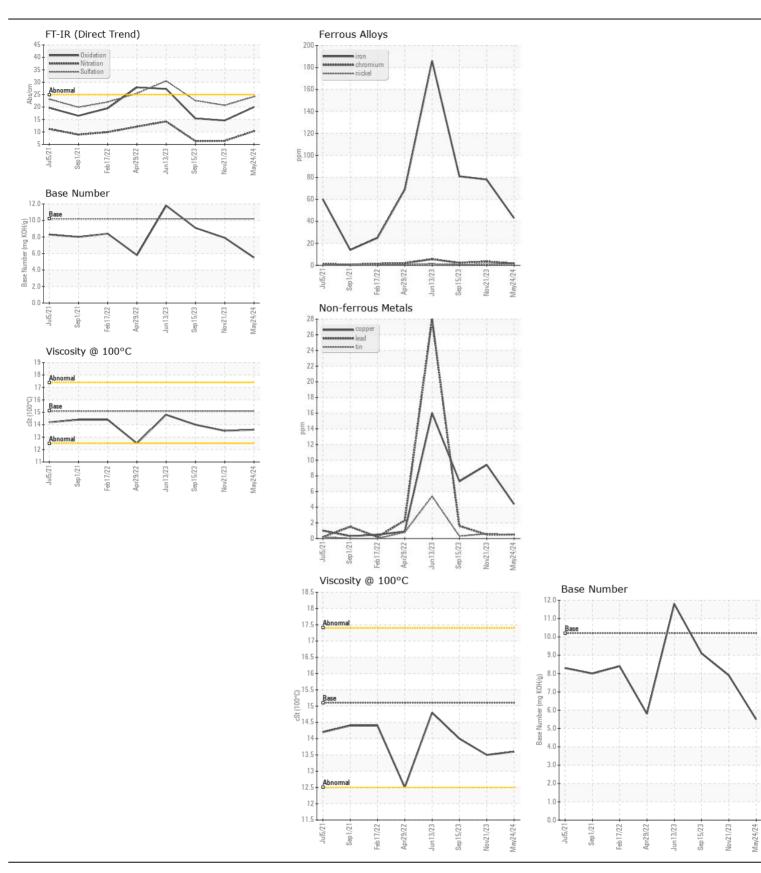
WEAR CONTAMINATION **FLUID CONDITION** **NORMAL NORMAL NORMAL**

Machine Id

924025-260243

Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0120947	GFL0081044	GFL0071769
	Sample Date		Client Info		24 May 2024	21 Nov 2023	15 Sep 202
	Machine Age	hrs	Client Info		7090	5928	5778
	Oil Age	hrs	Client Info		1162	650	600
	Filter Age	hrs	Client Info		1162	650	600
	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	43	78	81
	Chromium	ppm	ASTM D5185m	>20	2	3	2
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		1	<1	<1
	Titanium	ppm	ASTM D5185m		<1	<1	<1
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m	>20	3	10	7
	Lead	ppm	ASTM D5185m		<1	<1	2
	Copper	ppm	ASTM D5185m	>330	4	9	7
	Tin	ppm	ASTM D5185m		<1	<1	<1
	Vanadium	ppm	ASTM D5185m		0	0	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	7	21	19
	Potassium	ppm	ASTM D5185m		6	4	4
There is no indication of any contamination in the oil.	Fuel	ppiii	WC Method		<1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method	7 0.2	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	1.4	0.5	0
	Nitration	Abs/cm	*ASTM D7624	>20	10.3	6.4	6.3
	Sulfation	Abs/.1mm	*ASTM D7415	>30	24.2	20.7	22.6
	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	NORMI
	Odor	scalar	*Visual	NORML	NORML	NORML	NORMI
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		20	36	35
1201B CONDITION	Boron	ppm	ASTM D5185m	50	18	333	361
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	0
	Molybdenum	ppm	ASTM D5185m		48	85	90
	Manganese	ppm	ASTM D5185m		1	4	3
	Magnesium	ppm	ASTM D5185m	560	492	464	432
	Calcium	ppm	ASTM D5185m		1445	1420	1444
	Phosphorus	ppm	ASTM D5185m		706	961	941
	Zinc	ppm	ASTM D5185m		890	1165	1147
	Sulfur	ppm	ASTM D5185m	2040	2547	3061	3593
	Oxidation	Abs/.1mm	*ASTM D7414		20.0	14.6	15.4
	Base Number (BN)	mg KOH/g	ASTM D2896	10.2	5.5	7.9	9.1
	, ,	- 0		15.1			14.0







Certificate L2367

Laboratory Sample No.

: GFL0120947 Lab Number : 06193428 Unique Number : 11050180 Test Package : FLEET

To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 28 May 2024 **Tested** : 30 May 2024

: 30 May 2024 - Wes Davis Diagnosed

GFL Environmental - 883 - Orange City

1378 South Volusia Ave Orange City, FL

US 32763 Contact: JEFF COOPERSMITH

JCOOPERSMITH@GFLENV.COM T: (386)503-8468

* - 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)

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