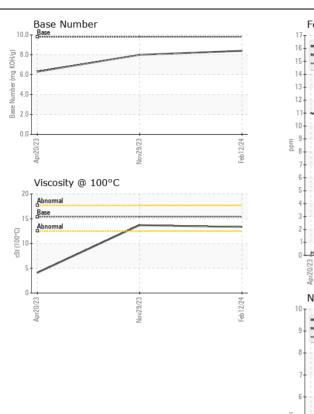
WEAR CONTAMINATION **FLUID CONDITION**

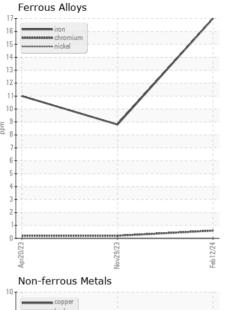
NORMAL NORMAL NORMAL

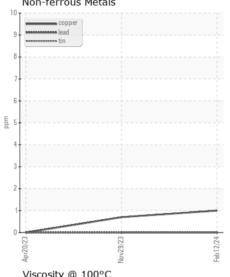


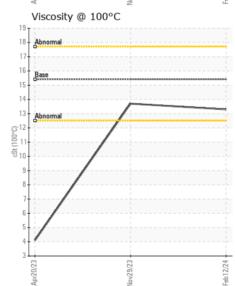
Machine Id **710012** Component Diesel Engine

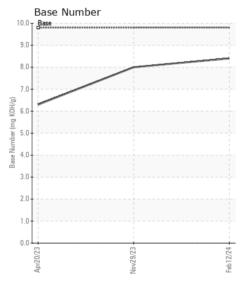
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0108923	GFL0101426	GFL0069867
	Sample Date		Client Info		12 Feb 2024	29 Nov 2023	20 Apr 2020
	Machine Age	hrs	Client Info		9946	9366	0
	Oil Age	hrs	Client Info		600	0	0
	Filter Age	hrs	Client Info		600	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	SEVERE
WEAR	Iron	ppm	ASTM D5185m	>120	17	9	11
WEAR	Chromium	ppm	ASTM D5185m		<1	<1	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0	0	0
	Titanium	ppm	ASTM D5185m		<1	0	0
	Silver	ppm	ASTM D5185m		0	0	0
	Aluminum	ppm	ASTM D5185m		7	4	4
	Lead	ppm	ASTM D5185m	>40	0	0	0
	Copper		ASTM D5185m		1	<1	0
	Tin	ppm	ASTM D5185m		0	0	0
	Vanadium	ppm	ASTM D5185m	>10	0	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m		3	2	4
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		6	<1	3
	Fuel		WC Method		<1.0	1.3	49.5
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844		0.3	0.3	0.3
	Nitration	Abs/cm	*ASTM D7624	>20	7.4	7.9	7.9
	Sulfation	Abs/.1mm	*ASTM D7415		18.4	18.9	14.7
	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	NORM
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		0	4	4
	Boron	ppm	ASTM D5185m	0	0	<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	0	12	0	0
	Molybdenum	ppm	ASTM D5185m	60	52	55	30
	Manganese	ppm	ASTM D5185m	0	0	0	<1
	Magnesium	ppm	ASTM D5185m	1010	801	937	503
	Calcium	ppm	ASTM D5185m	1070	915	1104	553
	Phosphorus	ppm	ASTM D5185m	1150	977	1058	573
	Zinc	ppm	ASTM D5185m	1270	1083	1246	680
	Sulfur	ppm	ASTM D5185m	2060	3107	2898	1629
	Oxidation	Abs/.1mm	*ASTM D7414		14.4	15.6	9.7
	Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.4	8.0	6.3
	Visc @ 100°C	- 0	ASTM D445		13.3	13.7	4.1













Certificate L2367

Laboratory

Sample No.

: GFL0108923 Lab Number : 06088578 Unique Number : 10876023 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 14 Feb 2024 **Tested** : 15 Feb 2024

Diagnosed : 15 Feb 2024 - Wes Davis

GFL Environmental - 415 - Michigan East 6200 Elmridge Sterling Heights, MI US 48313 Contact: Frank Wolak

fwolak@gflenv.com T: (586)825-9514

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)