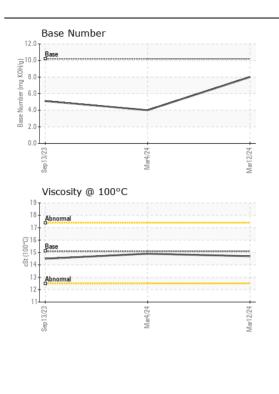
WEAR CONTAMINATION **FLUID CONDITION**

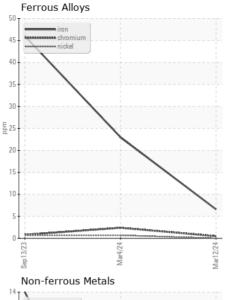
NORMAL NORMAL NORMAL

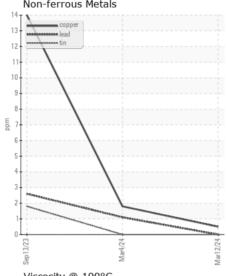
Machine Id 934057

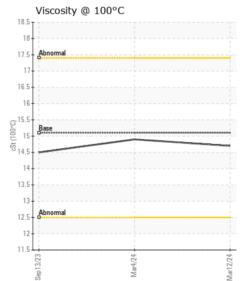
Component Natural Gas Engine

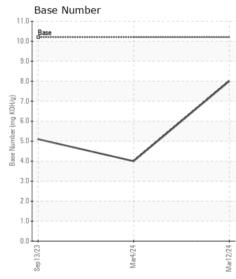
	Test	UOM	Method	Limit/Abn	Current	History1	History2
RECOMMENDATION	Sample Number	OOW	Client Info	LITTIOTOTI	GFL0114474	GFL0114481	GFL009323
Resample at the next service interval to monitor. (Customer Sample Comment: Oil sample only)	Sample Date		Client Info		12 Mar 2024	04 Mar 2024	13 Sep 202
	Machine Age	mls	Client Info		27646	1772	584
	Oil Age	mls	Client Info		0	0	584
	Filter Age	mls	Client Info		0	0	0
	Oil Changed	11110	Client Info		Not Changd	Changed	Changed
	Filter Changed		Client Info		Not Changd	Changed	Change
	Sample Status		Onone inio		NORMAL	NORMAL	ATTENTIO
VEAR	Iron	ppm	ASTM D5185m	>50	7	23	46
	Chromium	ppm	ASTM D5185m	>4	<1	2	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>2	0	<1	<1
	Titanium	ppm	ASTM D5185m		<1	0	0
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m		2	12	19
	Lead	ppm	ASTM D5185m	>30	0	1	3
	Copper	ppm	ASTM D5185m	>35	<1	2	14
	Tin	ppm	ASTM D5185m	>4	0	0	2
	Vanadium	ppm	ASTM D5185m		<1	<1	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NON
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NON
CONTAMINATION	Silicon	ppm	ASTM D5185m	>+100	4	6	32
	Potassium	ppm	ASTM D5185m	>20	4	34	66
There is no indication of any contamination in the oil.	Water		WC Method	>0.1	NEG	NEG	NEG
	Soot %	%	*ASTM D7844		0	0	0.1
	Nitration	Abs/cm	*ASTM D7624	>20	7.1	11.3	10.8
	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.1	22.2	21.9
	Silt	scalar	*Visual	NONE	NONE	NONE	NON
	Debris	scalar	*Visual	NONE	NONE	NONE	NON
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NON
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORN
	Odor	scalar	*Visual	NORML	NORML	NORML	NORN
	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
LUID CONDITION	Sodium	ppm	ASTM D5185m		5	7	6
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m	50	29	6	15
	Barium	ppm	ASTM D5185m	5	0	0	0
	Molybdenum	ppm	ASTM D5185m	50	48	55	60
	Manganese	ppm	ASTM D5185m	0	<1	1	14
	Magnesium	ppm	ASTM D5185m	560	554	606	825
	Calcium	ppm	ASTM D5185m	1510	1548	1695	1380
	Phosphorus	ppm	ASTM D5185m	780	752	741	710
	Zinc	ppm	ASTM D5185m	870	901	1005	968
	Sulfur	ppm	ASTM D5185m	2040	2891	2871	2682
	Oxidation	Abs/.1mm	*ASTM D7414	>25	15.9	18.9	20.1
	Base Number (BN)	mg KOH/g	ASTM D2896	10.2	8.0	4.0	5.1













Laboratory

Sample No.

: GFL0114474 Lab Number : 06123008 Unique Number: 10937159

Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 19 Mar 2024 **Tested** : 20 Mar 2024

Diagnosed : 21 Mar 2024 - Don Baldridge

GFL Environmental - 865 - East Mount Hauling

7213 East Mount Houston Road Houston, TX US 77050

Contact: Saul Castillo saul.castillo@gflenv.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)

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F: