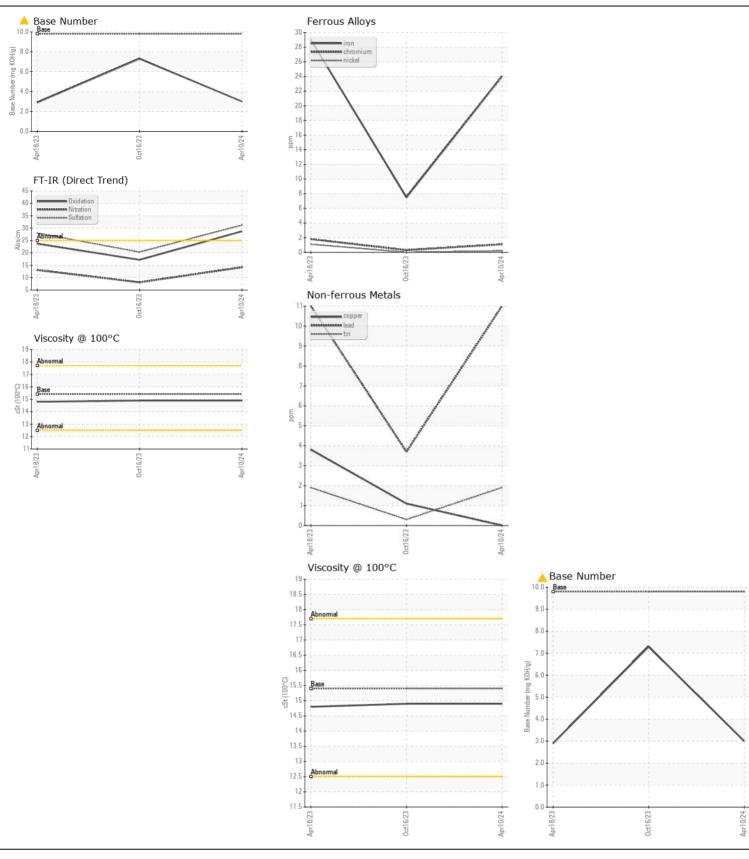
**WEAR** CONTAMINATION **FLUID CONDITION** 

**NORMAL NORMAL ABNORMAL** 

Machine Id 732012

## Natural Gas Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0106748	_	GFL007800
	Sample Date		Client Info		10 Apr 2024	16 Oct 2023	18 Apr 202
	Machine Age	hrs	Client Info		4407	0	35867
	Oil Age	hrs	Client Info		4407	0	0
	Filter Age	hrs	Client Info		4407	0	0
	Oil Changed		Client Info		Changed	Changed	Not Chang
	Filter Changed		Client Info		Changed	Changed	Not Chang
	Sample Status				ABNORMAL	NORMAL	ABNORMA
WEAR	Iron	ppm	ASTM D5185m	>50	24	8	29
	Chromium	ppm	ASTM D5185m	>4	1	<1	2
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>2	<1	0	1
	Titanium	ppm	ASTM D5185m		0	<1	<1
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m	>9	4	2	3
	Lead	ppm	ASTM D5185m		11	4	11
	Copper	ppm	ASTM D5185m	>35	0	1	4
	Tin	ppm	ASTM D5185m	>4	2	<1	2
	Vanadium	ppm	ASTM D5185m		0	<1	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>+100	7	4	8
	Potassium	ppm	ASTM D5185m	>20	0	3	2
There is no indication of any contamination in the oil.	Water		WC Method	>0.1	NEG	NEG	NEG
	Soot %	%	*ASTM D7844		0.1	0	0
	Nitration	Abs/cm	*ASTM D7624	>20	14.2	8.1	13.1
	Sulfation	Abs/.1mm	*ASTM D7415	>30	31.2	20.3	28.0
	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	>0.1	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		13	5	12
The BN level is low.	Boron	ppm	ASTM D5185m	0	12	33	6
	Barium	ppm	ASTM D5185m	0	0	0	0
	Molybdenum	ppm	ASTM D5185m	60	66	52	65
	Manganese	ppm	ASTM D5185m	0	1	<1	2
	Magnesium	ppm	ASTM D5185m	1010	689	592	666
	Calcium	ppm	ASTM D5185m	1070	1944	1736	1881
	Phosphorus	ppm	ASTM D5185m	1150	884	816	839
	Zinc	ppm	ASTM D5185m	1270	1108	1006	1133
	Sulfur	ppm	ASTM D5185m	2060	2874	2492	2794
	Oxidation	Abs/.1mm	*ASTM D7414	>25	28.7	17.2	23.7
	Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>△</b> 3.0	7.3	<u></u>
	Visc @ 100°C	cSt	ASTM D445	15./	14.9	14.9	14.8







Certificate L2367

Laboratory Sample No.

: GFL0106748 Lab Number : 06151499 Unique Number: 10981577 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 17 Apr 2024 **Tested** 

: 18 Apr 2024 Diagnosed : 19 Apr 2024 - Sean Felton

GFL Environmental - 856 - Houston South 8515 Highway 6 South

Houston, TX US 77083 Contact: Jose Gonzalez

jgonzalez2@gflenv.com T:

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)

F: