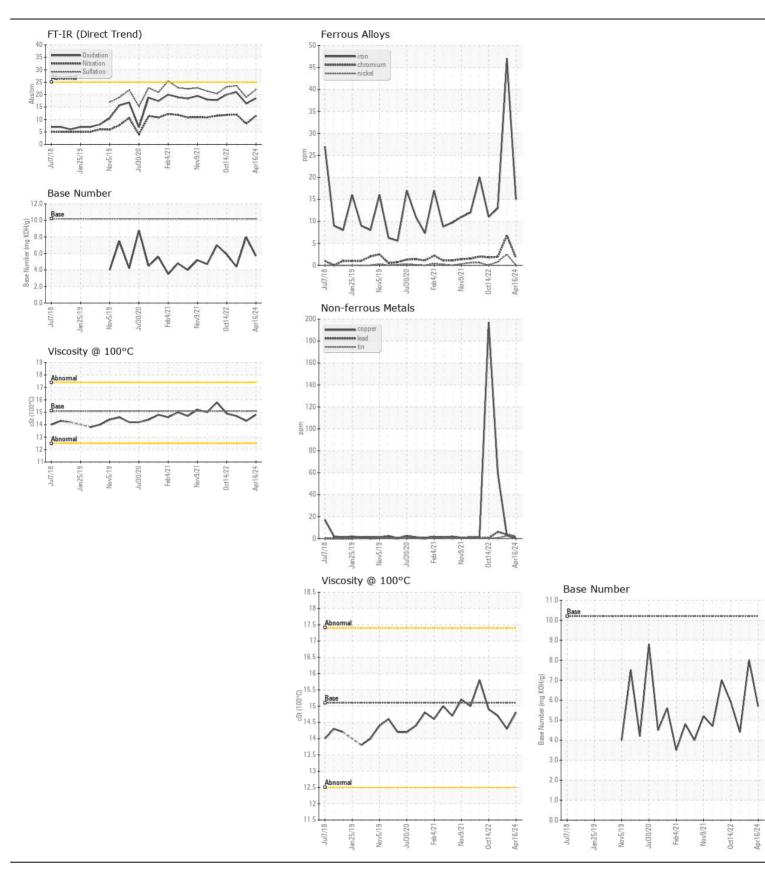
WEAR CONTAMINATION **FLUID CONDITION** **NORMAL NORMAL NORMAL**

(YA144037)

3799C

Natural Gas Engine

RECOMMENDATION Resample at the next service interval to monitor.	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0082428	GFL0082440	GFL005073
Resample at the next service interval to monitor.	Sample Date		Client Info		16 Apr 2024	05 Jan 2024	16 Mar 202
	Machine Age	hrs	Client Info		0	13018	13018
	Oil Age	hrs	Client Info		0	13018	1212
	Filter Age	hrs	Client Info		0	13018	1212
	Oil Changed		Client Info		N/A	Changed	Changed
	Filter Changed		Client Info		N/A	Changed	Changed
	Sample Status				NORMAL	ABNORMAL	ABNORMA
WEAR	Iron	ppm	ASTM D5185m	>50	15	4 7	13
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>4	2	<u>^</u> 7	2
	Nickel	ppm	ASTM D5185m	>2	0	2	<1
	Titanium	ppm	ASTM D5185m		0	<1	0
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m	>9	1	3	4
	Lead	ppm	ASTM D5185m	>30	2	4	6
	Copper	ppm	ASTM D5185m	>35	0	3	6 0
	Tin	ppm	ASTM D5185m	>4	1	2	<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	>+100	5	19	4
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	5	17	1
	Water		WC Method	>0.1	NEG	NEG	NEG
	Soot %	%	*ASTM D7844		0	0	0.1
	Nitration	Abs/cm	*ASTM D7624	>20	11.4	8.3	12.0
	Sulfation	Abs/.1mm	*ASTM D7415	>30	22.0	18.9	23.6
	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	NORN
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		6	7	7
	Boron	ppm	ASTM D5185m	50	14	29	8
	Barium	ppm	ASTM D5185m	5	0	0	0
The BN result indicates that there is suitable alkalinity remaining in the		ppm	ASTM D5185m	50	53	62	56
The BN result indicates that there is suitable alkalinity remaining in the	Molybdenum		ASTM D5185m	0	0	2	<1
The BN result indicates that there is suitable alkalinity remaining in the	Manganese	ppm	AO IIVI DO IOOIII				FOC
The BN result indicates that there is suitable alkalinity remaining in the	-	ppm	ASTM D5185m	560	577	637	536
The BN result indicates that there is suitable alkalinity remaining in the	Manganese				577 1635	637 1814	1716
The BN result indicates that there is suitable alkalinity remaining in the	Manganese Magnesium	ppm	ASTM D5185m	1510			
The BN result indicates that there is suitable alkalinity remaining in the	Manganese Magnesium Calcium	ppm	ASTM D5185m ASTM D5185m	1510 780	1635	1814	1716
	Manganese Magnesium Calcium Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	1510 780 870	1635 746	1814 811	1716 700
The BN result indicates that there is suitable alkalinity remaining in the	Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1510 780 870 2040	1635 746 953	1814 811 1103	1716 700 982
The BN result indicates that there is suitable alkalinity remaining in the	Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7414	1510 780 870 2040 >25	1635 746 953 2654	1814 811 1103 3016	1716 700 982 2136







Certificate L2367

Laboratory Sample No.

: GFL0082428 Lab Number : 06151440 Unique Number: 10981518 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 : 17 Apr 2024 **Tested** : 18 Apr 2024

: 18 Apr 2024 - Wes Davis

GFL Environmental - 007 - Brunswick

2809 Galloway Road

Bolivia, NC US 28422

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Contact: DONALD CRAVEN

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* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Diagnosed

T: