WEAR
CONTAMINATION
FLUID CONDITION

NORMAL

MARGINAL

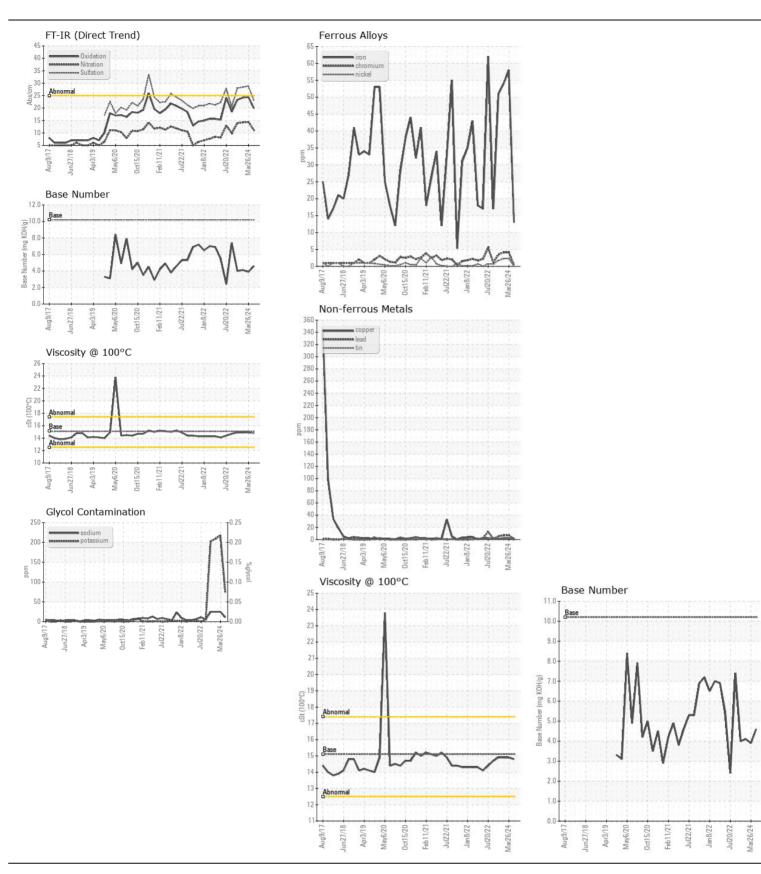
NORMAL

Area

(P633852) Machine Id 10775C

Natural Gas Engine

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RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.	Sample Number		Client Info		GFL0125699	GFL0101761	GFL0101753
	Sample Date		Client Info		20 Jun 2024	26 Mar 2024	22 Mar 202
	Machine Age	hrs	Client Info		16399	15951	15930
	Oil Age	hrs	Client Info		600	600	600
	Filter Age	hrs	Client Info		600	600	600
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				MARGINAL	ABNORMAL	ABNORMA
WEAR	Iron	ppm	ASTM D5185m	>50	13	58	54
	Chromium	ppm	ASTM D5185m		<1	4	4
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0	2	2
	Titanium	ppm	ASTM D5185m		0	- <1	<1
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m		2	8	7
	Lead	ppm	ASTM D5185m		1	7	7
	Copper	ppm	ASTM D5185m		0	2	2
	Tin	ppm	ASTM D5185m	>4	<1	2	2
	Vanadium	ppm	ASTM D5185m		0	- <1	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m		4	11	11
Sodium and/or potassium levels remain high. Test for glycol is negative.	Potassium	ppm	ASTM D5185m	>20	<u>^</u> 76	<u></u> 218	<b>^</b> 209
	Water		WC Method	>0.1	NEG	NEG	NEG
	Soot %	%	*ASTM D7844		0	0	0
	Nitration	Abs/cm	*ASTM D7624	>20	11.1	14.4	14.2
	Sulfation	Abs/.1mm	*ASTM D7415	>30	23.0	28.8	28.4
	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		11	<u> </u>	<u>^</u> 25
	Boron	ppm	ASTM D5185m	50	12	13	14
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185m	5	0	1	1
	Molybdenum	ppm	ASTM D5185m	50	55	70	68
	Manganese	ppm	ASTM D5185m		1	3	3
	Magnesium	ppm	ASTM D5185m	560	624	749	736
	Calcium	ppm	ASTM D5185m		1746	2082	2033
	Phosphorus	ppm	ASTM D5185m	780	811	1068	1052
	Zinc	ppm	ASTM D5185m		1072	1239	1218
	Sulfur	ppm	ASTM D5185m	2040	2900	2952	2974
	Oxidation	Abs/.1mm	*ASTM D7414		19.9	24.4	24.2
	Base Number (BN)	mg KOH/g	ASTM D2896	10.2	4.6	3.9	4.1







Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : GFL0125699 Lab Number : 06216710

Unique Number : 11089574 Test Package: FLEET (Additional Tests: Glycol)

Received **Tested** Diagnosed

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

: 21 Jun 2024

: 24 Jun 2024 : 24 Jun 2024 - Jonathan Hester

GFL Environmental - 030 - Conway Myrtle Beach

3010 HWY 378 Conway, SC US 29527

Contact: ARCILIO RUEZ

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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.

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