WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

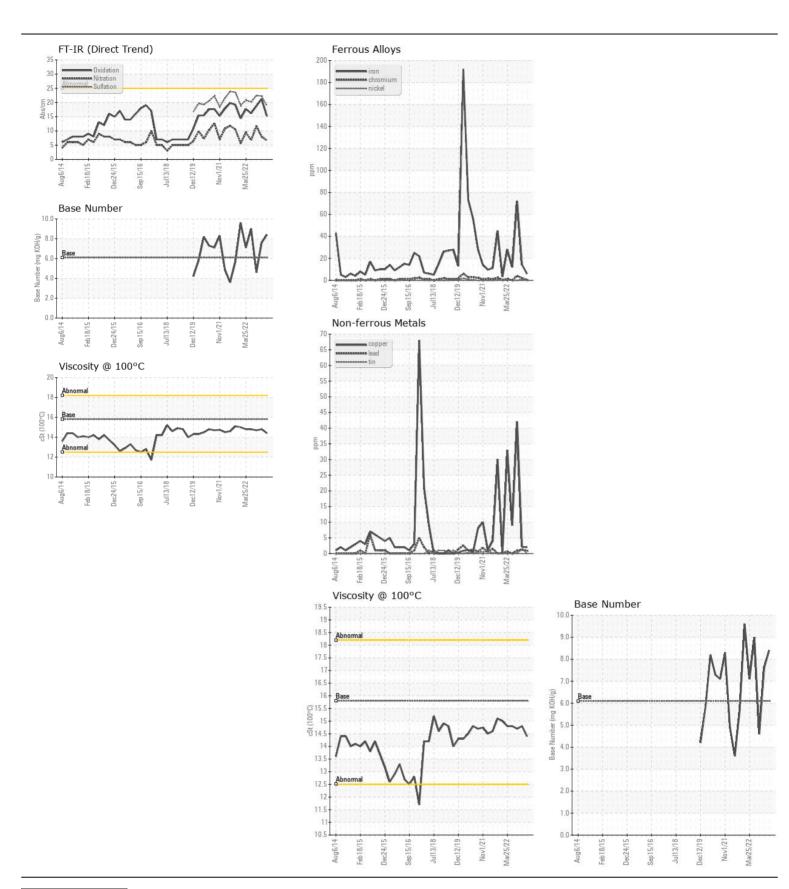
Area

(YA145297)

3492C

Natural Gas Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info	21111071011	GFL0123398	GFL0082493	GFL005079
Resample at the next service interval to monitor.	Sample Date		Client Info		18 Jun 2024	28 Aug 2023	06 Feb 202
	Machine Age	mls	Client Info		197316	6050	4823
	Oil Age	mls	Client Info		197316	1227	1233
	Filter Age	mls	Client Info		197316	1227	1233
	Oil Changed		Client Info		N/A	Changed	Changed
	Filter Changed		Client Info		N/A	Changed	Changed
	Sample Status				NORMAL	NORMAL	ABNORMA
WEAR	Iron	nnm	ASTM D5185m	. E0	6	14	<u>^</u> 72
WEAN	Chromium	ppm	ASTM D5185m		<1	2	4
All component wear rates are normal.	Nickel	ppm	ASTM D5165III		0	<1	0
	Titanium	ppm	ASTM D5185m	>८	√ <1	<1	0
	Silver	ppm	ASTM D5185m	. 2	0	0	0
	Aluminum	ppm	ASTM D5185m		1	1	4
	Lead	ppm	ASTM D5185m		- <1	1	<1
	Copper	ppm	ASTM D5185m		2	2	<u>42</u>
	Tin	ppm	ASTM D5185m		0	2	<1
	Vanadium	ppm	ASTM D5185m	77	<1	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
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CONTAMINATION	Silicon	ppm	ASTM D5185m	>+100	4	5	<1
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	4	4	4
	Water		WC Method	>0.1	NEG	NEG	NEG
	Soot %	%	*ASTM D7844		0	0.1	0.1
	Nitration	Abs/cm	*ASTM D7624	>20	6.6	8.0	11.7
	Sulfation	Abs/.1mm	*ASTM D7415	>30	18.7	22.3	22.4
	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		4	4	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		41	23	5
	Barium	ppm	ASTM D5185m		0	44	0
	Molybdenum	ppm	ASTM D5185m		50	47	59
	Manganese	ppm	ASTM D5185m		<1	1	1
	Magnesium	ppm	ASTM D5185m		606	487	519
	Calcium	ppm	ASTM D5185m		1696	1374	1671
	Phosphorus	ppm	ASTM D5185m	800	875	722	715
	Zinc	ppm	ASTM D5185m		1040	852	959
	Sulfur	ppm	ASTM D5185m		3129	2799	2124
	Oxidation	Abs/.1mm	*ASTM D7414	>25	15.2	21.2	18.8
	Base Number (BN)				8.4	7.6	4.6
	Dase Mullipel (DIM)	IIIU IVOI I/U			0.7		







Certificate L2367

Report Id: GFL007 [WUSCAR] 06215561 (Generated: 06/21/2024 14:37:57) Rev: 1

Laboratory Sample No.

Lab Number : 06215561

Unique Number : 11088425 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : GFL0123398 : 20 Jun 2024

**Tested** : 21 Jun 2024 Diagnosed

: 21 Jun 2024 - Wes Davis

GFL Environmental - 007 - Brunswick

2809 Galloway Road Bolivia, NC

US 28422 Contact: DONALD CRAVEN

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

Submitted By: DONALD CRAVEN

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