WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

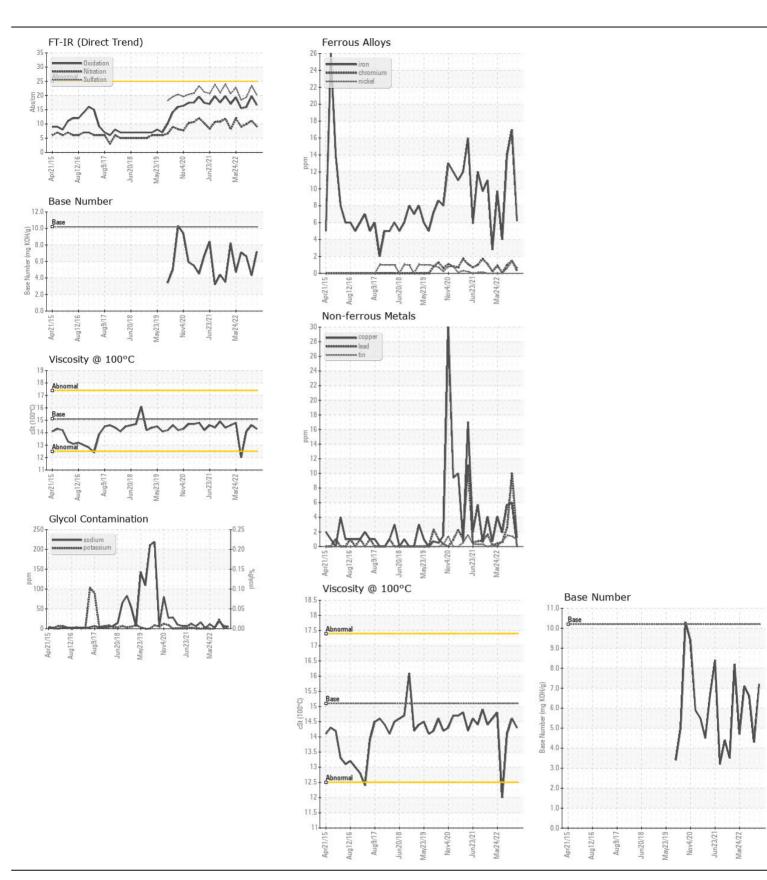
Area

(YA115770) Machine Id

10418C Component

Natural Gas Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		GFL0082427	GFL0082473	GFL005072
Resample at the next service interval to monitor.	Sample Date		Client Info		16 Apr 2024	26 Sep 2023	28 Mar 202
	Machine Age	hrs	Client Info		0	8498	7286
	Oil Age	hrs	Client Info		0	1232	647
	Filter Age	hrs	Client Info		0	1232	647
	Oil Changed		Client Info		N/A	Changed	Changed
	Filter Changed		Client Info		N/A	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAI
WEAR	Iron	ppm	ASTM D5185m	\50	6	17	14
WEAR	Chromium	ppm	ASTM D5185m		<1	2	1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1	1	<1
	Titanium	ppm	ASTM D5185m	72	0	0	0
	Silver	ppm	ASTM D5185m	~3	<1	0	0
	Aluminum	ppm	ASTM D5185m		2	2	2
	Lead	ppm	ASTM D5185m		1	10	3
	Copper	ppm	ASTM D5185m		0	6	6
	Tin	ppm	ASTM D5185m		<1	1	2
	Vanadium	ppm	ASTM D5185m	7 7	0	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NON
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>+100	4	9	6
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	4	2	23
	Water		WC Method	>0.1	NEG	NEG	NEG
	Soot %	%	*ASTM D7844		0	0	0.1
	Nitration	Abs/cm	*ASTM D7624	>20	9.1	11.1	9.9
	Sulfation	Abs/.1mm	*ASTM D7415	>30	20.1	23.5	19.4
	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	NORN
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
FLUID CONDITION The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Sodium	ppm	ASTM D5185m		5	7	18
	Boron	ppm	ASTM D5185m	50	25	9	18
	Barium	ppm	ASTM D5185m		<1	0	1
	Molybdenum	ppm	ASTM D5185m		52	58	51
	Manganese	ppm	ASTM D5185m		<1	<1	1
	Magnesium	ppm	ASTM D5185m		646	582	495
	Calcium	ppm	ASTM D5185m		1658	1687	1534
	Phosphorus	ppm	ASTM D5185m		898	778	710
	Zinc	ppm	ASTM D5185m		1040	1053	925
	Sulfur	ppm	ASTM D5185m		2998	2629	2493
	Oxidation	Abs/.1mm	*ASTM D7414		16.6	19.8	15.9
	CAIGGIOIT						
	Base Number (BN)	ma KOH/a	ASTM D2896	10.2	7.2	4.3	6.6







Certificate L2367

Laboratory Sample No.

Lab Number : 06151442 Unique Number: 10981520 Test Package: FLEET (Additional Tests: Glycol)

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : GFL0082427

Received **Tested** Diagnosed

: 17 Apr 2024 : 23 Apr 2024

: 23 Apr 2024 - Jonathan Hester

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)