WEAR CONTAMINATION FLUID CONDITION

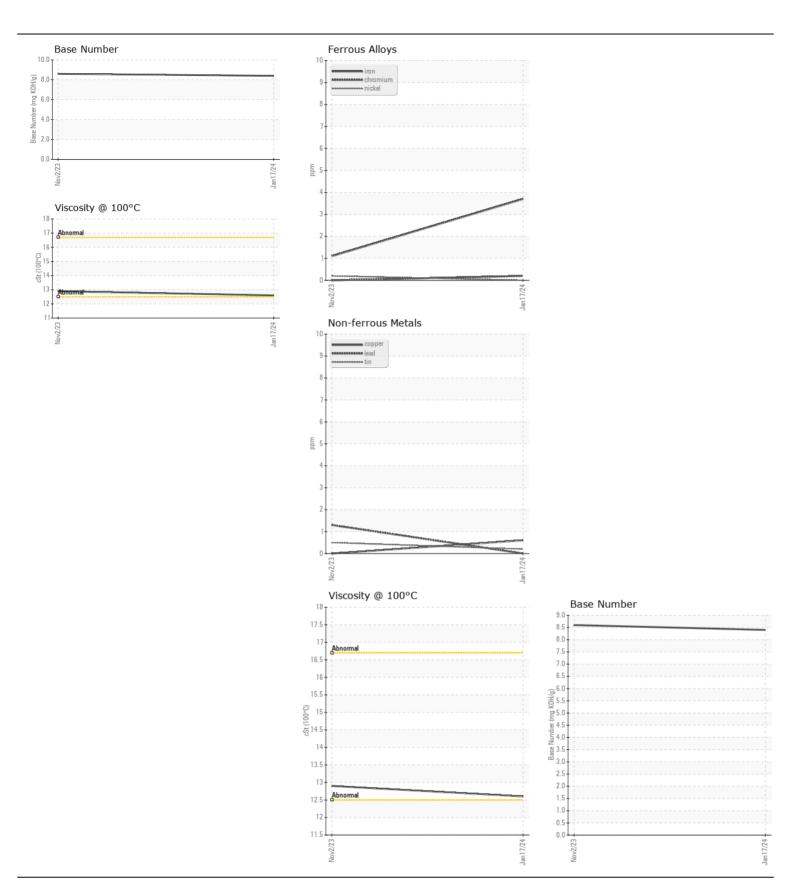
NORMAL NORMAL

Machine Id

825058

Component Diesel Engine

Diesel Engine							
{not provided} (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Number	OOW	Client Info	LITTIOTALIT	GFL0108320	GFL0098241	
	Sample Date		Client Info		17 Jan 2024	02 Nov 2023	
	Machine Age	hrs	Client Info		2115	2109	
	Oil Age	hrs	Client Info		2115	2109	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Changed	N/A	
	Filter Changed		Client Info		Changed	N/A	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>100	4	1	
WEAT	Chromium	ppm	ASTM D5185m		<1	0	
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0	<1	
	Titanium	ppm	ASTM D5185m		0	0	
	Silver	ppm	ASTM D5185m	>3	0	<1	
	Aluminum	ppm	ASTM D5185m		<1	<1	
	Lead	ppm	ASTM D5185m		0	1	
	Copper	ppm	ASTM D5185m		<1	0	
	Tin	ppm	ASTM D5185m		<1	<1	
	Vanadium	ppm	ASTM D5185m		<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Ciliaaa		ACTM DE10E	05	•		
CONTAMINATION	Silicon	ppm	ASTM D5185m		3 0	3	
There is no indication of any contamination in the oil.	Potassium Fuel	ppm	ASTM D5185m WC Method		-	<1 <1.0	
	Water		WC Method		<1.0 NEG	NEG	
	Glycol		WC Method	>0.2	NEG	NEG	
	Soot %	%	*ASTM D7844	~3	0.1	0.1	
	Nitration	Abs/cm	*ASTM D7624	>20	8.5	7.3	
	Sulfation	Abs/.1mm	*ASTM D7415		20.0	19.1	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar		>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		1	<1	
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		9	12	
	Barium	ppm	ASTM D5185m		0	0	
	Molybdenum	ppm	ASTM D5185m		62	59	
	Manganese	ppm	ASTM D5185m		<1	<1	
	Magnesium	ppm	ASTM D5185m		1069	941	
	Calcium	ppm	ASTM D5185m		1140	1064	
	Phosphorus	ppm	ASTM D5185m		1163	1041	
	Zinc	ppm	ASTM D5185m		1393	1306	
	Sulfur	ppm Abo/1mm	ASTM D5185m	. 25	3593	3363	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	17.2	15.8	
	Base Number (BN) Visc @ 100°C	mg KOH/g cSt	ASTM D2896 ASTM D445		8.4	8.6 12.9	
	VISC (W TOU'C	COL	49 LIVI D449		12.6	12.9	







Certificate L2367

Laboratory Sample No. Lab Number **Unique Number**

: GFL0108320 : 06065397 : 10836779 Test Package : FLEET

To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 19 Jan 2024 Diagnosed : 22 Jan 2024 Diagnostician : Wes Davis

GFL Environmental - 652 - Fredericksburg Hauling 10954 Houser Drive

Fredericksburg, VA US 22408

Contact: WILLIAM MILO wmilo@gflenv.com

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* - 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: