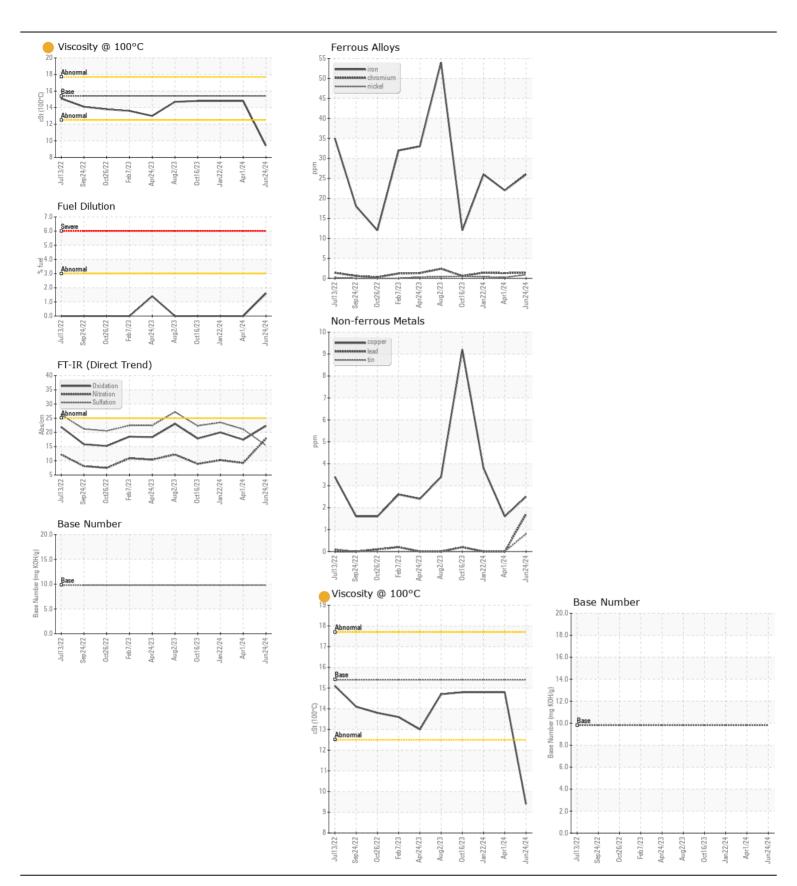
WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL **ATTENTION**



Machine Id 810001 Component
Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
No corrective action is recommended at this time. Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0119629	,	GFL0107279
	Sample Date		Client Info		24 Jun 2024	01 Apr 2024	22 Jan 2024
	Machine Age	hrs	Client Info		0	9833	9469
	Oil Age	hrs	Client Info		0	600	600
	Filter Age	hrs	Client Info		0	600	600
	Oil Changed		Client Info		N/A	Changed	Changed
	Filter Changed		Client Info		N/A	Changed	Changed
	Sample Status				ATTENTION	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>90	26	22	26
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	1	1	1
	Nickel	ppm	ASTM D5185m	>2	<1	<1	<1
	Titanium	ppm	ASTM D5185m	>2	<1	0	0
	Silver	ppm	ASTM D5185m		<1	0	0
	Aluminum	ppm	ASTM D5185m		5	3	5
	Lead	ppm		>40	2	0	0
	Copper	ppm	ASTM D5185m	>330	2	2	4
	Tin	ppm	ASTM D5185m		<1	0	0
	Vanadium	ppm	ASTM D5185m		<1	0	0
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	9	6	8
	Potassium	ppm	ASTM D5185m	>20	5	2	4
Fuel content negligible. There is no indication of any contamination in the oil.	Fuel	%	ASTM D3524	>3.0	1.6	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>6	0.7	0.7	0.8
	Nitration	Abs/cm	*ASTM D7624	>20	17.8	9.2	10.2
	Sulfation	Abs/.1mm	*ASTM D7415	>30	15.4	21.1	23.5
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		9	6	7
The cilculate site is leaven the property of the DNI was all indicates that	Boron	ppm	ASTM D5185m	0	14	5	8
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Barium	ppm	ASTM D5185m	0	1	0	0
	Molybdenum	ppm	ASTM D5185m	60	61	60	55
	Manganese	ppm	ASTM D5185m	0	1	0	0
	Magnesium	ppm	ASTM D5185m	1010	904	993	879
	Calcium	ppm	ASTM D5185m	1070	1113	1095	1247
	Phosphorus	ppm	ASTM D5185m	1150	968	996	1006
	Zinc	ppm	ASTM D5185m		1245	1232	1210
	Sulfur	ppm	ASTM D5185m	2060	2970	2378	2496
	Oxidation	Abs/.1mm	*ASTM D7414	>25	22.3	17.4	20.0
		110111	A OTHER DOGGO	0 0			
	Base Number (BN)	mg KOH/g	ASTM D2896	9.8	18.7		







Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : GFL0119629 Lab Number : 06219463

Unique Number: 11097660

Received **Tested** Diagnosed

: 25 Jun 2024 : 28 Jun 2024

: 28 Jun 2024 - Jonathan Hester

GFL Environmental - 250 - Sault Ste Marie Hauling + MRF 86 Sackville Rd, Sault Ste. Marie, ON CA P6B 4T6

Contact: Mike Pelletier mpelletier@gflenv.com T: (705)945-7554

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.

Test Package: FLEET (Additional Tests: FuelDilution, PercentFuel)

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

F: (705)945-7857