WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

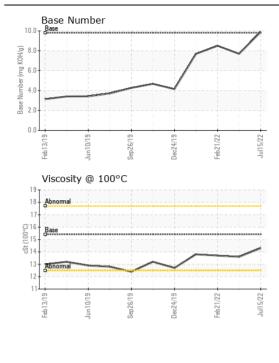
Machine Id

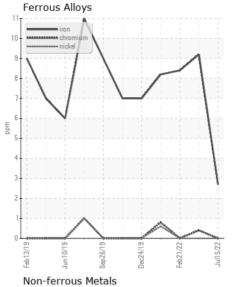
## 929078-205275

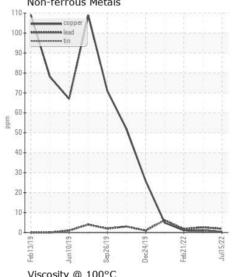
Component

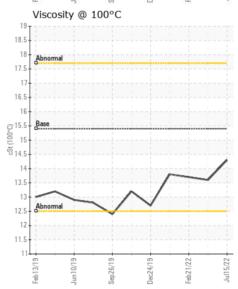
Diesel Fngine

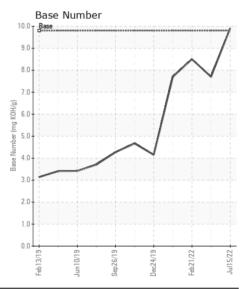
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.	Sample Number	JOIVI	Client Info	LIIIIV/NJII	GFL0046862	GFL0046845	GFL0046838
	Sample Date		Client Info		15 Jul 2022	22 Apr 2022	21 Feb 2022
	Machine Age	hrs	Client Info		11079	10347	9815
	Oil Age	hrs	Client Info		0	532	1231
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed	0	Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	nnm	ASTM D5185m	> 100	3	9	8
WEAN	Chromium	ppm	ASTM D5185m		0	<1	0
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0	0	0
	Titanium	ppm	ASTM D5185m	>4	0	0	0
	Silver	ppm	ASTM D5185m	~3	<1	0	0
	Aluminum	ppm	ASTM D5185m		<1	1	0
	Lead		ASTM D5185m		2	3	2
	Copper	ppm	ASTM D5185m		<1	1	1
	Tin	ppm	ASTM D5185m		<1	<1	0
	Vanadium	ppm	ASTM D5185m	710	0	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	2	4	2
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	<1	0	<1
	Fuel		WC Method	>5	<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.1	0.3	0.2
	Nitration	Abs/cm	*ASTM D7624	>20	6.7	8.0	8.4
	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.8	19.9	21.3
	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	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2	2	0
	Boron	ppm	ASTM D5185m	0	8	3	5
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m	0	0	0	0
	Molybdenum	ppm	ASTM D5185m	60	63	62	57
	Manganese	ppm	ASTM D5185m	0	0	<1	0
	Magnesium	ppm	ASTM D5185m	1010	923	996	789
	Calcium	ppm	ASTM D5185m		1077	1145	987
	Phosphorus	ppm	ASTM D5185m	1150	1001	1066	902
	Zinc	ppm	ASTM D5185m	1270	1211	1263	1128
	Sulfur	ppm	ASTM D5185m	2060	3655	2672	1524
	Oxidation	Abs/.1mm	*ASTM D7414	>25	15.4	15.6	17.1
	Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.9	7.7	8.5
	Visc @ 100°C	cSt	ASTM D445	15.4	14.3	13.6	13.7













Certificate L2367

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

: GFL0046862 : 05598669 : 10063149 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 : 22 Jul 2022

: 25 Jul 2022 Diagnosed Diagnostician : Wes Davis

GFL Environmental - 814 - Little Rock Hauling 4005 Hwy 161 N.

Little Rock, AR US 72117

Contact: Brad Koenig bkoenig@gflenv.com T:

\* - 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)

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