



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
834048
Component
Diesel Engine
Fluid
RDL-3647 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0108135	GFL0108157	GFL0102478
Sample Date		Client Info		24 Jan 2024	15 Jan 2024	22 Dec 2023
Machine Age	hrs	Client Info		0	1130	974
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	26	29	23
Chromium	ppm	ASTM D5185m	>5	1	1	<1
Nickel	ppm	ASTM D5185m	>2	<1	1	<1
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>30	5	6	5
Lead	ppm	ASTM D5185m	>30	2	2	2
Copper	ppm	ASTM D5185m	>150	6	7	6
Tin	ppm	ASTM D5185m	>5	2	2	2
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

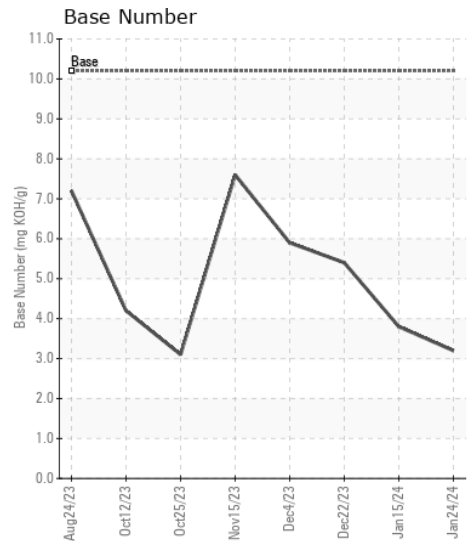
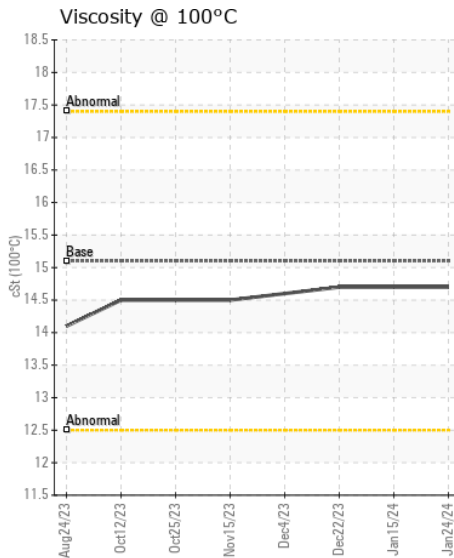
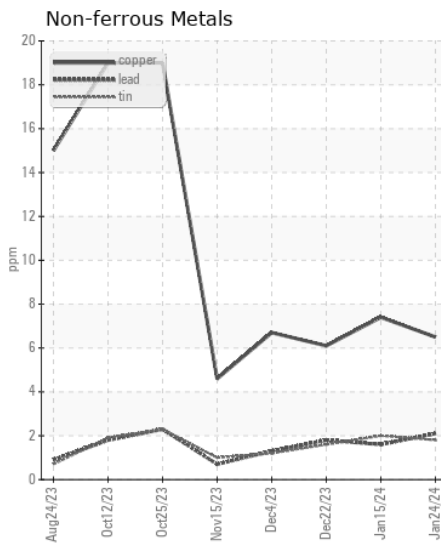
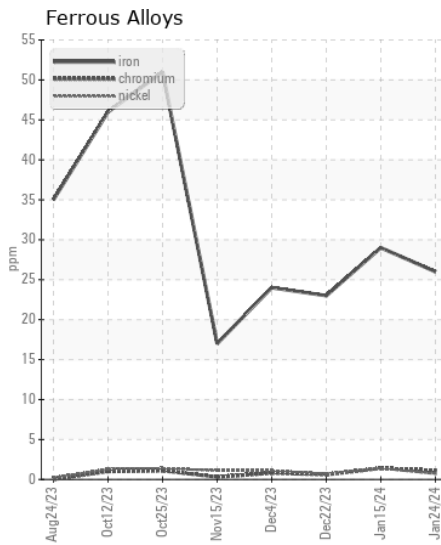
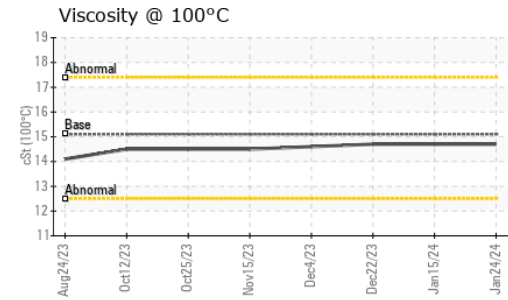
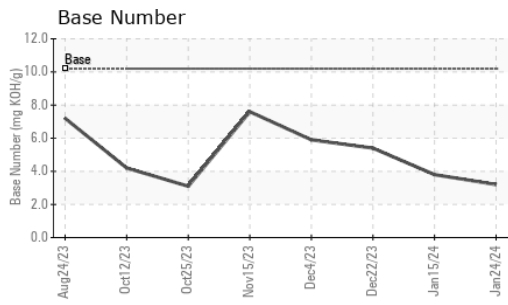
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	12	14	13
Potassium	ppm	ASTM D5185m	>20	6	7	5
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	0	0.2
Nitration	Abs/cm	*ASTM D7624	>20	12.3	12.1	10.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.9	22.7	20.5
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

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	6	4
Boron	ppm	ASTM D5185m	50	4	9	11
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	50	44	53	53
Manganese	ppm	ASTM D5185m	0	4	5	5
Magnesium	ppm	ASTM D5185m	560	634	610	668
Calcium	ppm	ASTM D5185m	1510	1458	1461	1588
Phosphorus	ppm	ASTM D5185m	780	686	693	799
Zinc	ppm	ASTM D5185m	870	870	968	1068
Sulfur	ppm	ASTM D5185m	2040	2002	2343	2583
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.5	20.2	17.0
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	3.2	3.8	5.4
Visc @ 100°C	cSt	ASTM D445	15.1	14.7	14.7	14.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0108135 **Received** : 31 Jan 2024
Lab Number : 06076329 **Diagnosed** : 01 Feb 2024
Unique Number : 10858420 **Diagnostician** : Wes Davis
Test Package : FLEET

GFL Environmental - 837 - Harrison TS
 22820 S State Route 291
 Harrisonville, MO
 US 64701
 Contact: BRYAN SWANSON
 bryanswanson@gflenv.com
 T:
 F:

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)