



WEAR	SEVERE
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
934025
 Component
Natural Gas Engine
 Fluid
RDL-3647 (--- GAL)

RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Please note that this is a corrected copy for data entry updates.

WEAR

Piston, ring and cylinder wear is indicated.

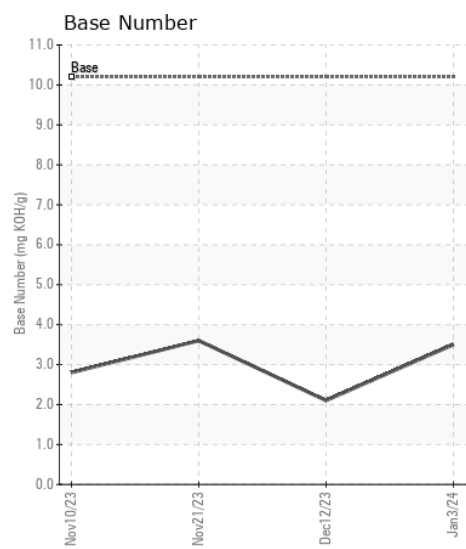
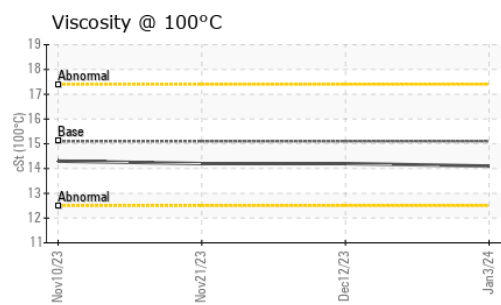
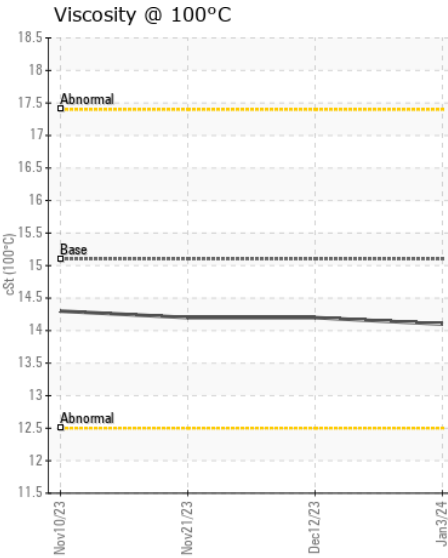
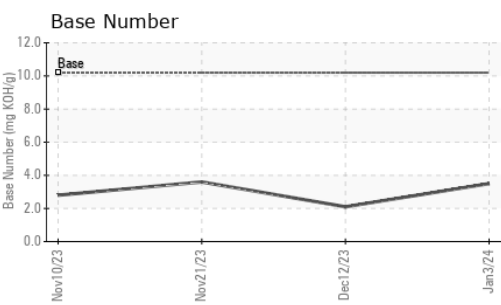
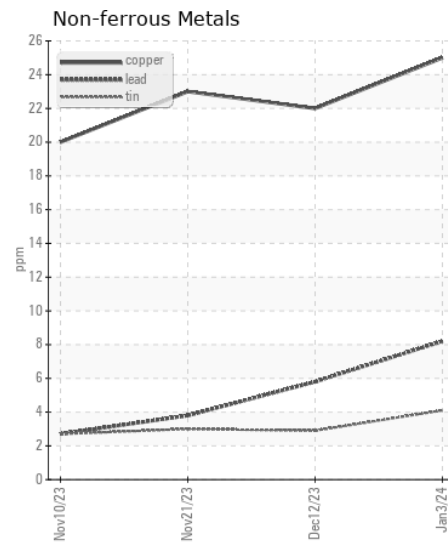
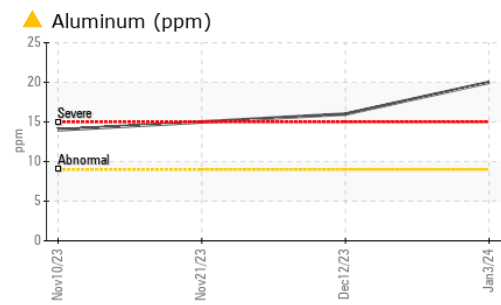
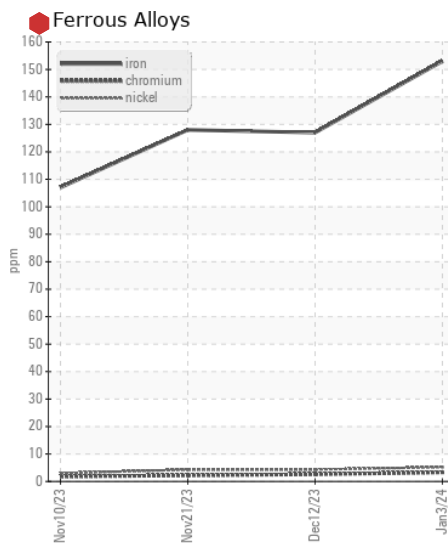
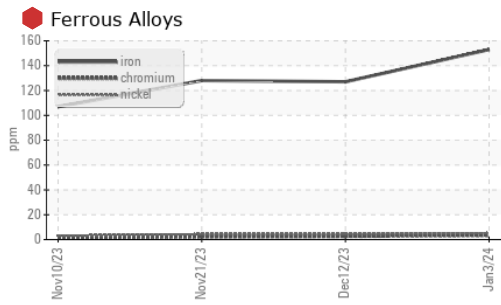
CONTAMINATION

There is no indication of any contamination in the oil.

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0102437	GFL0102509	GFL0098638
Sample Date		Client Info		03 Jan 2024	12 Dec 2023	21 Nov 2023
Machine Age	hrs	Client Info		1462	1414	1268
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	N/A	N/A
Filter Changed		Client Info		Not Changd	N/A	N/A
Sample Status				SEVERE	SEVERE	SEVERE
Iron	ppm	ASTM D5185m	>50	153	127	128
Chromium	ppm	ASTM D5185m	>4	3	3	2
Nickel	ppm	ASTM D5185m	>2	5	4	4
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	<1	<1
Aluminum	ppm	ASTM D5185m	>9	20	16	15
Lead	ppm	ASTM D5185m	>30	8	6	4
Copper	ppm	ASTM D5185m	>35	25	22	23
Tin	ppm	ASTM D5185m	>4	4	3	3
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>+100	33	32	35
Potassium	ppm	ASTM D5185m	>20	14	12	14
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.2	0.1	0
Nitration	Abs/cm	*ASTM D7624	>20	15.2	15.2	14.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	29.3	29.4	28.1
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	>0.1	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		11	9	4
Boron	ppm	ASTM D5185m	50	6	2	5
Barium	ppm	ASTM D5185m	5	3	0	0
Molybdenum	ppm	ASTM D5185m	50	89	80	79
Manganese	ppm	ASTM D5185m	0	21	18	19
Magnesium	ppm	ASTM D5185m	560	1040	905	906
Calcium	ppm	ASTM D5185m	1510	1598	1389	1440
Phosphorus	ppm	ASTM D5185m	780	1032	750	812
Zinc	ppm	ASTM D5185m	870	1242	1023	1033
Sulfur	ppm	ASTM D5185m	2040	2820	2355	2563
Oxidation	Abs/.1mm	*ASTM D7414	>25	29.6	29.1	27.0
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	3.5	2.1	3.6
Visc @ 100°C	cSt	ASTM D445	15.1	14.1	14.2	14.2



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0102437 **Received** : 08 Jan 2024
Lab Number : 06054578 **Diagnosed** : 16 Jan 2024
Unique Number : 10820527 **Diagnostician** : Doug Bogart
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:

Certificate L2367
 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)