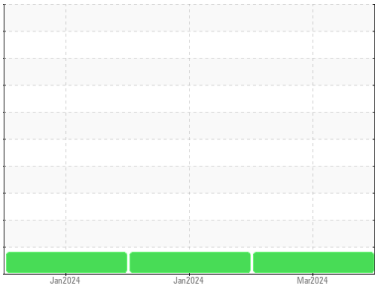
OIL ANALYSIS REPORT

Area
2730
Machine Id
813031
Component
Diesel Engine
Fluid
{not provided} (--- GAL)

Sample Rating Trend



WEAR

DIAGNOSIS

▲ Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

▲ Wear

The nickel level is abnormal. All other metal levels are typical for a new component breaking in.

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 condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**GFL0112169**	GFL0098054	GFL0023773
Sample Date		Client Info		**18 Mar 2024**	22 Jan 2024	18 Jan 2024
Machine Age	hrs	Client Info		**1119**	1119	1119
Oil Age	hrs	Client Info		**1119**	1119	1119
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	**<1.0**	<1.0	<1.0
Water		WC Method	>0.2	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>120	**71**	55	61
Chromium	ppm	ASTM D5185m	>20	**3**	2	2
Nickel	ppm	ASTM D5185m	>5	▲ **32**	▲ 21	▲ 28
Titanium	ppm	ASTM D5185m	>2	**<1**	<1	0
Silver	ppm	ASTM D5185m	>2	**<1**	0	<1
Aluminum	ppm	ASTM D5185m	>20	**3**	3	3
Lead	ppm	ASTM D5185m	>40	**2**	1	<1
Copper	ppm	ASTM D5185m	>330	**52**	42	42
Tin	ppm	ASTM D5185m	>15	**4**	4	4
Vanadium	ppm	ASTM D5185m		**<1**	<1	<1
Cadmium	ppm	ASTM D5185m		**<1**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**10**	9	12
Barium	ppm	ASTM D5185m		**1**	0	0
Molybdenum	ppm	ASTM D5185m		**77**	67	75
Manganese	ppm	ASTM D5185m		**4**	3	3
Magnesium	ppm	ASTM D5185m		**863**	826	998
Calcium	ppm	ASTM D5185m		**1171**	1096	1200
Phosphorus	ppm	ASTM D5185m		**849**	832	968
Zinc	ppm	ASTM D5185m		**1103**	1022	1262
Sulfur	ppm	ASTM D5185m		**2010**	1642	2395

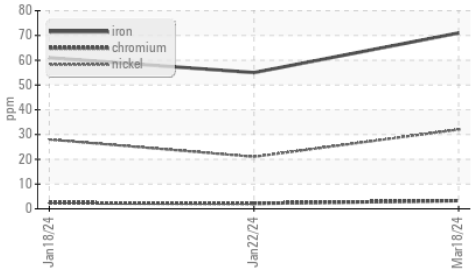
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**19**	17	17
Sodium	ppm	ASTM D5185m		**1**	4	7
Potassium	ppm	ASTM D5185m	>20	**8**	5	5

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>4	**0.9**	0.8	0.7
Nitration	Abs/cm	*ASTM D7624	>20	**12.2**	11.4	11.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	**23.3**	23.0	22.6

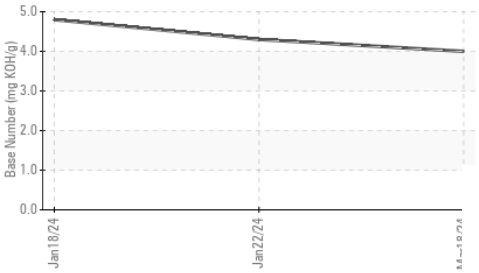
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**22.4**	21.5	20.9
Base Number (BN)	mg KOH/g	ASTM D2896		**4.0**	4.3	4.8

OIL ANALYSIS REPORT

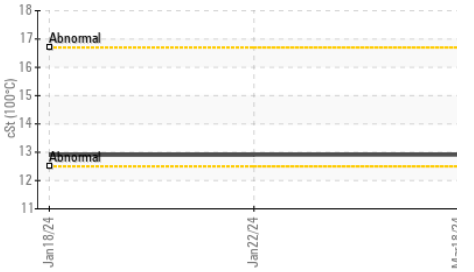
Ferrous Alloys



Base Number



Viscosity @ 100°C

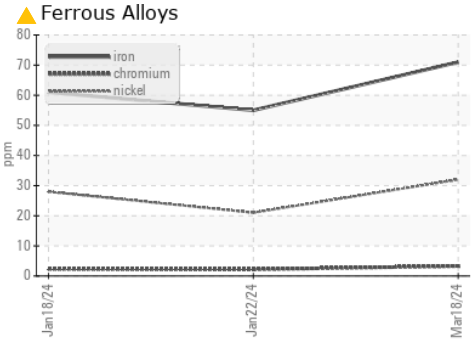


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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
Free Water	scalar	*Visual		**NEG**	NEG	NEG

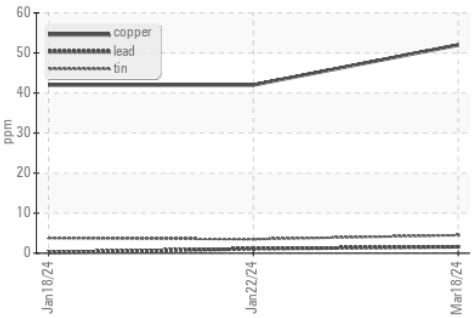
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445		**12.9**	12.9	12.9

GRAPHS

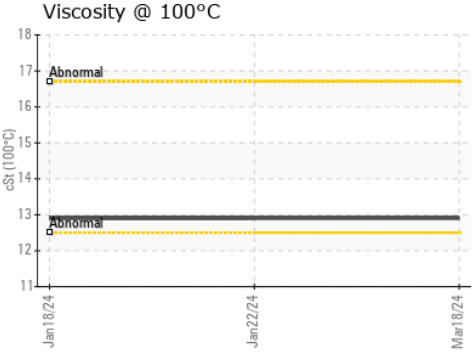
Ferrous Alloys



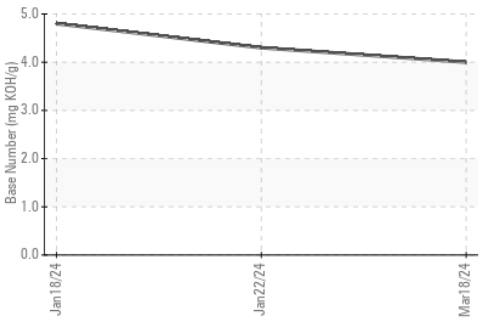
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0112169
Lab Number : 06127503
Unique Number : 10941654
Test Package : FLEET

Received : 25 Mar 2024
Tested : 26 Mar 2024
Diagnosed : 27 Mar 2024 - Don Baldridge

GFL Environmental - 045 - Tidewater
3821 Cook Blvd.
Chesapeake, VA
US 23323
Contact: ELVIN RODRIGUEZ
elvinrodriguez@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)