

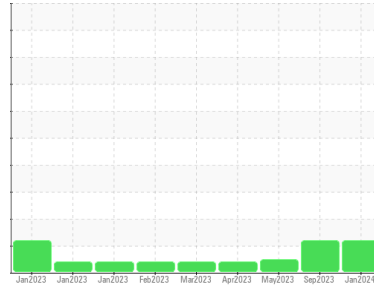


OIL ANALYSIS REPORT



Area
(62A0X0D) TALLASSEE
Machine Id
425027-345507
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER15W40 (--- LTR)

Sample Rating Trend



FUEL



DIAGNOSIS

Recommendation

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0081857	GFL0078464	GFL0072682
Sample Date	Client Info	25 Jan 2024	29 Sep 2023	11 May 2023
Machine Age	hrs	17584	17245	17017
Oil Age	hrs	1015	676	448
Oil Changed	Client Info	N/A	N/A	Not Changd
Sample Status		ABNORMAL	ABNORMAL	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
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	20	11	7
Chromium	ppm ASTM D5185m >20	<1	<1	<1
Nickel	ppm ASTM D5185m >5	<1	1	<1
Titanium	ppm ASTM D5185m >2	0	0	0
Silver	ppm ASTM D5185m >2	0	0	0
Aluminum	ppm ASTM D5185m >20	15	9	8
Lead	ppm ASTM D5185m >40	<1	<1	0
Copper	ppm ASTM D5185m >330	4	3	1
Tin	ppm ASTM D5185m >15	<1	1	1
Vanadium	ppm ASTM D5185m	0	0	0
Cadmium	ppm ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	3	9	14
Barium	ppm ASTM D5185m 0	0	0	0
Molybdenum	ppm ASTM D5185m 0	62	64	65
Manganese	ppm ASTM D5185m	<1	<1	<1
Magnesium	ppm ASTM D5185m 0	794	826	855
Calcium	ppm ASTM D5185m	1048	1076	1102
Phosphorus	ppm ASTM D5185m	837	900	939
Zinc	ppm ASTM D5185m	1109	1126	1225
Sulfur	ppm ASTM D5185m	2843	2871	3879

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	10	7	6
Sodium	ppm ASTM D5185m	4	4	3
Potassium	ppm ASTM D5185m >20	4	3	3
Fuel	% ASTM D3524 >3.0	▲ 3.5	▲ 3.9	<1.0

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >4	1	0.7	0.5
Nitration	Abs/cm *ASTM D7624 >20	11.3	9.9	9.3
Sulfation	Abs/.1mm *ASTM D7415 >30	21.9	19.3	18.6

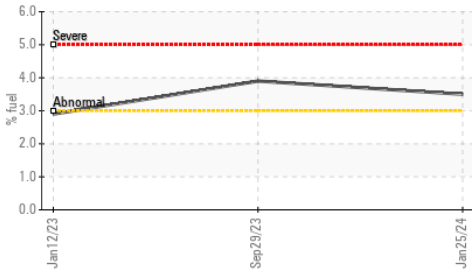
FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	16.3	14.8	14.4
Base Number (BN)	mg KOH/g ASTM D2896 9.4	4.8	6.1	7.2

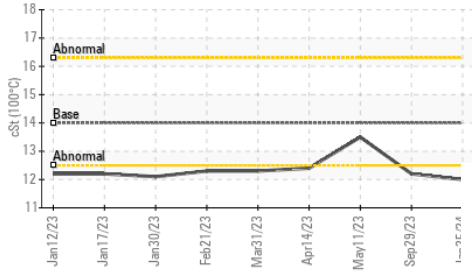


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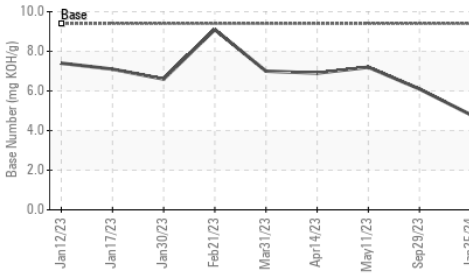
▲ Fuel Dilution



▲ Viscosity @ 100°C



Base Number

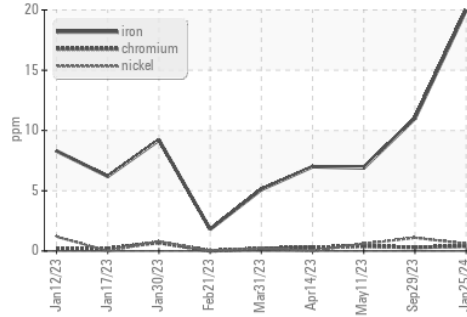


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

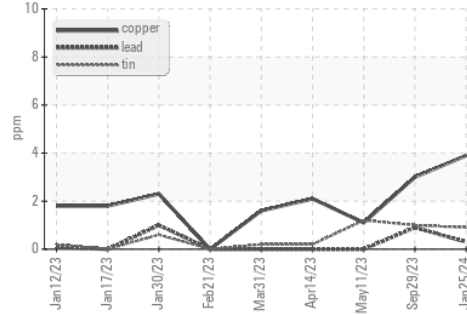
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14 ▲ 12.0	▲ 12.2	13.5

GRAPHS

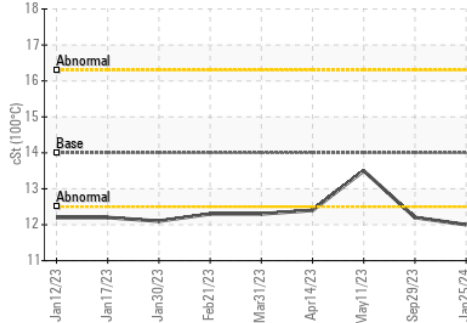
Ferrous Alloys



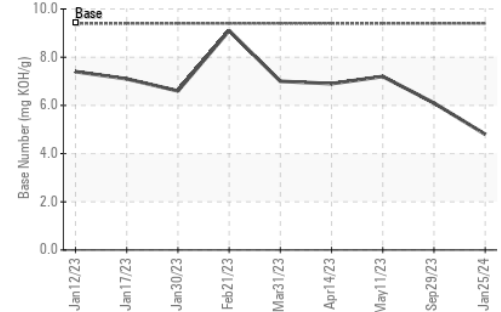
Non-ferrous Metals



▲ Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : GFL0081857

Lab Number : 06078979

Unique Number : 10861070

Test Package : FLEET (Additional Tests: PercentFuel)

Received : 02 Feb 2024

Tested : 06 Feb 2024

Diagnosed : 06 Feb 2024 - Wes Davis

GFL Environmental - 172 - Montgomery-Alexander City-Tallahassee

Multiple Sites

Montgomery, AL

US 36108

Contact: RICHARD HATFIELD

rhatfield@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)