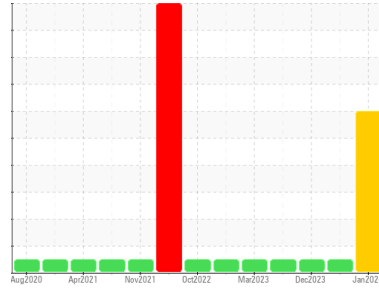




PROBLEM SUMMARY

Sample Rating Trend



WEAR



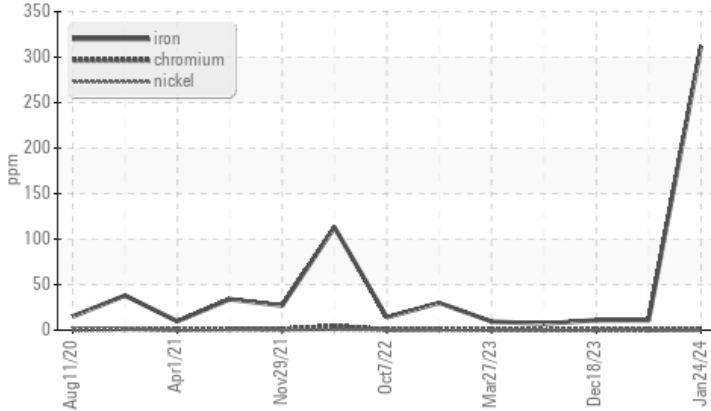
Machine Id
727016-596

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 15W40 (--- LTR)

COMPONENT CONDITION SUMMARY

Ferrous Alloys



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	312	11	11

Customer Id: GFL650
Sample No.: GFL0077786
Lab Number: 06072158
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldrige +1
don.b505@comcast.net

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

27 Dec 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



18 Dec 2023 Diag: Jonathan Hester

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



30 Aug 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

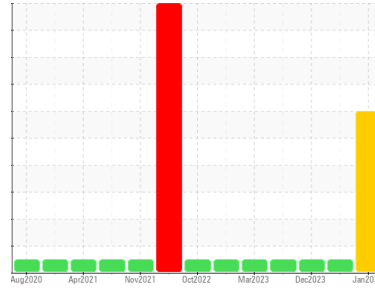
view report





OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
727016-596

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 15W40 (--- LTR)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

An increase in the iron level is noted. Cylinder, crank, or cam shaft 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.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0077786	GFL0077768	GFL0077771
Sample Date	Client Info	24 Jan 2024	27 Dec 2023	18 Dec 2023
Machine Age	mls Client Info	240038	237345	236652
Oil Age	mls Client Info	0	0	0
Oil Changed	Client Info	Changed	Not Changd	Not Changd
Sample Status		SEVERE	NORMAL	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<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 >100	312	11	11
Chromium	ppm ASTM D5185m >20	<1	<1	<1
Nickel	ppm ASTM D5185m >4	0	0	0
Titanium	ppm ASTM D5185m	0	<1	0
Silver	ppm ASTM D5185m >3	0	0	0
Aluminum	ppm ASTM D5185m >20	19	16	17
Lead	ppm ASTM D5185m >40	9	3	3
Copper	ppm ASTM D5185m >330	24	4	1
Tin	ppm ASTM D5185m >15	3	<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 250	<1	3	2
Barium	ppm ASTM D5185m 10	0	0	0
Molybdenum	ppm ASTM D5185m 100	59	61	60
Manganese	ppm ASTM D5185m	6	<1	0
Magnesium	ppm ASTM D5185m 450	939	981	896
Calcium	ppm ASTM D5185m 3000	1078	1139	1056
Phosphorus	ppm ASTM D5185m 1150	981	1037	920
Zinc	ppm ASTM D5185m 1350	1194	1282	1184
Sulfur	ppm ASTM D5185m 4250	2856	3111	3053

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	10	8	8
Sodium	ppm ASTM D5185m >158	2	<1	0
Potassium	ppm ASTM D5185m >20	<1	0	2

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	1.8	1.4	1.2
Nitration	Abs/cm *ASTM D7624 >20	14.6	12.8	11.6
Sulfation	Abs/.1mm *ASTM D7415 >30	25.8	23.0	21.2

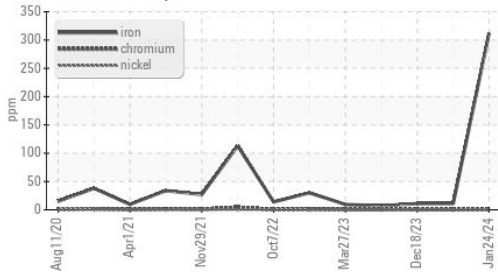
FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	24.0	21.6	19.2
Base Number (BN)	mg KOH/g ASTM D2896 8.5	7.0	7.4	7.5



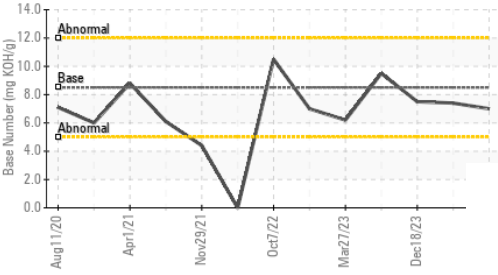
OIL ANALYSIS REPORT

Ferrous Alloys



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

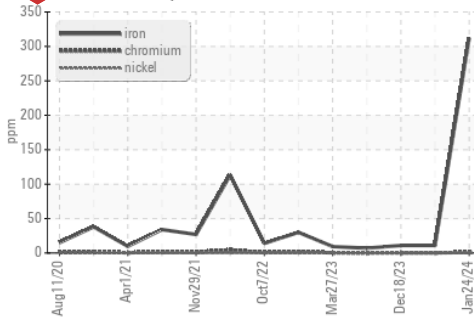
Base Number



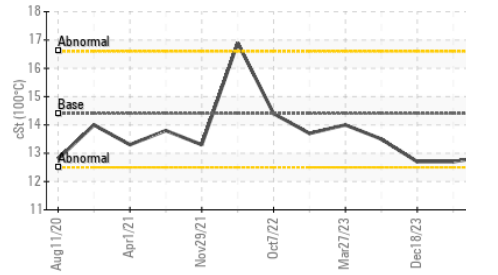
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	12.9	12.7

GRAPHS

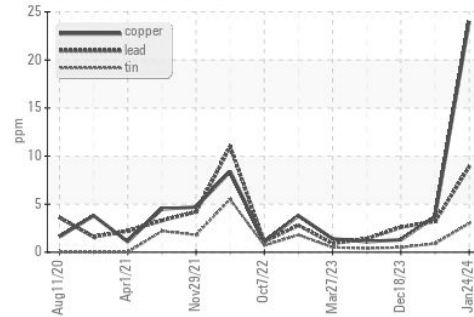
Ferrous Alloys



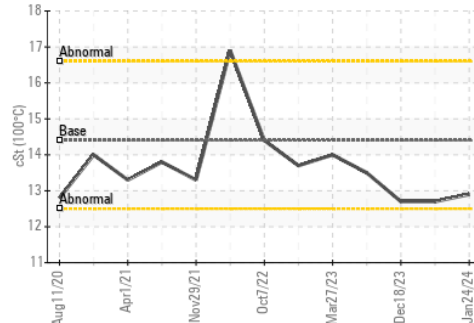
Viscosity @ 100°C



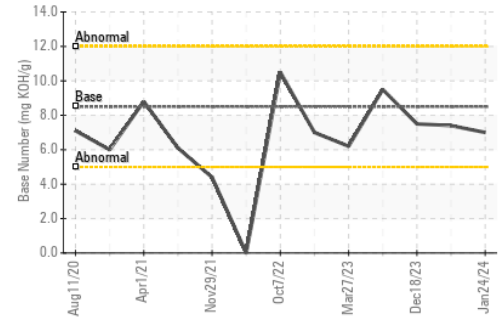
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0077786 **Received** : 26 Jan 2024
Lab Number : 06072158 **Diagnosed** : 30 Jan 2024
Unique Number : 10848835 **Diagnostician** : Don Baldrige
Test Package : FLEET

GFL Environmental - 650 - West Point Hauling
 7825 Parham Landing Road
 West Point, VA
 US 23181
 Contact: Jason Smith
 jasonsmith@gflenv.com

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)

T:
F: