



PROBLEM SUMMARY

Sample Rating Trend

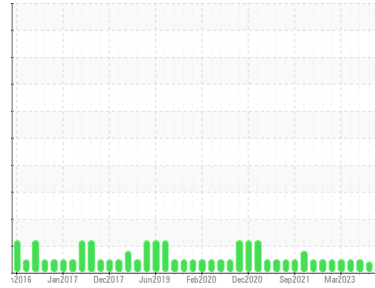
VISCOSITY



Machine Id
10532

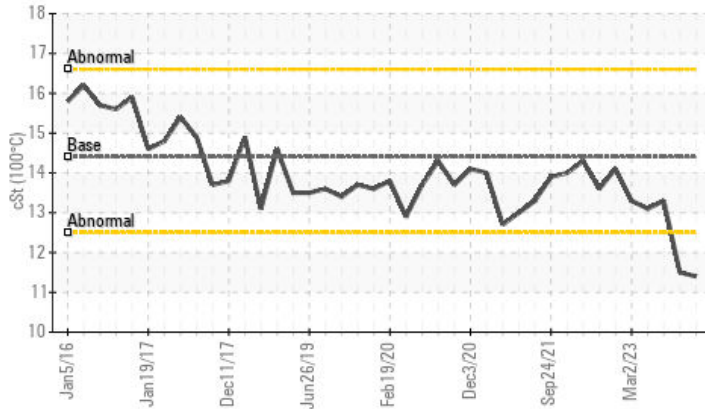
Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 15W40 (11 GAL)



COMPONENT CONDITION SUMMARY

▲ Viscosity @ 100°C



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	ATTENTION	NORMAL
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 11.4	▲ 11.5	13.3

Customer Id: GFL095
Sample No.: GFL0092488
Lab Number: 06004846
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:

Sean Felton +1 919-379-4092
sfelton@wearcheckusa.com

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.

HISTORICAL DIAGNOSIS

23 Oct 2023 Diag: Jonathan Hester

VISCOSITY



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Fuel content negligible. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

[view report](#)



19 Jul 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](#)



22 May 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.

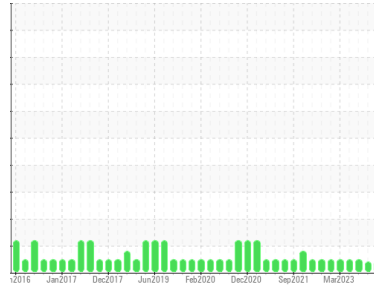
[view report](#)





OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id
10532

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 15W40 (11 GAL)

DIAGNOSIS

▲ Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

▲ Fluid Condition

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0092488	GFL0092453	GFL0074606
Sample Date	Client Info	08 Nov 2023	23 Oct 2023	19 Jul 2023
Machine Age	hrs	0	23219	22346
Oil Age	hrs	0	585	288
Oil Changed	Client Info	Changed	Not Changd	Changed
Sample Status		ATTENTION	ATTENTION	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >3.0	<1.0	0.2	<1.0
Glycol	WC Method	NEG	NEG	0.0

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >75	9	10	10
Chromium	ppm ASTM D5185m >5	<1	<1	<1
Nickel	ppm ASTM D5185m >4	0	<1	0
Titanium	ppm ASTM D5185m >2	0	<1	0
Silver	ppm ASTM D5185m >2	<1	0	0
Aluminum	ppm ASTM D5185m >15	2	2	1
Lead	ppm ASTM D5185m >25	<1	<1	0
Copper	ppm ASTM D5185m >100	0	<1	0
Tin	ppm ASTM D5185m >4	<1	0	0
Vanadium	ppm ASTM D5185m	0	0	0
Cadmium	ppm ASTM D5185m	0	<1	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 250	5	4	12
Barium	ppm ASTM D5185m 10	0	3	0
Molybdenum	ppm ASTM D5185m 100	47	49	62
Manganese	ppm ASTM D5185m	<1	0	0
Magnesium	ppm ASTM D5185m 450	672	631	827
Calcium	ppm ASTM D5185m 3000	755	774	1340
Phosphorus	ppm ASTM D5185m 1150	818	754	1054
Zinc	ppm ASTM D5185m 1350	973	946	1284
Sulfur	ppm ASTM D5185m 4250	2273	2436	3822

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	7	6	7
Sodium	ppm ASTM D5185m >158	24	10	139
Potassium	ppm ASTM D5185m >20	1	2	3

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >6	0.3	0.2	0.4
Nitration	Abs/cm *ASTM D7624 >20	6.6	6.2	8.4
Sulfation	Abs/.1mm *ASTM D7415 >30	16.6	16.2	19.2

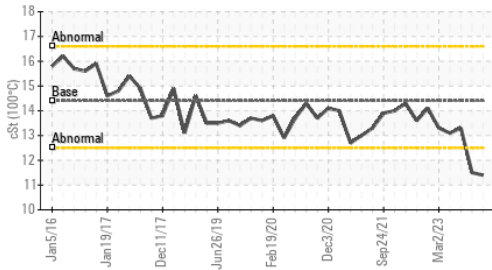
FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	11.5	11.4	14.7
Base Number (BN)	mg KOH/g ASTM D2896 8.5	5.4	5.7	7.1

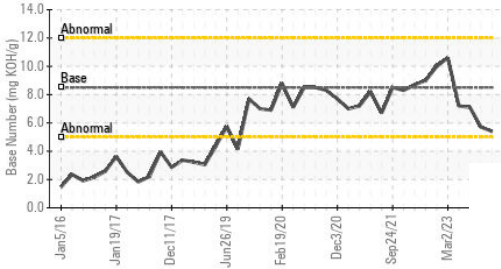


OIL ANALYSIS REPORT

▲ Viscosity @ 100°C



Base Number

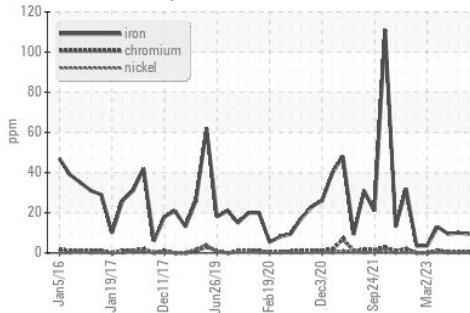


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

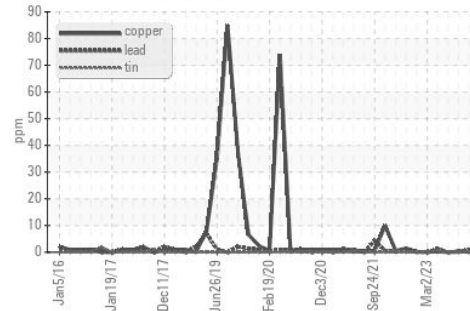
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	▲ 11.4	▲ 11.5	13.3

GRAPHS

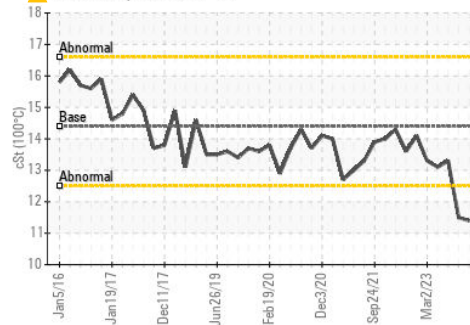
Ferrous Alloys



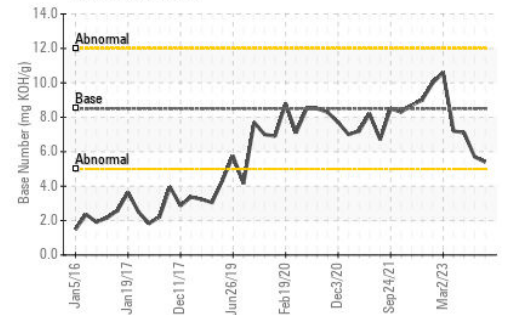
Non-ferrous Metals



▲ Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0092488 **Received** : 10 Nov 2023
Lab Number : 06004846 **Diagnosed** : 14 Nov 2023
Unique Number : 10738608 **Diagnostician** : Sean Felton
Test Package : FLEET

GFL Environmental - 095 - Atlanta West
 2699 Cochran Industrial Blvd
 Douglasville, GA
 US 30127-1332
 Contact: Darrell Welch
 darrell.welch@gflenv.com
 T: (800)207-6618
 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)