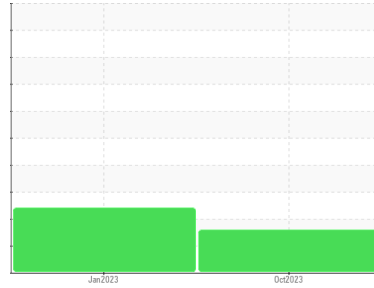




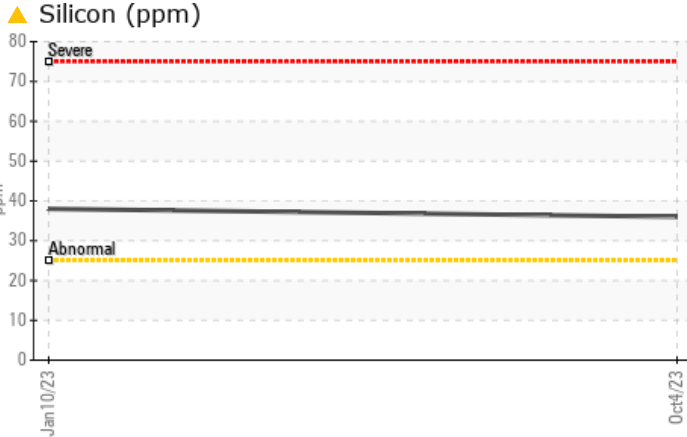
PROBLEM SUMMARY

Sample Rating Trend



Area
{UNASSIGNED}
 Machine Id
824036
 Component
Diesel Engine
 Fluid
MOBIL 15W40 (8 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. 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	ABNORMAL	ABNORMAL	---
Silicon	ppm	ASTM D5185m	>25
	▲ 36	▲ 38	---

Customer Id: GFL938
 Sample No.: GFL0066279
 Lab Number: 05998719
 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.
Check Dirt Access	---	---	?	We advise that you check the air filter, air induction system, and any areas where dirt may enter the component.

HISTORICAL DIAGNOSIS

10 Jan 2023 Diag: Jonathan Hester

DIRT



Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. Cylinder, crank, or cam shaft wear is indicated. Elemental level of silicon (Si) above normal indicating ingress of seal material. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

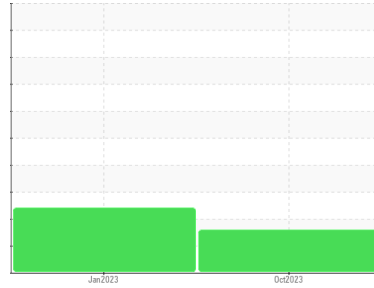
view report





OIL ANALYSIS REPORT

Sample Rating Trend



Area
{UNASSIGNED}
 Machine Id
824036
 Component
Diesel Engine
 Fluid
MOBIL 15W40 (8 GAL)

DIAGNOSIS

Recommendation
 We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. 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
 Elemental level of silicon (Si) above normal.

Fluid Condition
 The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0066279	GFL0055760	---
Sample Date	Client Info	04 Oct 2023	10 Jan 2023	---
Machine Age	hrs	28404	0	---
Oil Age	hrs	0	500	---
Oil Changed	Client Info	Changed	Changed	---
Sample Status		ABNORMAL	ABNORMAL	---

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<1.0	<1.0	---
Glycol	WC Method	NEG	NEG	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	12	▲ 146	---
Chromium	ppm ASTM D5185m >20	1	8	---
Nickel	ppm ASTM D5185m >4	0	2	---
Titanium	ppm ASTM D5185m	2	85	---
Silver	ppm ASTM D5185m >3	0	<1	---
Aluminum	ppm ASTM D5185m >20	0	3	---
Lead	ppm ASTM D5185m >40	0	2	---
Copper	ppm ASTM D5185m >330	7	3	---
Tin	ppm ASTM D5185m >15	0	<1	---
Vanadium	ppm ASTM D5185m	0	2	---
Cadmium	ppm ASTM D5185m	0	0	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	12	75	---
Barium	ppm ASTM D5185m	0	0	---
Molybdenum	ppm ASTM D5185m	60	5	---
Manganese	ppm ASTM D5185m	0	1	---
Magnesium	ppm ASTM D5185m	869	494	---
Calcium	ppm ASTM D5185m	1108	2021	---
Phosphorus	ppm ASTM D5185m	962	1100	---
Zinc	ppm ASTM D5185m	1183	1393	---
Sulfur	ppm ASTM D5185m	2921	4679	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	▲ 36	▲ 38	---
Sodium	ppm ASTM D5185m >118	4	3	---
Potassium	ppm ASTM D5185m >20	0	4	---

INFRA-RED

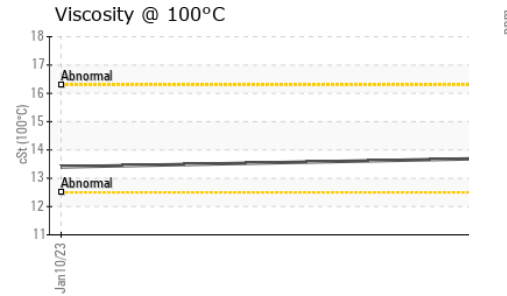
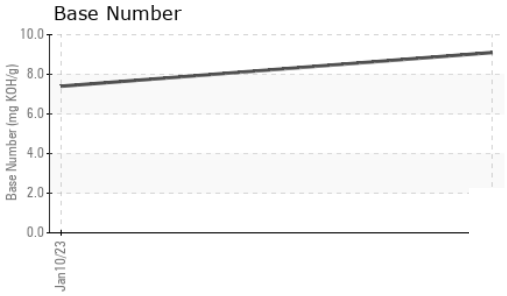
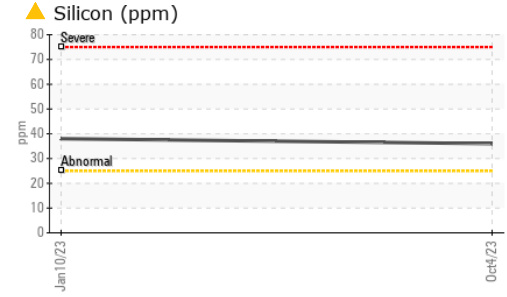
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	0.1	0.3	---
Nitration	Abs/cm *ASTM D7624 >20	6.9	11.4	---
Sulfation	Abs/.1mm *ASTM D7415 >30	18.7	24.3	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	14.7	18.9	---
Base Number (BN)	mg KOH/g ASTM D2896	9.1	7.4	---



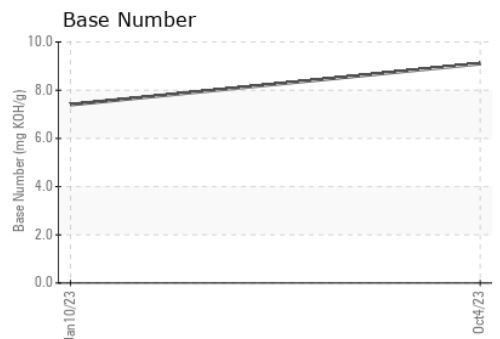
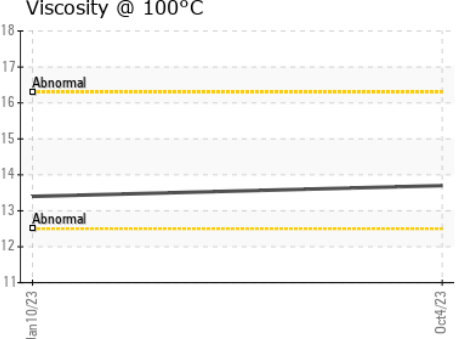
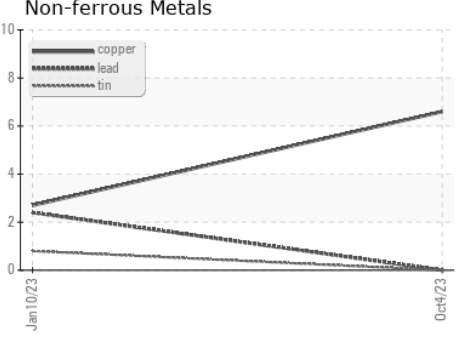
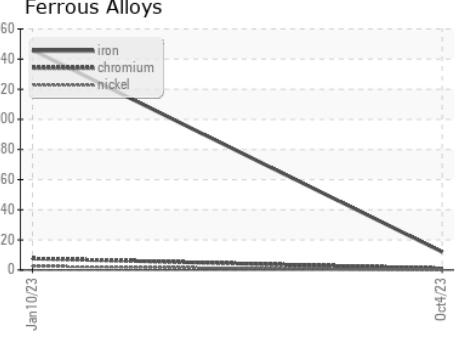
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	13.7	13.4	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0066279 **Received** : 06 Nov 2023
Lab Number : 05998719 **Diagnosed** : 07 Nov 2023
Unique Number : 10727079 **Diagnostician** : Don Baldrige
Test Package : FLEET

GFL Environmental - 938 - Hager City
 W9724 WIS-35
 HAGER CITY, WI
 US 54014
 Contact: ANDY KANE

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)

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