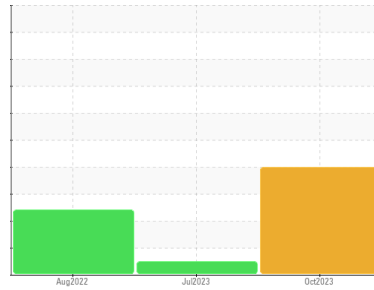




PROBLEM SUMMARY

Sample Rating Trend



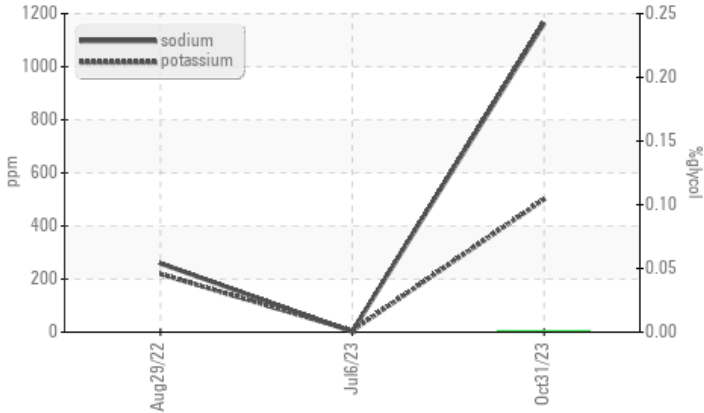
DIRT



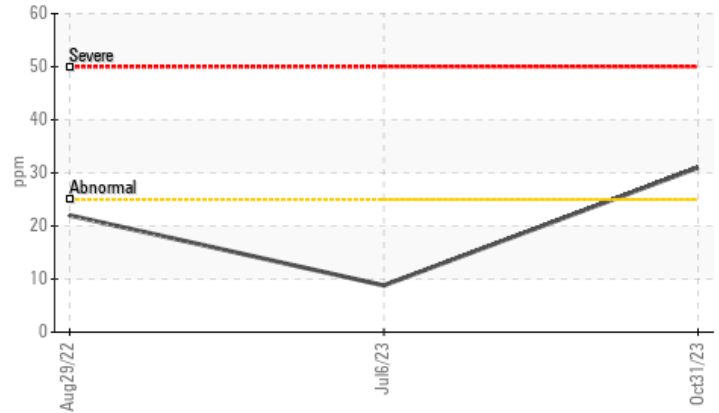
Machine Id
721061
 Component
Diesel Engine
 Fluid
MOBIL 15W40 (38 QTS)

COMPONENT CONDITION SUMMARY

▲ Glycol Contamination



▲ Silicon (ppm)



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				ABNORMAL	NORMAL	ABNORMAL
Silicon	ppm	ASTM D5185m	>25	▲ 31	9	22
Sodium	ppm	ASTM D5185m	>118	▲ 1164	2	▲ 259
Potassium	ppm	ASTM D5185m	>20	▲ 500	5	▲ 219

Customer Id: GFL938
 Sample No.: GFL0066214
 Lab Number: 06008011
 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

06 Jul 2023 Diag: Wes Davis

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



29 Aug 2022 Diag: Jonathan Hester

GLYCOL



We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. Sodium and/or potassium levels are high. The BN result indicates that there is suitable alkalinity remaining in the oil.

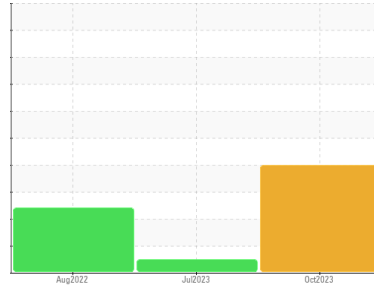
view report





OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Machine Id
721061
 Component
Diesel Engine
 Fluid
MOBIL 15W40 (38 QTS)

DIAGNOSIS

▲ Recommendation

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

Wear

All component wear rates are normal.

▲ Contamination

Sodium and/or potassium levels are high. Elemental level of silicon (Si) above normal. Test for glycol is negative.

▲ 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	GFL0066214	GFL0066198	GFL0055753
Sample Date	Client Info	31 Oct 2023	06 Jul 2023	29 Aug 2022
Machine Age	hrs	16936	16936	16936
Oil Age	hrs	500	500	650
Oil Changed	Client Info	Changed	Changed	Changed
Sample Status		ABNORMAL	NORMAL	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

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >75	68	26	68
Chromium	ppm ASTM D5185m >5	4	1	3
Nickel	ppm ASTM D5185m >4	1	0	2
Titanium	ppm ASTM D5185m >2	2	<1	36
Silver	ppm ASTM D5185m >2	<1	0	<1
Aluminum	ppm ASTM D5185m >15	3	6	8
Lead	ppm ASTM D5185m >25	3	0	8
Copper	ppm ASTM D5185m >100	6	0	4
Tin	ppm ASTM D5185m >4	<1	0	2
Vanadium	ppm ASTM D5185m	<1	0	<1
Cadmium	ppm ASTM D5185m	<1	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	21	6	35
Barium	ppm ASTM D5185m	0	0	3
Molybdenum	ppm ASTM D5185m	94	61	32
Manganese	ppm ASTM D5185m	<1	0	<1
Magnesium	ppm ASTM D5185m	744	942	344
Calcium	ppm ASTM D5185m	1055	1089	1767
Phosphorus	ppm ASTM D5185m	859	986	1031
Zinc	ppm ASTM D5185m	1032	1240	1176
Sulfur	ppm ASTM D5185m	2743	3401	3447

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	▲ 31	9	22
Sodium	ppm ASTM D5185m >118	▲ 1164	2	▲ 259
Potassium	ppm ASTM D5185m >20	▲ 500	5	▲ 219
Glycol	% *ASTM D2982	0.0	NEG	NEG

INFRA-RED

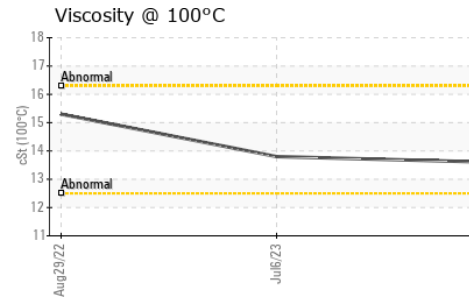
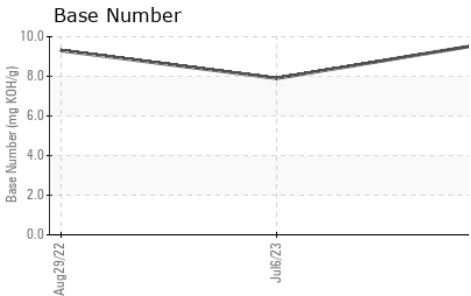
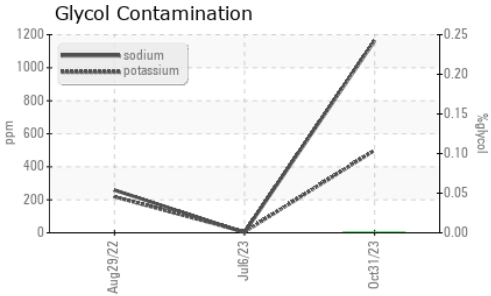
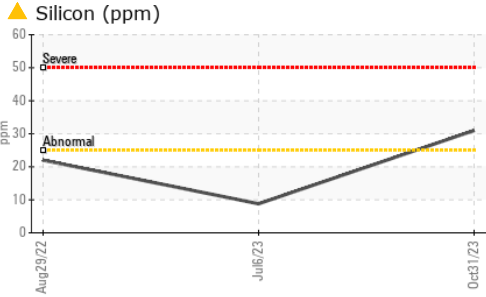
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >6	2.7	0.5	2.8
Nitration	Abs/cm *ASTM D7624 >20	15.9	10.1	15.4
Sulfation	Abs/.1mm *ASTM D7415 >30	28.8	21.4	31.6

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	24.1	20.2	21.4
Base Number (BN)	mg KOH/g ASTM D2896	9.7	7.9	9.3



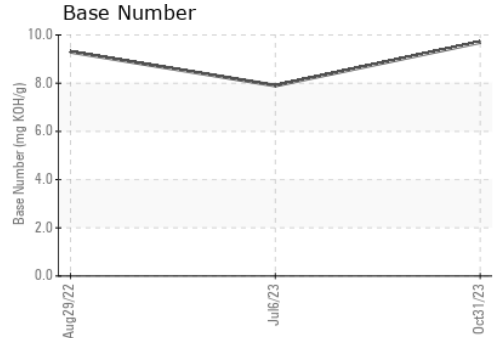
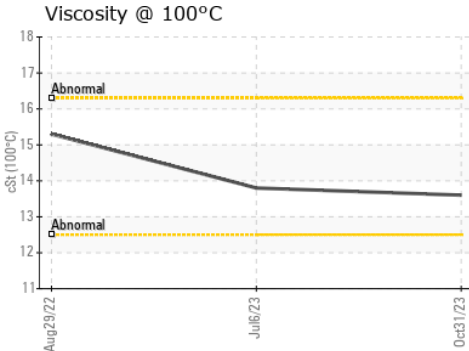
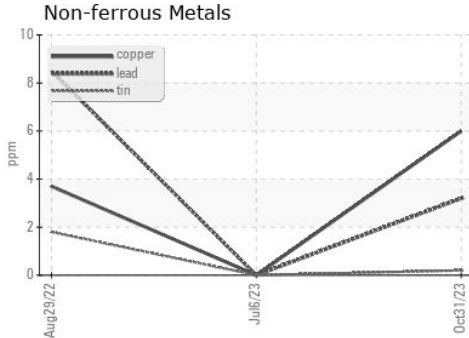
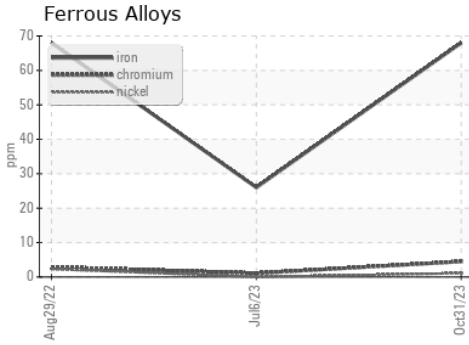
OIL ANALYSIS REPORT



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	13.6	13.8	15.3

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0066214 **Received** : 15 Nov 2023
Lab Number : 06008011 **Diagnosed** : 23 Nov 2023
Unique Number : 10741773 **Diagnostician** : Don Baldrige
Test Package : FLEET (Additional Tests: Glycol)

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)

T: (715)202-3420

F: