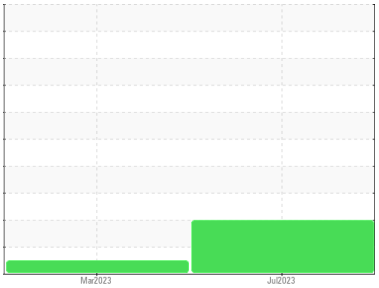
PROBLEM SUMMARY

Sample Rating Trend

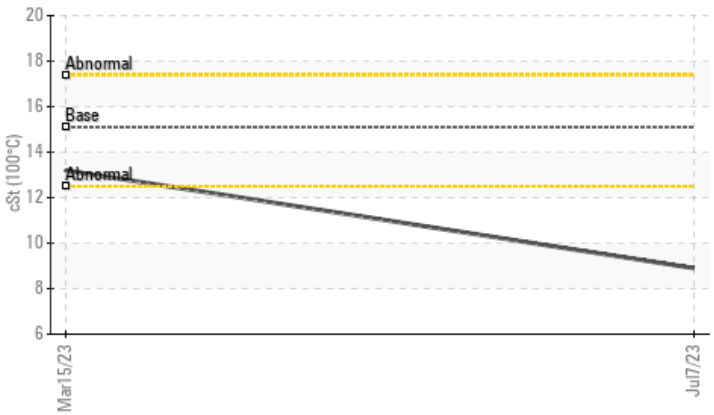


DIRT

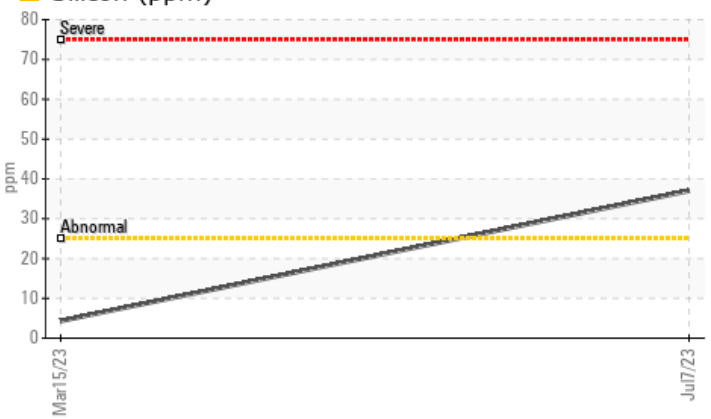
Machine Id
MACK 724025
Component
Diesel Engine
Fluid
CHEVRON DELO 400 MULTIGRADE 15W40 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Viscosity @ 100°C



▲ Silicon (ppm)



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				**ABNORMAL**	NORMAL	---
Silicon	ppm	ASTM D5185m	>25	▲ **37**	4	---
Visc @ 100°C	cSt	ASTM D445	15.1	▲ **8.9**	13.2	---

Customer Id: GFL409
Sample No.: GFL0079530
Lab Number: 05897924
Test Package: FLEET

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +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.

HISTORICAL DIAGNOSIS

15 Mar 2023 Diag: Wes Davis

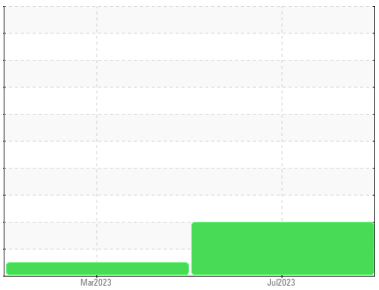
NORMAL

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.Metal levels are typical for a components first oil change. 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



DIRT

Machine Id
MACK 724025
Component
Diesel Engine
Fluid
CHEVRON DELO 400 MULTIGRADE 15W40 (--- 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
Fuel content negligible. Elemental level of silicon (Si) above normal.

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		**GFL0079530**	GFL0076861	---
Sample Date		Client Info		**07 Jul 2023**	15 Mar 2023	---
Machine Age	hrs	Client Info		**35522**	34970	---
Oil Age	hrs	Client Info		**35522**	34970	---
Oil Changed		Client Info		**Changed**	Changed	---
Sample Status				**ABNORMAL**	NORMAL	---

CONTAMINATION	method	limit/base	current	history1	history2
Glycol	WC Method		**NEG**	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>120	**12**	6	---
Chromium	ppm	ASTM D5185m	>20	**0**	<1	---
Nickel	ppm	ASTM D5185m	>5	**0**	0	---
Titanium	ppm	ASTM D5185m	>2	**0**	<1	---
Silver	ppm	ASTM D5185m	>2	**0**	0	---
Aluminum	ppm	ASTM D5185m	>20	**4**	2	---
Lead	ppm	ASTM D5185m	>40	**1**	<1	---
Copper	ppm	ASTM D5185m	>330	**21**	<1	---
Tin	ppm	ASTM D5185m	>15	**2**	<1	---
Vanadium	ppm	ASTM D5185m		**0**	0	---
Cadmium	ppm	ASTM D5185m		**0**	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**105**	184	---
Barium	ppm	ASTM D5185m		**0**	0	---
Molybdenum	ppm	ASTM D5185m		**52**	94	---
Manganese	ppm	ASTM D5185m		**<1**	1	---
Magnesium	ppm	ASTM D5185m		**265**	778	---
Calcium	ppm	ASTM D5185m		**669**	1388	---
Phosphorus	ppm	ASTM D5185m	1360	**588**	792	---
Zinc	ppm	ASTM D5185m	1480	**732**	1008	---
Sulfur	ppm	ASTM D5185m		**1965**	3008	---

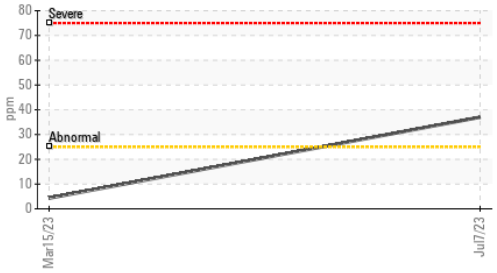
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	▲ **37**	4	---
Sodium	ppm	ASTM D5185m		**0**	1	---
Potassium	ppm	ASTM D5185m	>20	**1**	1	---
Fuel	%	ASTM D3524	>3.0	**1.2**	<1.0	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>4	**1**	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	**4.2**	8.2	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	**17.3**	22.0	---

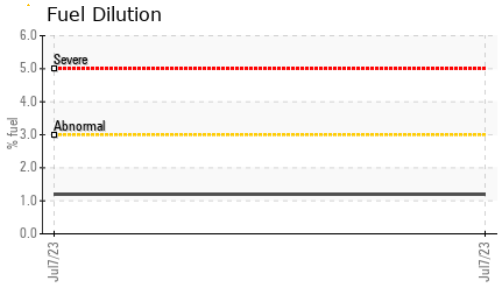
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**9.0**	16.5	---
Base Number (BN)	mg KOH/g	ASTM D2896	12.2	**3.7**	8.1	---

OIL ANALYSIS REPORT

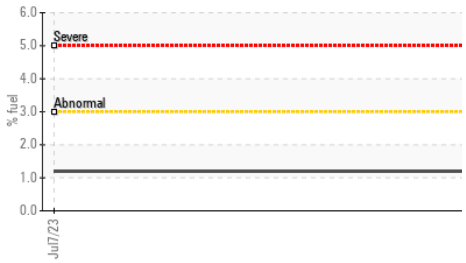
Silicon (ppm)



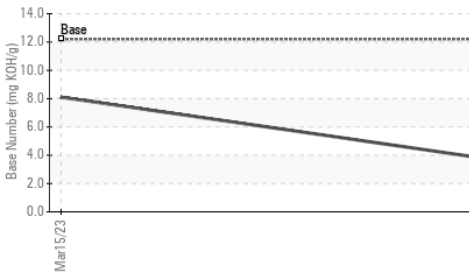
Fuel Dilution



Fuel Dilution



Base Number

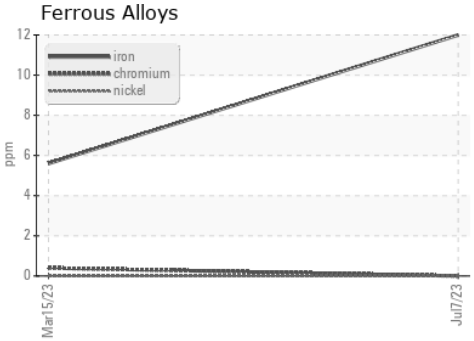


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	**NONE**	NONE	---
Debris	scalar	*Visual	NONE	**NONE**	NONE	---
Sand/Dirt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

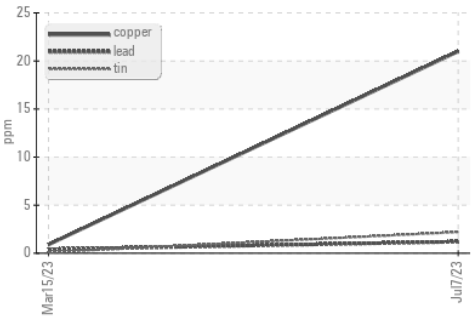
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	▲ **8.9**	13.2	---

GRAPHS

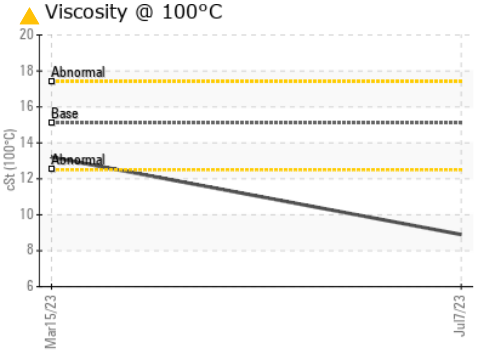
Ferrous Alloys



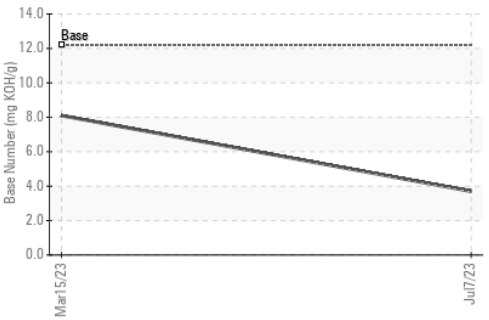
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0079530 **Received** : 13 Jul 2023
Lab Number : 05897924 **Diagnosed** : 17 Jul 2023
Unique Number : 10559280 **Diagnostician** : Don Baldridge
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

GFL Environmental - 409 - Wood Island LF
E10081 State Hwy M28
Wetmore, MI
US 49895
Contact: Service Manager
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)