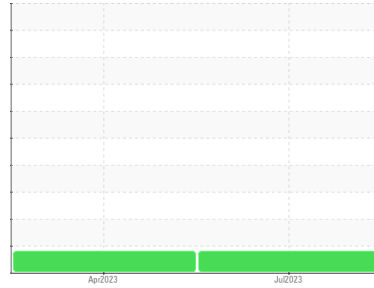




PROBLEM SUMMARY

Sample Rating Trend



WEAR



Machine Id

2321

Component

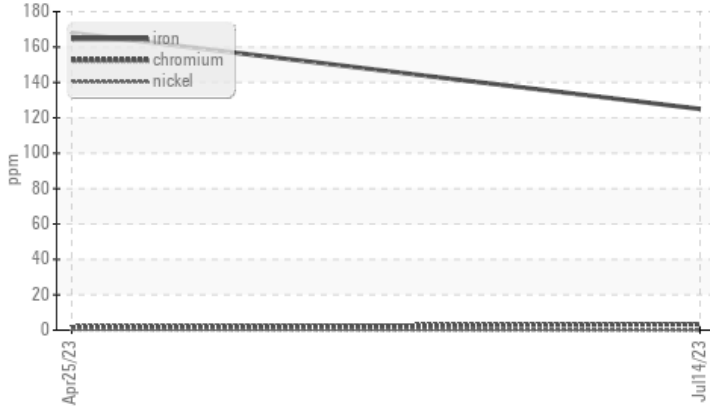
Diesel Engine

Fluid

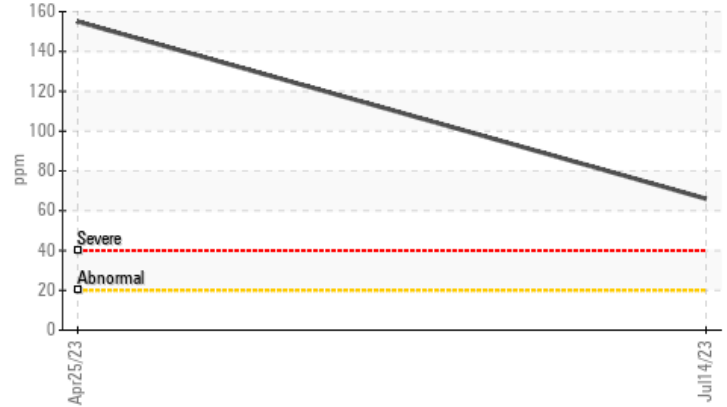
DIESEL ENGINE OIL SAE 5W30 (--- QTS)

COMPONENT CONDITION SUMMARY

▲ Ferrous Alloys



Aluminum (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	ASTM D5185m	>100	ABNORMAL	ABNORMAL	---
Iron	ppm	ASTM D5185m	>100	▲ 125	▲ 168

Customer Id: MABEDE
 Sample No.: WC0814837
 Lab Number: 05903688
 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.

HISTORICAL DIAGNOSIS

25 Apr 2023 Diag: Doug Bogart

WEAR



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. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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



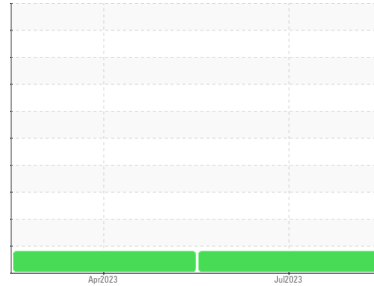
Machine Id
2321

Component

Diesel Engine

Fluid

DIESEL ENGINE OIL SAE 5W30 (--- QTS)



DIAGNOSIS

Recommendation

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

Wear

Cylinder, crank, or cam shaft wear is indicated.

Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0814837	WC0786109	---
Sample Date	Client Info		14 Jul 2023	25 Apr 2023	---
Machine Age	mls	Client Info	110887	107818	---
Oil Age	mls	Client Info	100000	100000	---
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	▲ 125	▲ 168	---
Chromium	ppm	ASTM D5185m >20	3	2	---
Nickel	ppm	ASTM D5185m >4	0	<1	---
Titanium	ppm	ASTM D5185m	<1	<1	---
Silver	ppm	ASTM D5185m >3	<1	<1	---
Aluminum	ppm	ASTM D5185m >20	66	155	---
Lead	ppm	ASTM D5185m >40	0	<1	---
Copper	ppm	ASTM D5185m >330	15	27	---
Tin	ppm	ASTM D5185m >15	3	1	---
Vanadium	ppm	ASTM D5185m	0	<1	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	20	14	---
Barium	ppm	ASTM D5185m 10	0	0	---
Molybdenum	ppm	ASTM D5185m 100	36	37	---
Manganese	ppm	ASTM D5185m	3	4	---
Magnesium	ppm	ASTM D5185m 450	979	1026	---
Calcium	ppm	ASTM D5185m 3000	1481	1327	---
Phosphorus	ppm	ASTM D5185m 1150	989	949	---
Zinc	ppm	ASTM D5185m 1350	1255	1221	---
Sulfur	ppm	ASTM D5185m 4250	3992	3681	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	16	22	---
Sodium	ppm	ASTM D5185m	8	8	---
Potassium	ppm	ASTM D5185m >20	164	379	---

INFRA-RED

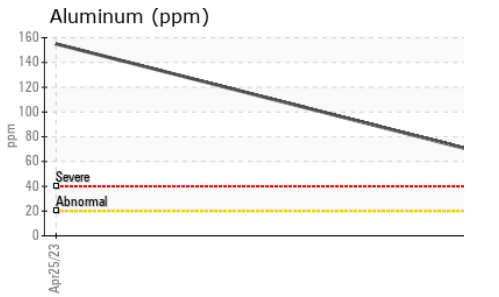
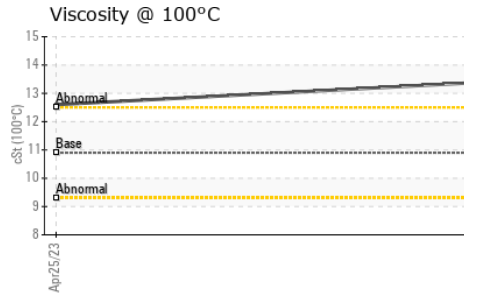
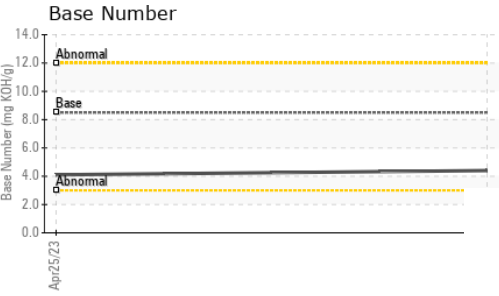
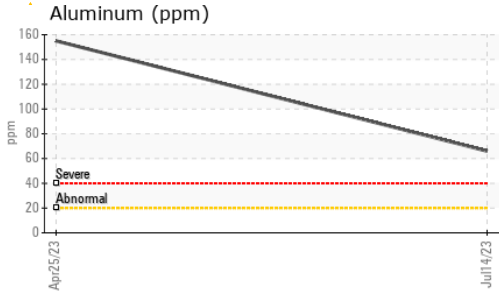
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.6	0.8	---
Nitration	Abs/cm	*ASTM D7624 >20	14.8	15.1	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	31.6	31.5	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	32.3	31.0	---
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	4.4	4.1	---



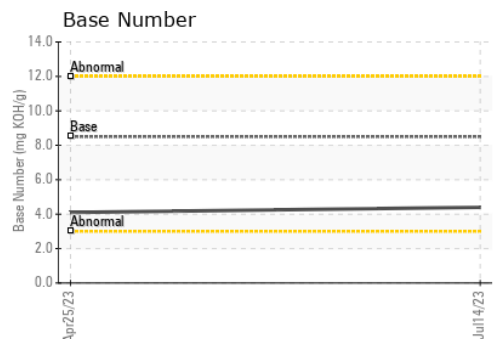
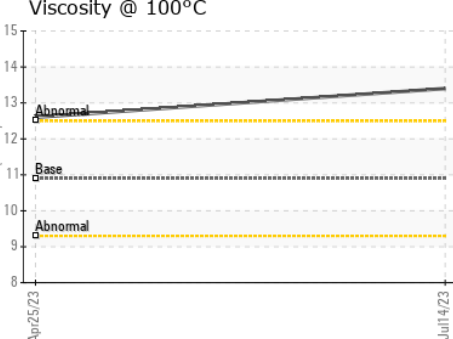
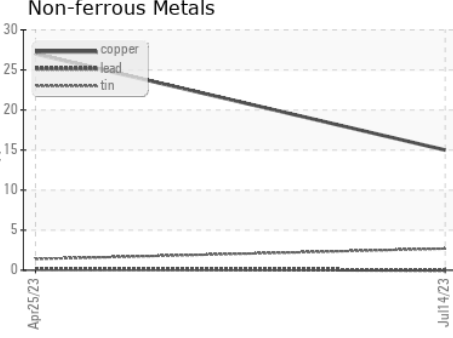
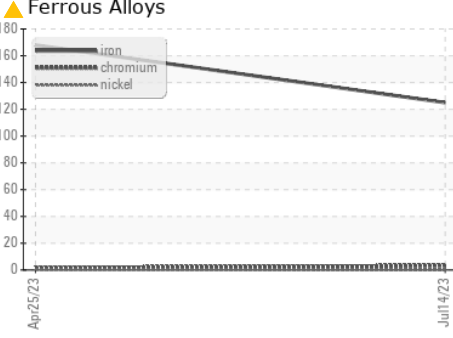
OIL ANALYSIS REPORT



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	10.9	13.4	12.6

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0814837 **Received** : 20 Jul 2023
Lab Number : 05903688 **Diagnosed** : 24 Jul 2023
Unique Number : 10565044 **Diagnostician** : Don Baldrige
Test Package : FLEET

MABE TRUCKING
 PO BOX 1081
 EDEN, NC
 US 27289

Contact: MAINTENANCE
 maintenancemanager@mabetrucking.com

F: (336)635-1791

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)