



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
2307
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 5W30 (--- QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0876666	WC0786085	---
Sample Date		Client Info		22 Dec 2023	26 Feb 2023	---
Machine Age	mls	Client Info		210912	105793	---
Oil Age	mls	Client Info		50000	100000	---
Filter Age	mls	Client Info		50000	100000	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	68	▲ 107	---
Chromium	ppm	ASTM D5185m	>20	1	1	---
Nickel	ppm	ASTM D5185m	>4	<1	0	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	<1	---
Aluminum	ppm	ASTM D5185m	>20	24	89	---
Lead	ppm	ASTM D5185m	>40	<1	<1	---
Copper	ppm	ASTM D5185m	>330	13	35	---
Tin	ppm	ASTM D5185m	>15	1	2	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

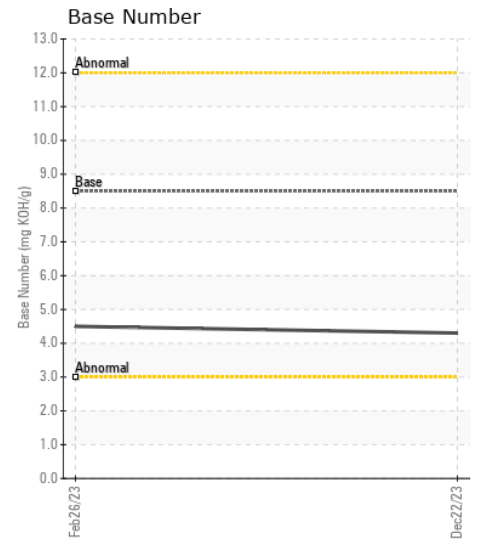
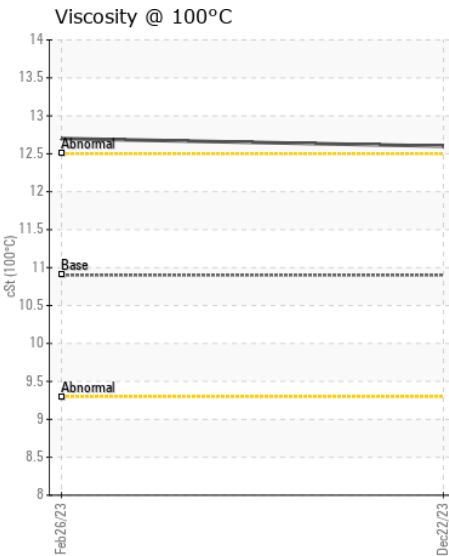
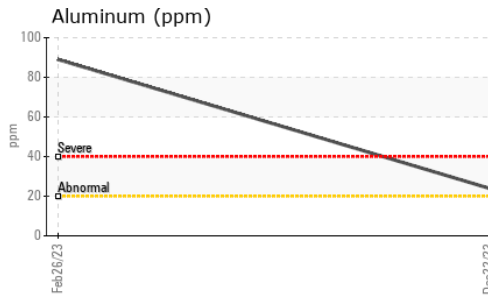
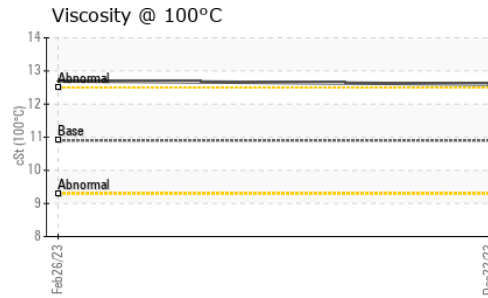
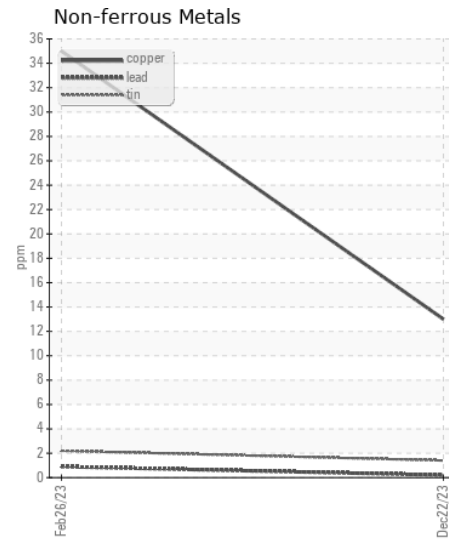
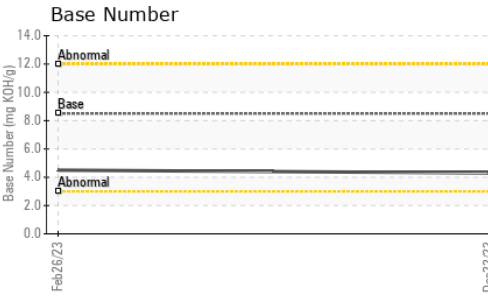
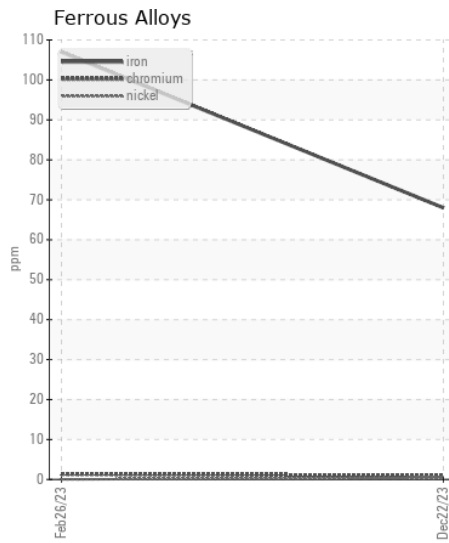
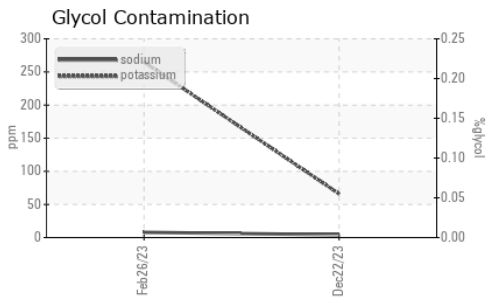
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>25	17	20	---
Potassium	ppm	ASTM D5185m	>20	66	265	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.8	0.7	---
Nitration	Abs/cm	*ASTM D7624	>20	14.2	13.8	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	30.1	29.6	---
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	---

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.

Sodium	ppm	ASTM D5185m		4	8	---
Boron	ppm	ASTM D5185m	250	9	13	---
Barium	ppm	ASTM D5185m	10	0	0	---
Molybdenum	ppm	ASTM D5185m	100	61	26	---
Manganese	ppm	ASTM D5185m		1	4	---
Magnesium	ppm	ASTM D5185m	450	1131	896	---
Calcium	ppm	ASTM D5185m	3000	927	1329	---
Phosphorus	ppm	ASTM D5185m	1150	1097	850	---
Zinc	ppm	ASTM D5185m	1350	1300	1078	---
Sulfur	ppm	ASTM D5185m	4250	3196	3125	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	31.5	28.1	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	4.3	4.5	---
Visc @ 100°C	cSt	ASTM D445	10.9	12.6	12.7	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0876666 **Received** : 11 Jan 2024
Lab Number : 06058679 **Diagnosed** : 14 Jan 2024
Unique Number : 10830061 **Diagnostician** : Don Baldrige
Test Package : FLEET

MABE TRUCKING
 PO BOX 1081
 EDEN, NC
 US 27289

Contact: MAINTENANCE
 maintenancemanager@mabetrucking.com

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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)