

OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

2341

Component

Diesel Engine

Fluid

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

DIAGNOSIS

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.

Wear

All component wear rates are normal.

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.

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		HRE0000213	---	---
Sample Date	Client Info		27 May 2024	---	---
Machine Age	mls	Client Info	127747	---	---
Oil Age	mls	Client Info	50000	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			NORMAL	---	---

CONTAMINATION method limit/base current history1 history2

Fuel	WC Method	>5	<1.0	---	---
Water	WC Method	>0.2	NEG	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS method limit/base current history1 history2

Iron	ppm	ASTM D5185m	>100	94	---	---
Chromium	ppm	ASTM D5185m	>20	<1	---	---
Nickel	ppm	ASTM D5185m	>4	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	25	---	---
Lead	ppm	ASTM D5185m	>40	<1	---	---
Copper	ppm	ASTM D5185m	>330	14	---	---
Tin	ppm	ASTM D5185m	>15	<1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
Cadmium	ppm	ASTM D5185m		2	---	---

ADDITIVES method limit/base current history1 history2

Boron	ppm	ASTM D5185m	250	18	---	---
Barium	ppm	ASTM D5185m	10	<1	---	---
Molybdenum	ppm	ASTM D5185m	100	42	---	---
Manganese	ppm	ASTM D5185m		3	---	---
Magnesium	ppm	ASTM D5185m	450	1086	---	---
Calcium	ppm	ASTM D5185m	3000	1295	---	---
Phosphorus	ppm	ASTM D5185m	1150	993	---	---
Zinc	ppm	ASTM D5185m	1350	1208	---	---
Sulfur	ppm	ASTM D5185m	4250	3528	---	---

CONTAMINANTS method limit/base current history1 history2

Silicon	ppm	ASTM D5185m	>25	23	---	---
Sodium	ppm	ASTM D5185m		10	---	---
Potassium	ppm	ASTM D5185m	>20	73	---	---

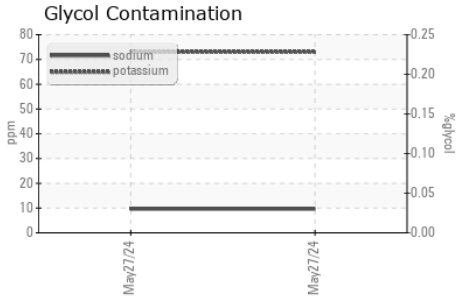
INFRA-RED method limit/base current history1 history2

Soot %	%	*ASTM D7844	>3	0.7	---	---
Nitration	Abs/cm	*ASTM D7624	>20	15.7	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	31.8	---	---

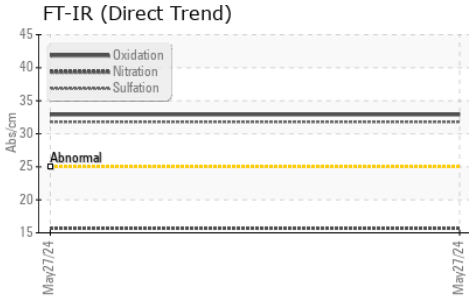
FLUID DEGRADATION method limit/base current history1 history2

Oxidation	Abs/.1mm	*ASTM D7414	>25	32.9	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	5.2	---	---

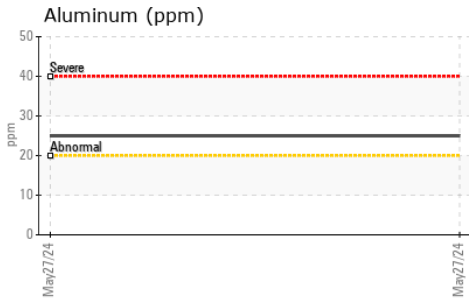
OIL ANALYSIS REPORT



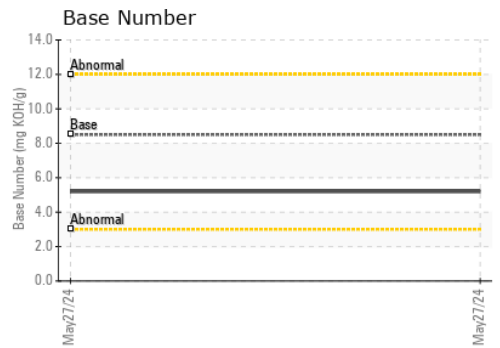
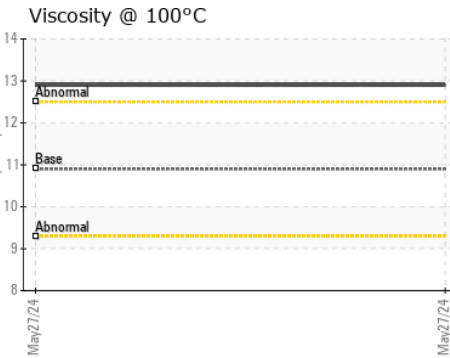
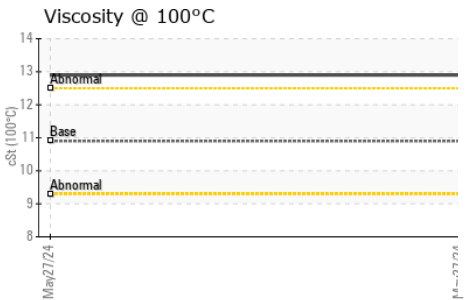
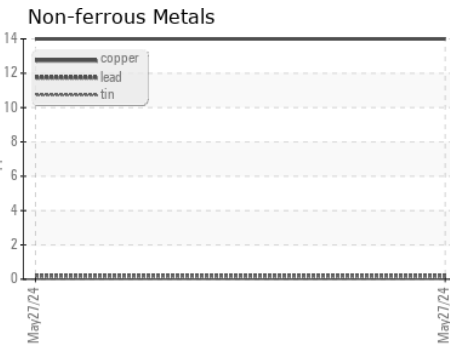
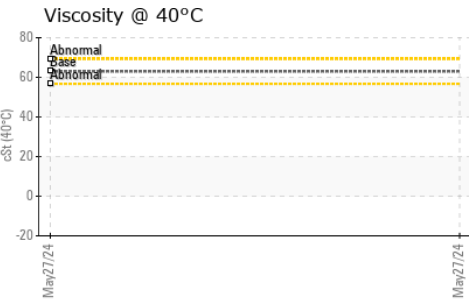
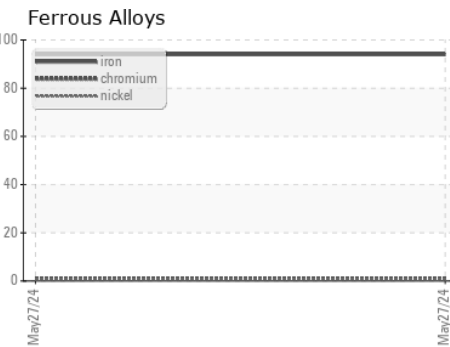
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	12.9	---



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : HRE0000213 **Received** : 13 Jun 2024
Lab Number : 06209520 **Tested** : 17 Jun 2024
Unique Number : 11076981 **Diagnosed** : 17 Jun 2024 - Don Baldrige
Test Package : FLEET (Additional Tests: KV40)

MABE TRUCKING
 PO BOX 1081
 EDEN, NC
 US 27289

Contact: MAINTENANCE
 maintenancemanager@mabetrucking.com

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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