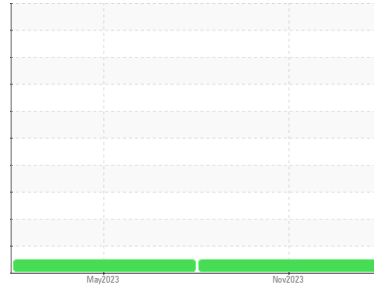




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id

2314

Component

Diesel Engine

Fluid

DISEL 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. 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			WC0836300	WC0814859	---
Sample Date	Client Info			06 Nov 2023	14 May 2023	---
Machine Age	mls	Client Info		102114	50917	---
Oil Age	mls	Client Info		50000	50000	---
Oil Changed	Client Info			Changed	Not Changd	---
Sample Status				NORMAL	NORMAL	---

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	86	64	---
Chromium	ppm	ASTM D5185m	>20	<1	<1	---
Nickel	ppm	ASTM D5185m	>4	0	<1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	<1	0	---
Aluminum	ppm	ASTM D5185m	>20	26	32	---
Lead	ppm	ASTM D5185m	>40	0	<1	---
Copper	ppm	ASTM D5185m	>330	13	13	---
Tin	ppm	ASTM D5185m	>15	2	2	---
Vanadium	ppm	ASTM D5185m		0	0	---
Cadmium	ppm	ASTM D5185m		0	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	13	16	---
Barium	ppm	ASTM D5185m	10	0	0	---
Molybdenum	ppm	ASTM D5185m	100	36	26	---
Manganese	ppm	ASTM D5185m		3	3	---
Magnesium	ppm	ASTM D5185m	450	938	896	---
Calcium	ppm	ASTM D5185m	3000	1175	1468	---
Phosphorus	ppm	ASTM D5185m	1150	882	846	---
Zinc	ppm	ASTM D5185m	1350	1119	1051	---
Sulfur	ppm	ASTM D5185m	4250	3008	3681	---

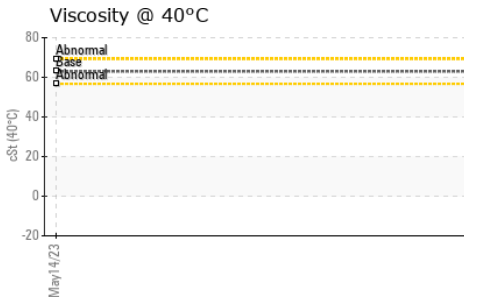
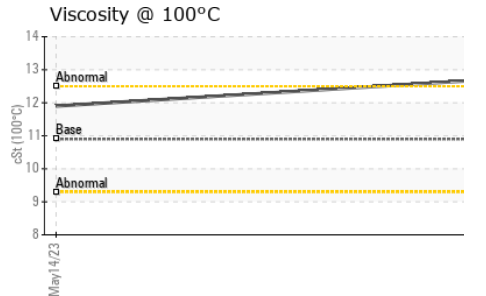
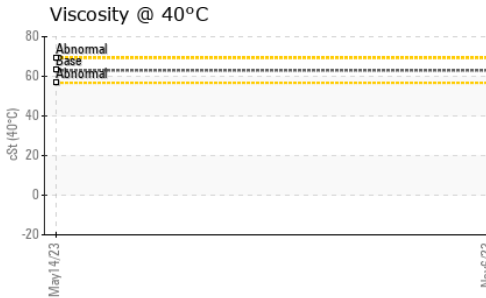
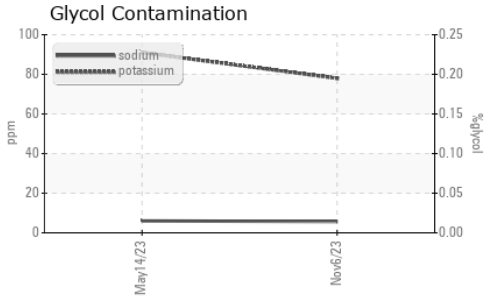
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	16	15	---
Sodium	ppm	ASTM D5185m		6	6	---
Potassium	ppm	ASTM D5185m	>20	78	91	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.6	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	13.4	12.0	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	29.8	27.3	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	28.4	23.2	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	4.5	5.2	---



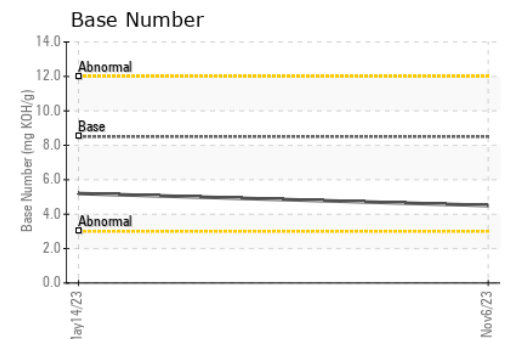
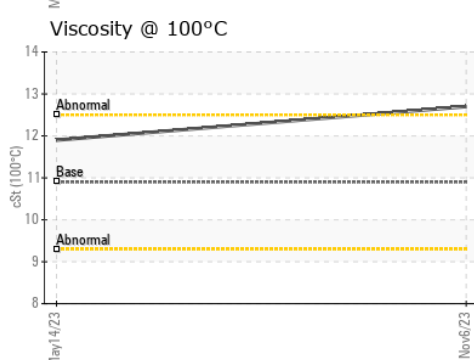
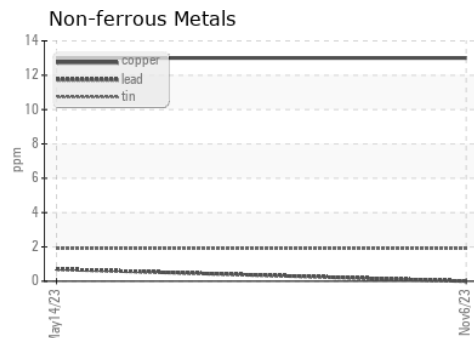
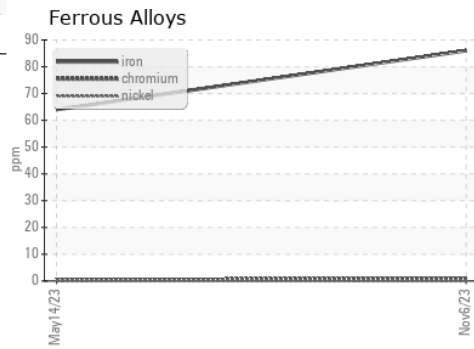
OIL ANALYSIS REPORT



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	12.7	11.9

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0836300 **Received** : 15 Nov 2023
Lab Number : 06008833 **Diagnosed** : 16 Nov 2023
Unique Number : 10742595 **Diagnostician** : Sean Felton
Test Package : FLEET (Additional Tests: KV40)

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 US 27289

Contact: MAINTENANCE
 maintenancemanager@mabetrucking.com

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 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)