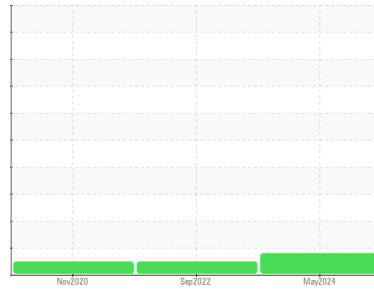


# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Machine Id

**604**

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**

Cylinder, crank, or cam shaft wear is indicated. All other component wear rates are normal.

**Contamination**

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			<b>HRE0000198</b>	WC0717400	WC0471742
Sample Date	Client Info			<b>25 May 2024</b>	19 Sep 2022	11 Nov 2020
Machine Age	mls	Client Info		<b>466115</b>	370203	213449
Oil Age	mls	Client Info		<b>50000</b>	50000	50000
Oil Changed	Client Info			<b>Changed</b>	Not Changd	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method	>0.2		<b>NEG</b>	NEG	NEG
Glycol	WC Method			<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<b>▲ 143</b>	47	19
Chromium	ppm	ASTM D5185m	>20	<b>4</b>	2	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>13</b>	6	4
Lead	ppm	ASTM D5185m	>40	<b>22</b>	6	2
Copper	ppm	ASTM D5185m	>330	<b>3</b>	1	1
Tin	ppm	ASTM D5185m	>15	<b>3</b>	0	<1
Antimony	ppm	ASTM D5185m		<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

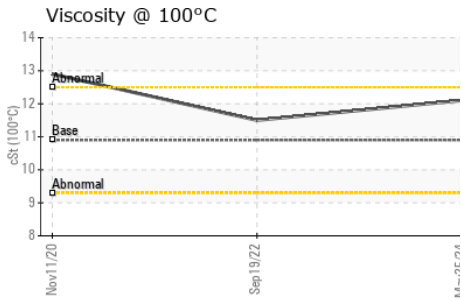
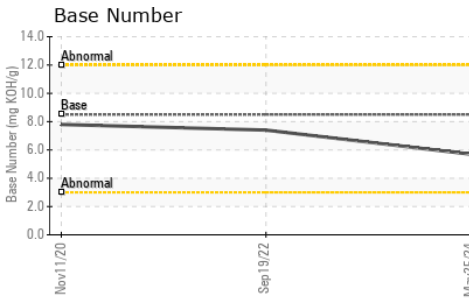
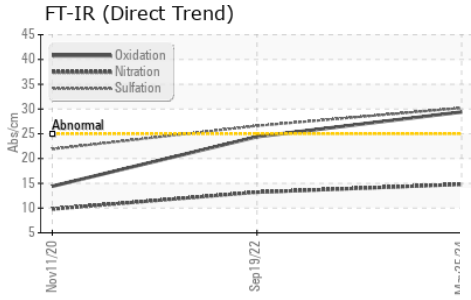
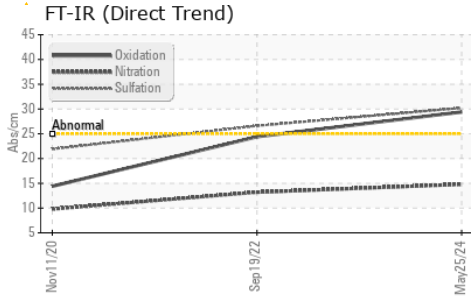
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	<b>17</b>	10	10
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>68</b>	61	10
Manganese	ppm	ASTM D5185m		<b>2</b>	<1	<1
Magnesium	ppm	ASTM D5185m	450	<b>1253</b>	1107	144
Calcium	ppm	ASTM D5185m	3000	<b>983</b>	876	2386
Phosphorus	ppm	ASTM D5185m	1150	<b>1168</b>	1038	957
Zinc	ppm	ASTM D5185m	1350	<b>1447</b>	1201	1117
Sulfur	ppm	ASTM D5185m	4250	<b>3743</b>	3644	4197

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>19</b>	8	4
Sodium	ppm	ASTM D5185m		<b>8</b>	4	3
Potassium	ppm	ASTM D5185m	>20	<b>22</b>	15	8

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>1.6</b>	0.9	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>14.8</b>	13.2	9.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>30.2</b>	26.6	21.9

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>29.4</b>	24.4	14.4
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>5.7</b>	7.4	7.8

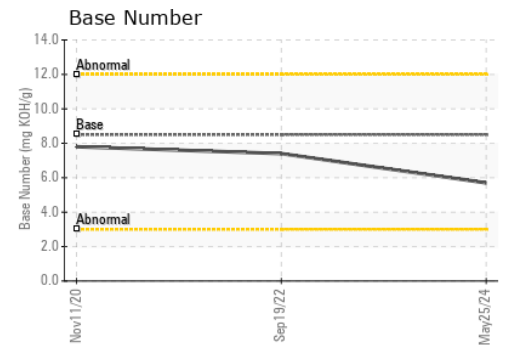
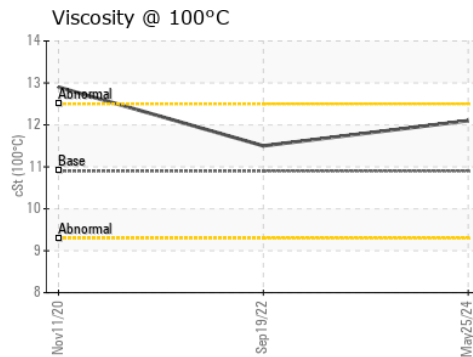
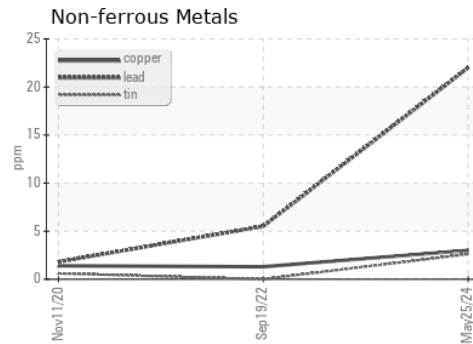
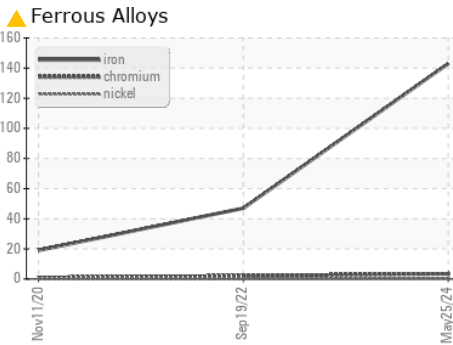
# OIL ANALYSIS REPORT



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	10.9	12.1	11.5

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : HRE0000198  
**Lab Number** : 06198585  
**Unique Number** : 11060708  
**Test Package** : FLEET

**Received** : 03 Jun 2024  
**Tested** : 04 Jun 2024  
**Diagnosed** : 05 Jun 2024 - Don Baldrige

**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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 F: (336)635-1791