



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**2124**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 5W30 (--- QTS)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>HRE000239</b>	WC0814833	WC0686072
Sample Date		Client Info		<b>03 May 2024</b>	02 Jul 2023	08 Jul 2022
Machine Age	mls	Client Info		<b>541253</b>	440992	338797
Oil Age	mls	Client Info		<b>50000</b>	100000	50000
Filter Age	mls	Client Info		<b>50000</b>	100000	50000
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>64</b>	24	45
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<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>	<1	<1
Aluminum	ppm	ASTM D5185m	>20	<b>9</b>	4	5
Lead	ppm	ASTM D5185m	>40	<b>2</b>	0	1
Copper	ppm	ASTM D5185m	>330	<b>10</b>	7	7
Tin	ppm	ASTM D5185m	>15	<b>2</b>	<1	1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

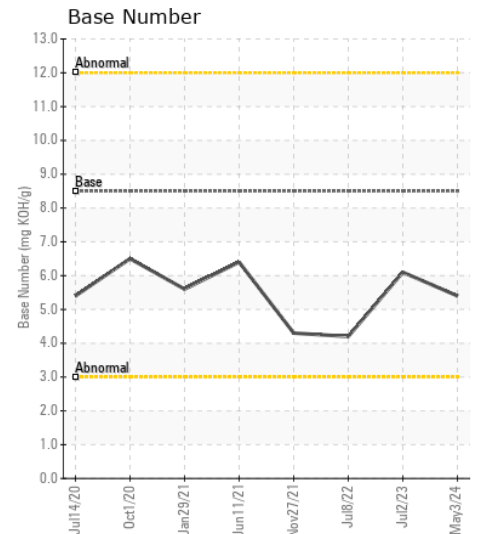
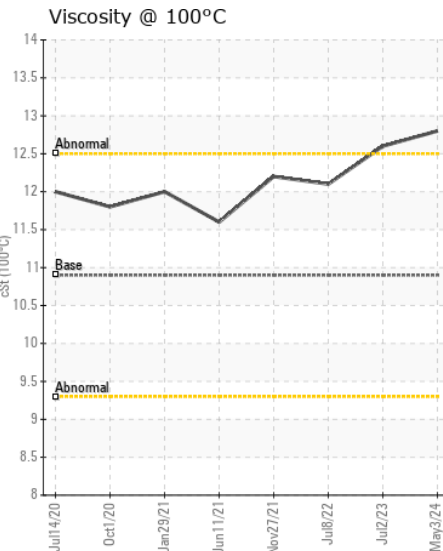
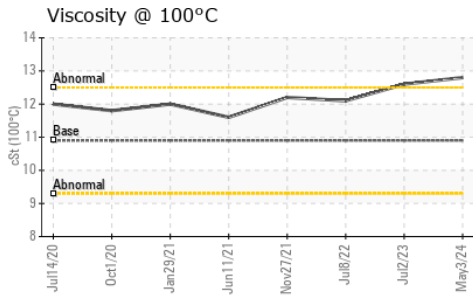
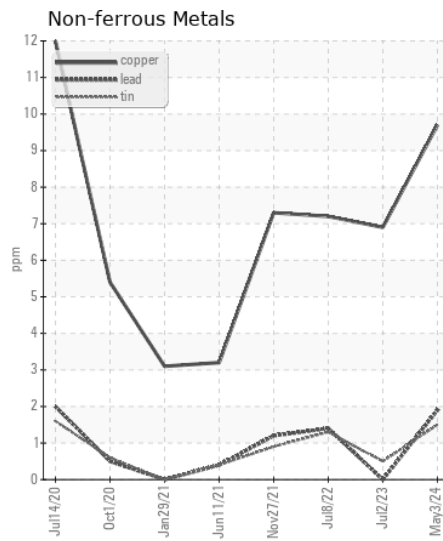
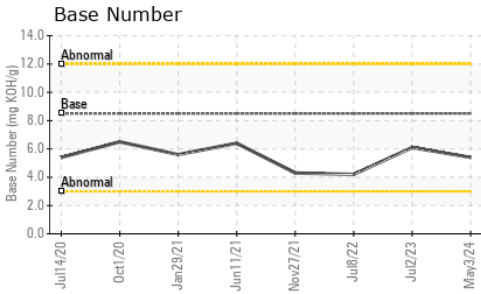
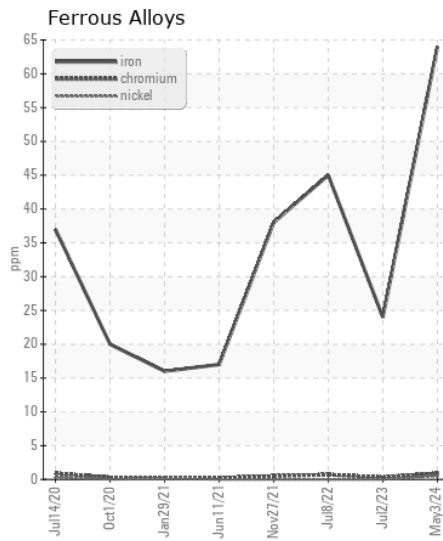
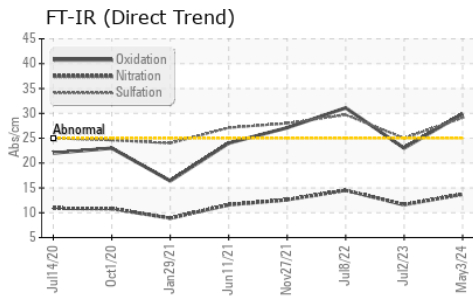
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>15</b>	10	9
Potassium	ppm	ASTM D5185m	>20	<b>12</b>	7	13
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
Soot %	%	*ASTM D7844	>3	<b>1</b>	0.6	1.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>13.7</b>	11.6	14.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>29.1</b>	25.0	29.7
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

### 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.

Sodium	ppm	ASTM D5185m		<b>6</b>	9	5
Boron	ppm	ASTM D5185m	250	<b>19</b>	17	10
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>74</b>	59	69
Manganese	ppm	ASTM D5185m		<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	450	<b>1090</b>	620	1222
Calcium	ppm	ASTM D5185m	3000	<b>1026</b>	1502	1026
Phosphorus	ppm	ASTM D5185m	1150	<b>1127</b>	986	1103
Zinc	ppm	ASTM D5185m	1350	<b>1390</b>	1287	1392
Sulfur	ppm	ASTM D5185m	4250	<b>3526</b>	3391	3715
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>29.9</b>	23.0	31.1
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>5.4</b>	6.1	4.2
Visc @ 100°C	cSt	ASTM D445	10.9	<b>12.8</b>	12.6	12.1



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : HRE0000239  
**Lab Number** : 06178144  
**Unique Number** : 11029470  
**Test Package** : FLEET  
**Received** : 13 May 2024  
**Tested** : 15 May 2024  
**Diagnosed** : 15 May 2024 - Sean Felton

**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) F: (336)635-1791