



# WEAR CHECK

## OIL ANALYSIS REPORT

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

Area

**5C07**

Machine Id

**UTILITY TRAILER RTR9148 REEFER (S/N 1UYV52531FM241910)**

Component

**Diesel Engine**

Fluid

**DIESEL ENGINE OIL SAE 10W30 (2 GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>ARI06099560</b>	ARI05822436	ARI05695495
Sample Date		Client Info		<b>25 Feb 2024</b>	17 Apr 2023	15 Nov 2022
Machine Age	hrs	Client Info		<b>17192</b>	14513	14016
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>11</b>	<1	3
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	7
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	3
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	0	2
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	0	0
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

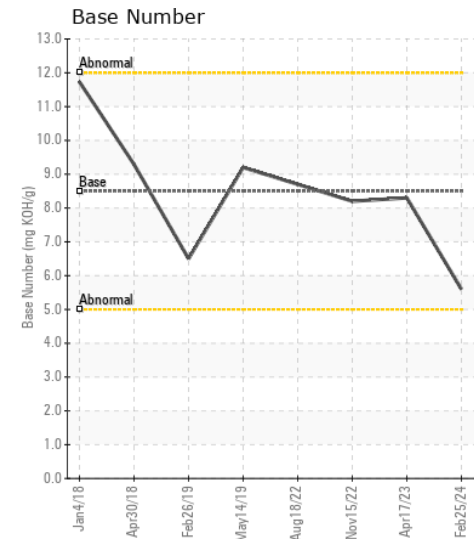
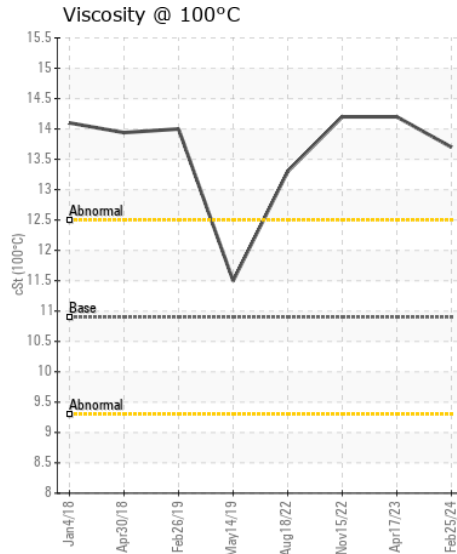
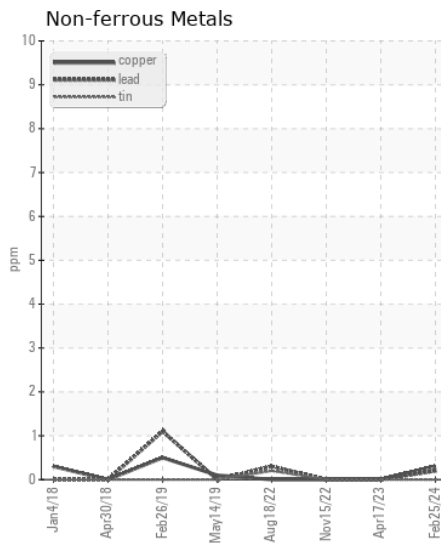
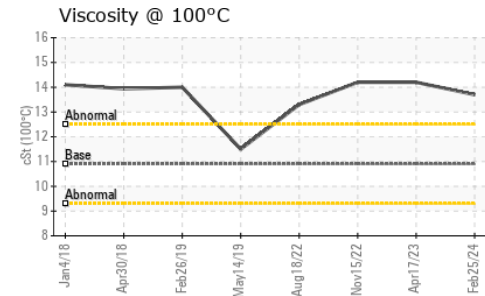
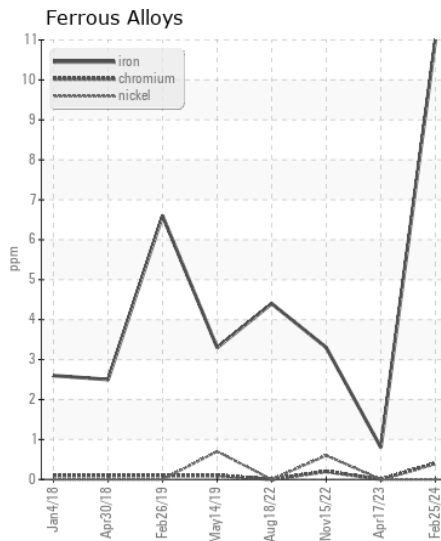
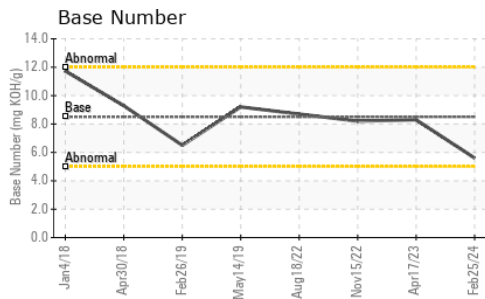
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	2	5
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	2	6
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>0.2</b>	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.6</b>	5.1	9.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.6</b>	16.7	22.3
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>9</b>	1	4
Boron	ppm	ASTM D5185m	250	<b>37</b>	80	186
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>61</b>	59	17
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m	450	<b>709</b>	671	128
Calcium	ppm	ASTM D5185m	3000	<b>1391</b>	1302	2127
Phosphorus	ppm	ASTM D5185m	1150	<b>963</b>	962	963
Zinc	ppm	ASTM D5185m	1350	<b>1108</b>	1145	1185
Sulfur	ppm	ASTM D5185m	4250	<b>2929</b>	3302	4333
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>25.9</b>	13.2	18.4
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>5.6</b>	8.3	8.2
Visc @ 100°C	cSt	ASTM D445	10.9	<b>13.7</b>	14.2	14.2



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ARI06099560 **Received** : 26 Feb 2024  
**Lab Number** : 06099560 **Tested** : 27 Feb 2024  
**Unique Number** : 10897790 **Diagnosed** : 27 Feb 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: TBN )

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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)