



# OIL ANALYSIS REPORT

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

Machine Id  
**2300**  
 Component  
**Diesel Engine**  
 Fluid  
**SHELL ROTELLA T 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0828995</b>	WC0828983	PCA0076223
Sample Date		Client Info		<b>07 Nov 2023</b>	31 Aug 2023	23 Nov 2022
Machine Age	mls	Client Info		<b>0</b>	132350	58296
Oil Age	mls	Client Info		<b>20000</b>	18000	0
Filter Age	mls	Client Info		<b>20000</b>	18000	0
Oil Changed		Client Info		<b>Changed</b>	Changed	N/A
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>12</b>	15	24
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	2
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>7</b>	12	16
Lead	ppm	ASTM D5185m	>40	<b>2</b>	<1	2
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	<1	2
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	1
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

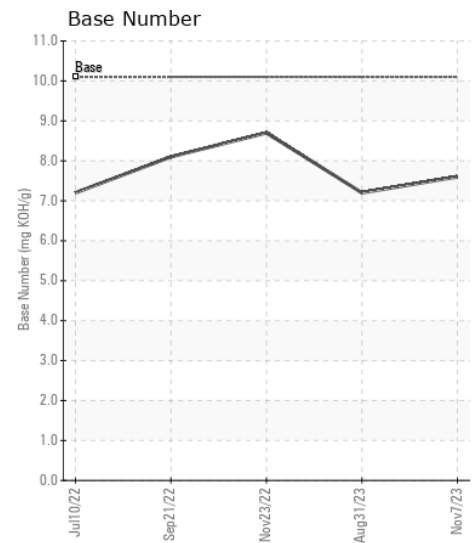
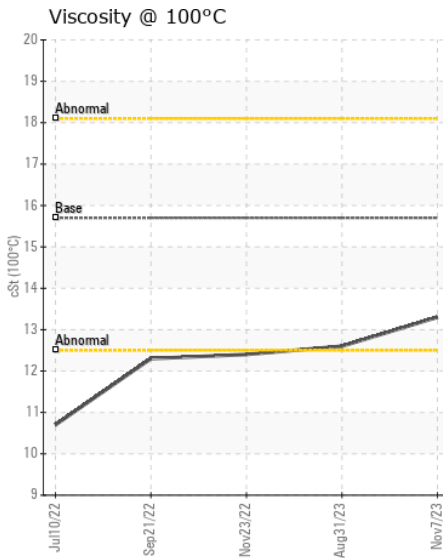
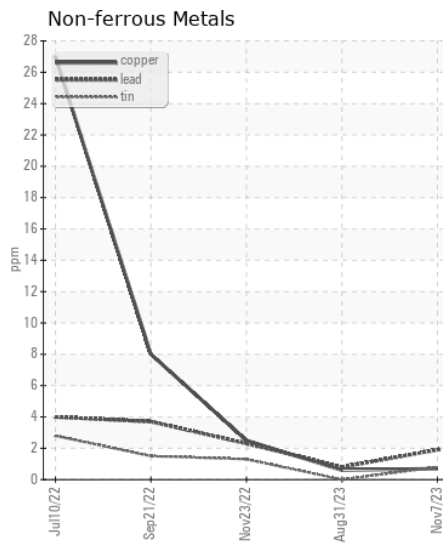
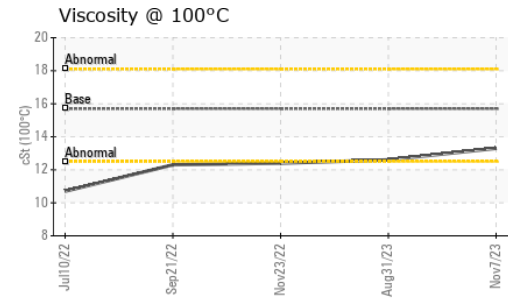
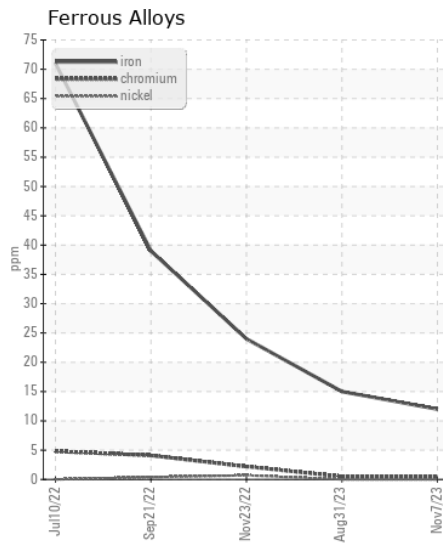
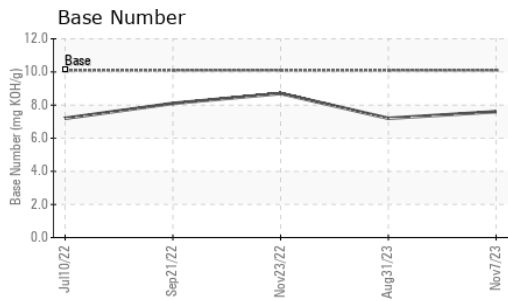
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>7</b>	8	11
Potassium	ppm	ASTM D5185m	>20	<b>11</b>	20	36
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>0.4</b>	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.7</b>	8.6	9.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.8</b>	22.3	24.7
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>3</b>	2	2
Boron	ppm	ASTM D5185m	316	<b>44</b>	158	226
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	1.2	<b>65</b>	128	120
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	1
Magnesium	ppm	ASTM D5185m	24	<b>551</b>	621	644
Calcium	ppm	ASTM D5185m	2292	<b>1608</b>	1484	1618
Phosphorus	ppm	ASTM D5185m	1064	<b>967</b>	661	727
Zinc	ppm	ASTM D5185m	1160	<b>1149</b>	827	853
Sulfur	ppm	ASTM D5185m	4996	<b>2840</b>	2312	2990
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.9</b>	16.7	18.6
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	<b>7.6</b>	7.2	8.7
Visc @ 100°C	cSt	ASTM D445	15.7	<b>13.3</b>	12.6	12.4



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0828995 **Received** : 18 Jan 2024  
**Lab Number** : 06064732 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10836114 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**Ergon Trucking Inc. - MAR605**  
 35020 State Route 7  
 Marietta, OH  
 US 45768-5236  
 Contact: JASON JULIAN

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: