



# OIL ANALYSIS REPORT

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

Machine Id  
**2301**  
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>WC0871355</b>	PCA0076237	PCA0076247
Sample Date		Client Info		<b>20 Nov 2023</b>	18 Aug 2023	01 Aug 2022
Machine Age	mls	Client Info		<b>0</b>	97000	19908
Oil Age	mls	Client Info		<b>20000</b>	17800	0
Filter Age	mls	Client Info		<b>20000</b>	17800	0
Oil Changed		Client Info		<b>Changed</b>	Changed	N/A
Filter Changed		Client Info		<b>Changed</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	ATTENTION

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>13</b>	17	51
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	2
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
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>4</b>	8	55
Lead	ppm	ASTM D5185m	>40	<b>2</b>	1	4
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	<1	29
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

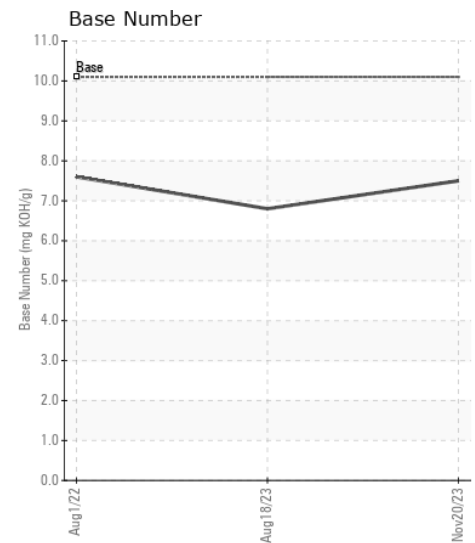
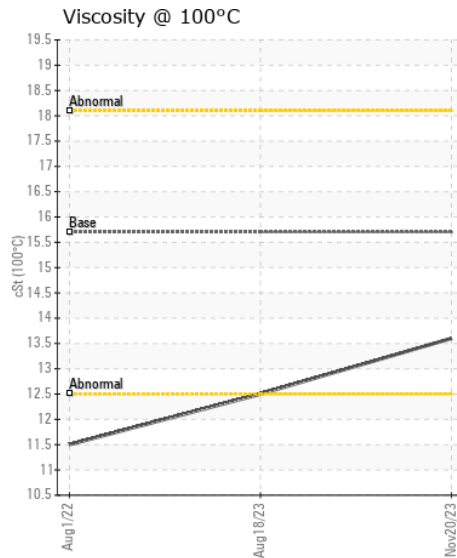
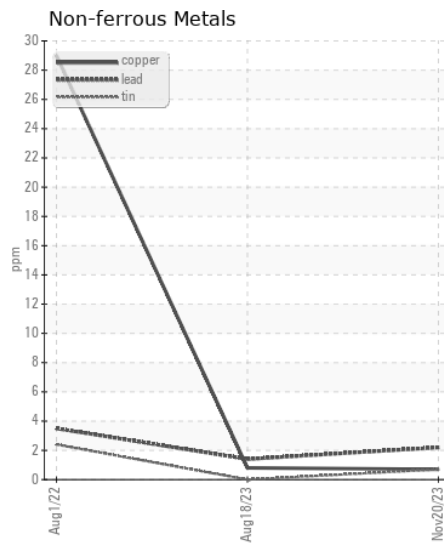
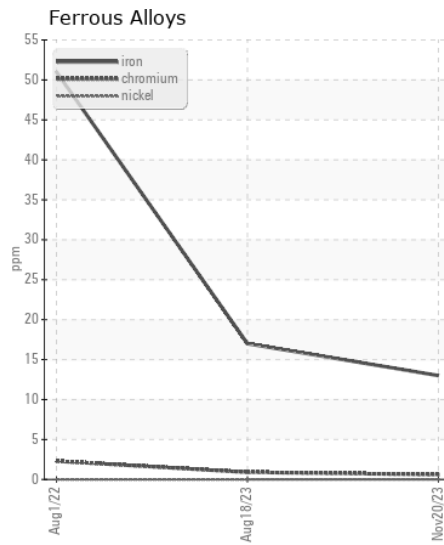
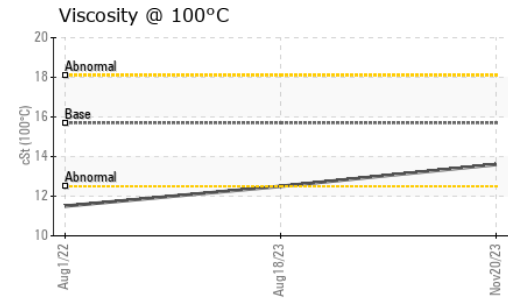
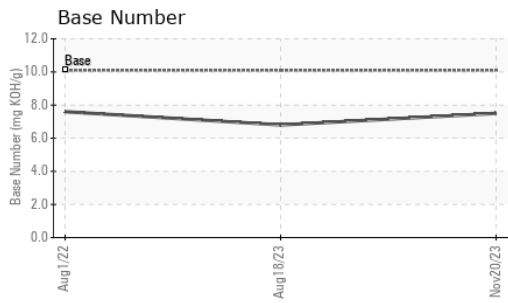
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>7</b>	8	42
Potassium	ppm	ASTM D5185m	>20	<b>8</b>	15	163
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	0.3
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.2</b>	9.6	10.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.6</b>	23.2	22.8
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>2</b>	3	5
Boron	ppm	ASTM D5185m	316	<b>51</b>	139	58
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	1.2	<b>64</b>	124	24
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	5
Magnesium	ppm	ASTM D5185m	24	<b>545</b>	625	610
Calcium	ppm	ASTM D5185m	2292	<b>1573</b>	1459	1270
Phosphorus	ppm	ASTM D5185m	1064	<b>943</b>	649	666
Zinc	ppm	ASTM D5185m	1160	<b>1147</b>	812	794
Sulfur	ppm	ASTM D5185m	4996	<b>2820</b>	2264	2655
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.9</b>	18.7	17.4
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	<b>7.5</b>	6.8	7.6
Visc @ 100°C	cSt	ASTM D445	15.7	<b>13.6</b>	12.5	▲ 11.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0871355 **Received** : 18 Jan 2024  
**Lab Number** : 06064731 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10836113 **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: