



# OIL ANALYSIS REPORT

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

Machine Id  
**T2102**

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>WC0871364</b>	WC0871364	PCA0076235
Sample Date		Client Info		<b>17 Jan 2024</b>	10 Dec 2023	09 Aug 2023
Machine Age	mls	Client Info		<b>0</b>	0	132523
Oil Age	mls	Client Info		<b>0</b>	20000	20000
Filter Age	mls	Client Info		<b>0</b>	20000	20000
Oil Changed		Client Info		<b>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>10</b>	14	13
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	6	5
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	2	<1
Copper	ppm	ASTM D5185m	>330	<b>2</b>	<1	1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	1	<1
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

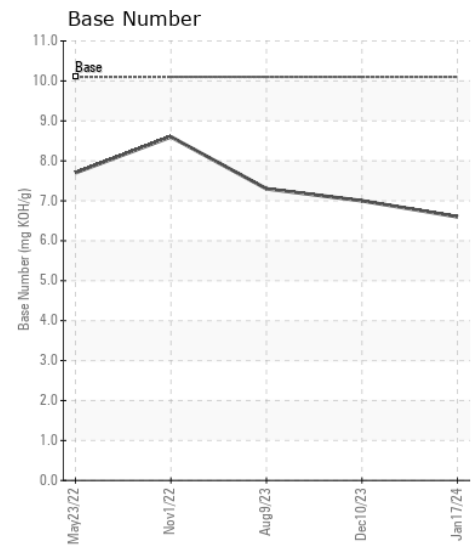
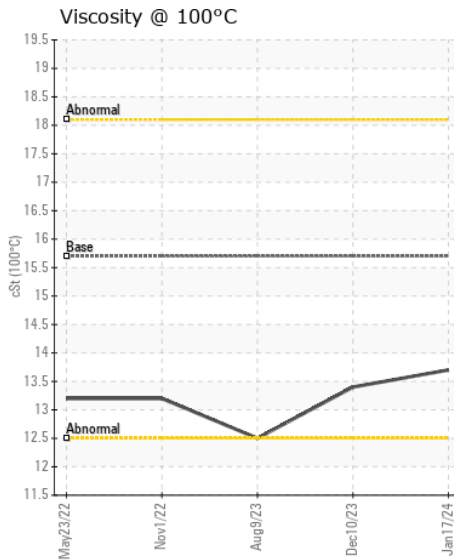
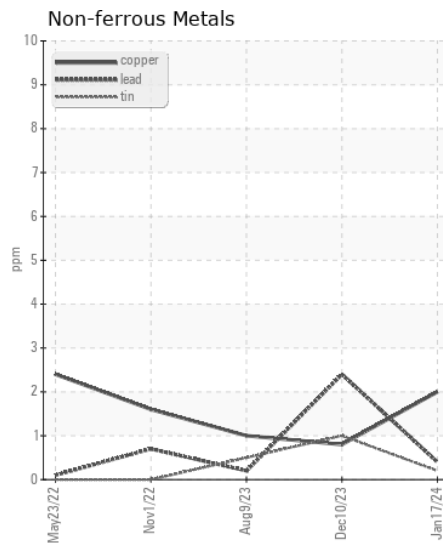
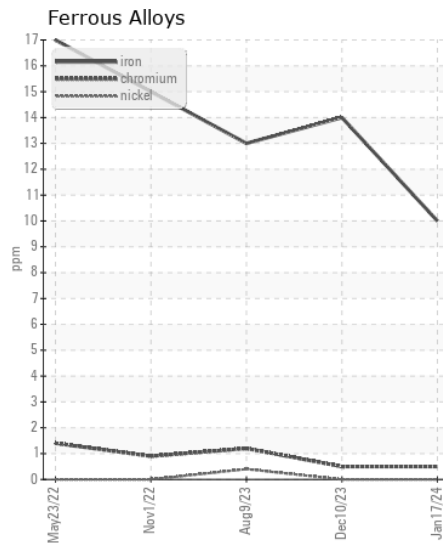
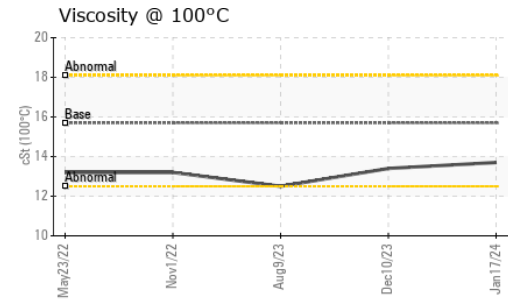
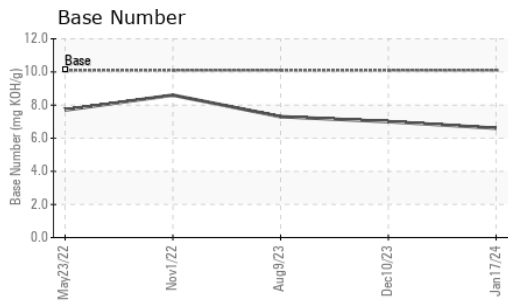
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>9</b>	7	8
Potassium	ppm	ASTM D5185m	>20	<b>9</b>	15	8
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>0.6</b>	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.2</b>	10.2	7.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.9</b>	22.5	21.6
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>40</b>	37	200
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	1.2	<b>63</b>	63	107
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	24	<b>564</b>	555	605
Calcium	ppm	ASTM D5185m	2292	<b>1600</b>	1569	1464
Phosphorus	ppm	ASTM D5185m	1064	<b>990</b>	945	721
Zinc	ppm	ASTM D5185m	1160	<b>1167</b>	1134	871
Sulfur	ppm	ASTM D5185m	4996	<b>2902</b>	2771	3049
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.5</b>	19.8	15.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	<b>6.6</b>	7.0	7.3
Visc @ 100°C	cSt	ASTM D445	15.7	<b>13.7</b>	13.4	12.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0871364 **Received** : 18 Jan 2024  
**Lab Number** : 06064701 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10836083 **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)

T:  
F: