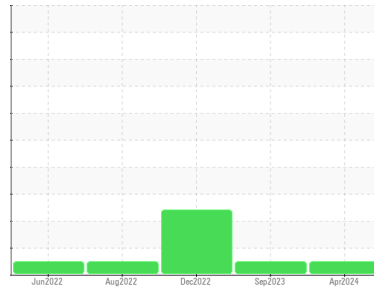




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**T2022**  
 Component  
**Diesel Engine**  
 Fluid  
**SHELL ROTELLA T 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### 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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>WC0871358</b>	WC0828987	PCA0076233
Sample Date	Client Info			<b>18 Apr 2024</b>	26 Sep 2023	15 Dec 2022
Machine Age	mls	Client Info		<b>409000</b>	20000	0
Oil Age	mls	Client Info		<b>20000</b>	20000	20000
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>110	<b>19</b>	18	32
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>4</b>	6	8
Lead	ppm	ASTM D5185m	>45	<b>4</b>	5	5
Copper	ppm	ASTM D5185m	>85	<b>1</b>	<1	<1
Tin	ppm	ASTM D5185m	>4	<b>1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	316	<b>24</b>	56	60
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m	1.2	<b>60</b>	123	129
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	24	<b>484</b>	594	599
Calcium	ppm	ASTM D5185m	2292	<b>1596</b>	1534	1487
Phosphorus	ppm	ASTM D5185m	1064	<b>1071</b>	649	638
Zinc	ppm	ASTM D5185m	1160	<b>1216</b>	839	820
Sulfur	ppm	ASTM D5185m	4996	<b>3168</b>	2349	2247

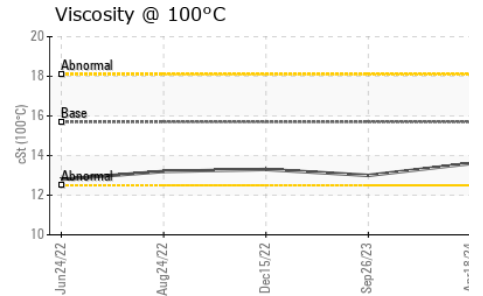
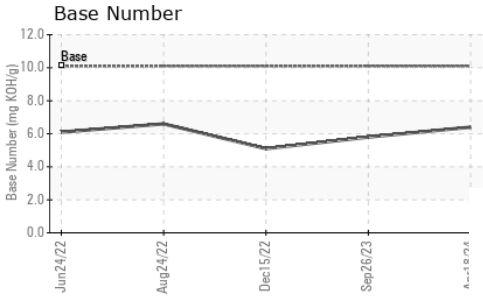
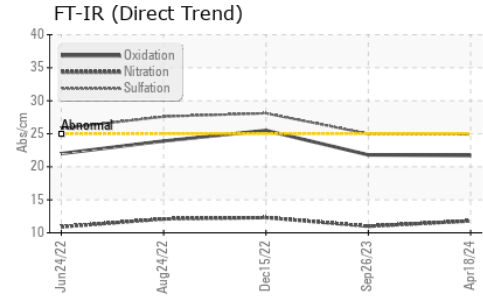
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>30	<b>8</b>	9	31
Sodium	ppm	ASTM D5185m		<b>2</b>	1	<1
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	6	8

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.7</b>	0.5	0.7
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.8</b>	11.0	12.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.9</b>	25.0	28.1

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>21.7</b>	21.8	25.5
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	<b>6.4</b>	5.8	5.1



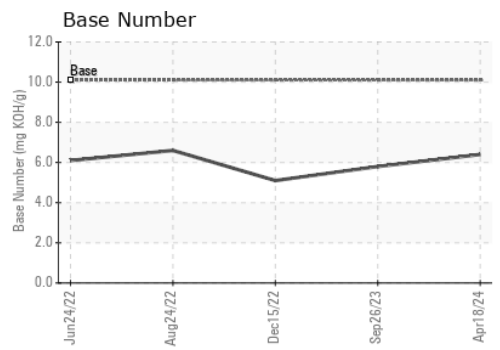
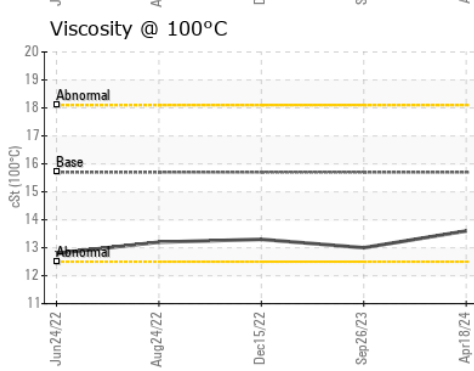
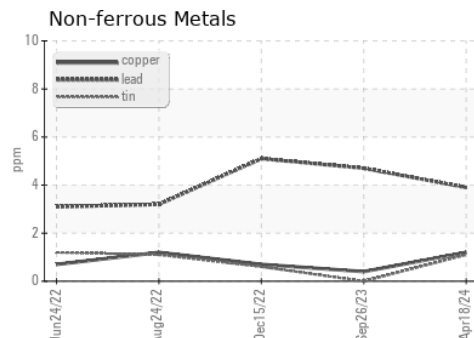
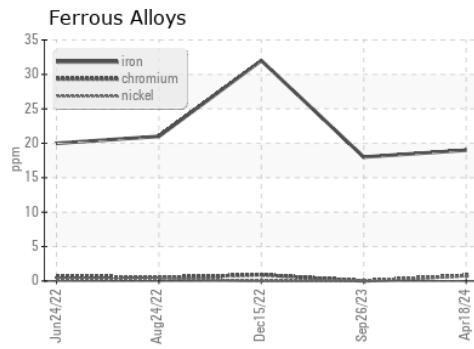
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.7	13.6	13.0

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0871358  
**Lab Number** : 06156760  
**Unique Number** : 10992183  
**Test Package** : FLEET  
**Received** : 22 Apr 2024  
**Tested** : 23 Apr 2024  
**Diagnosed** : 23 Apr 2024 - Wes Davis

**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)