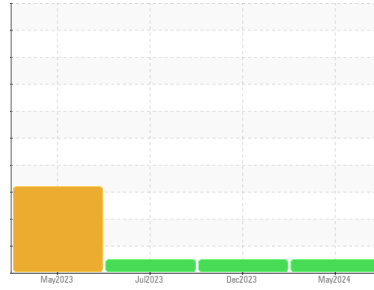




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**2221**  
 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>WC0829083</b>	WC0829098	WC0829101
Sample Date	Client Info			<b>29 May 2024</b>	11 Dec 2023	24 Jul 2023
Machine Age	mls	Client Info		<b>136832</b>	104647	80821
Oil Age	mls	Client Info		<b>32200</b>	33556	9730
Oil Changed	Client Info			<b>Changed</b>	Changed	Not Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

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	>100	<b>17</b>	25	13
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	2	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>7</b>	6	4
Lead	ppm	ASTM D5185m	>40	<b>3</b>	7	0
Copper	ppm	ASTM D5185m	>330	<b>2</b>	3	2
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	316	<b>86</b>	82	250
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	1.2	<b>115</b>	109	110
Manganese	ppm	ASTM D5185m		<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	24	<b>634</b>	595	624
Calcium	ppm	ASTM D5185m	2292	<b>1465</b>	1329	1398
Phosphorus	ppm	ASTM D5185m	1064	<b>675</b>	591	692
Zinc	ppm	ASTM D5185m	1160	<b>808</b>	797	816
Sulfur	ppm	ASTM D5185m	4996	<b>2635</b>	2157	2861

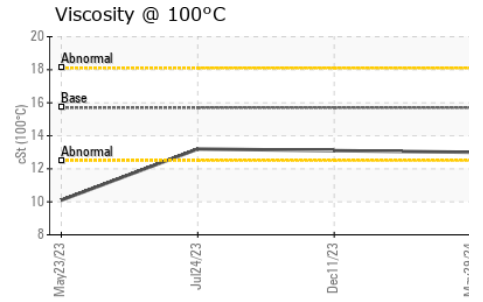
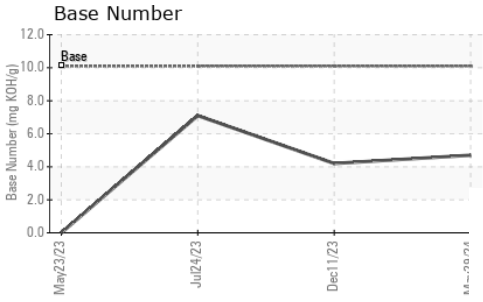
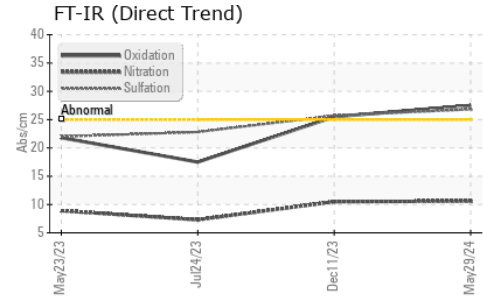
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>7</b>	9	6
Sodium	ppm	ASTM D5185m		<b>3</b>	<1	2
Potassium	ppm	ASTM D5185m	>20	<b>14</b>	13	8

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.3	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.6</b>	10.5	7.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>26.8</b>	25.7	22.8

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>27.5</b>	25.5	17.5
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	<b>4.7</b>	4.2	7.1



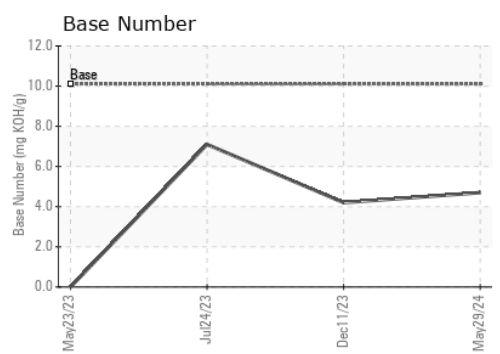
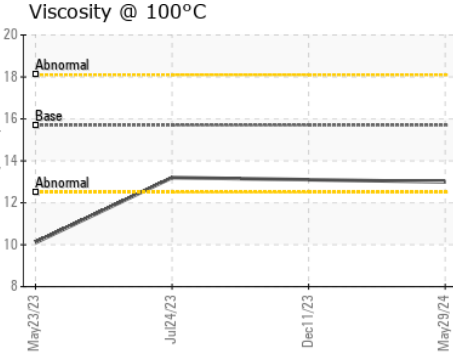
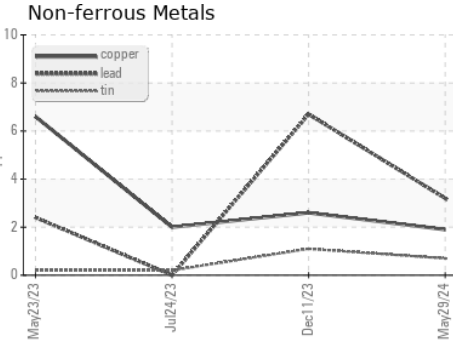
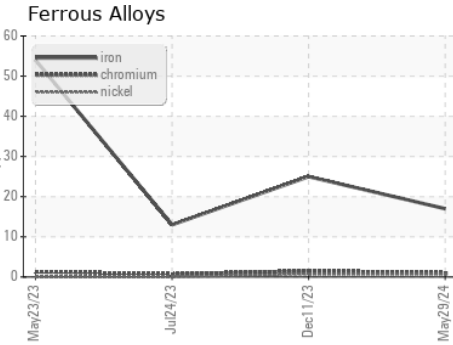
# OIL ANALYSIS REPORT



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	<b>13.0</b>	13.1	13.2

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0829083      **Received** : 17 Jun 2024  
**Lab Number** : **06212779**      **Tested** : 19 Jun 2024  
**Unique Number** : 11085643      **Diagnosed** : 19 Jun 2024 - Angela Borella  
**Test Package** : FLEET

**Ergon Trucking Inc. - SAL198**  
 211 Production Drive  
 Sulphur, LA  
 US 70663  
 Contact: Donald Daigle  
 Donald.daigle@ergon.com

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)