



# OIL ANALYSIS REPORT

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

Area  
**Store 9 - Marietta**

Machine Id

**1117**

Component

**Diesel Engine**

Fluid

**SHELL ROTELLA T 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LEC0050896</b>	LEC0049771	LEC0045848
Sample Date		Client Info		<b>06 Jul 2024</b>	30 May 2024	06 Nov 2023
Machine Age	hrs	Client Info		<b>21297</b>	20755	20119
Oil Age	hrs	Client Info		<b>400</b>	400	400
Filter Age	hrs	Client Info		<b>400</b>	400	400
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>29</b>	48	24
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	3	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>1</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	5	4
Lead	ppm	ASTM D5185m	>40	<b>2</b>	4	4
Copper	ppm	ASTM D5185m	>330	<b>2</b>	5	0
Tin	ppm	ASTM D5185m	>15	<b>1</b>	2	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

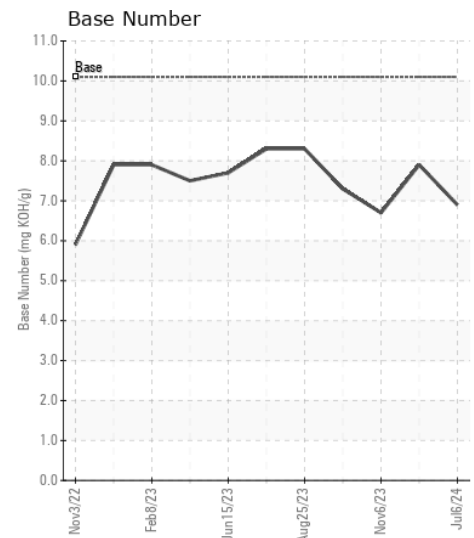
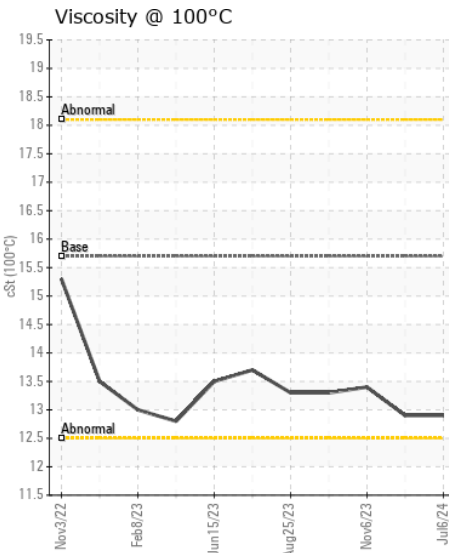
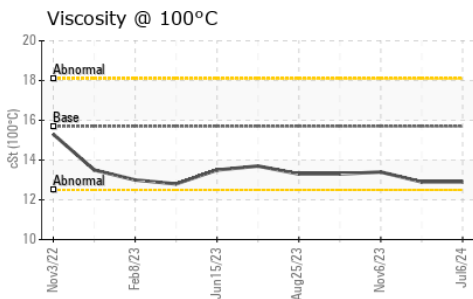
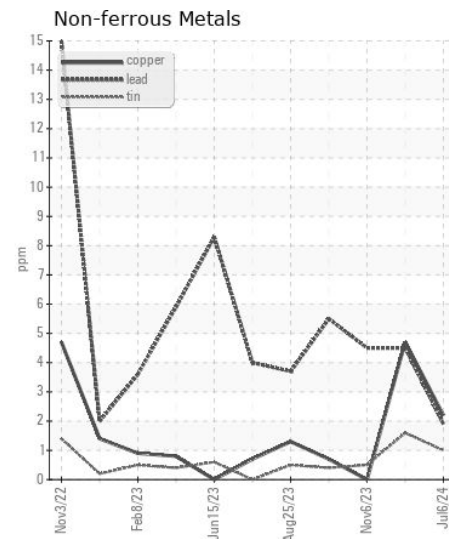
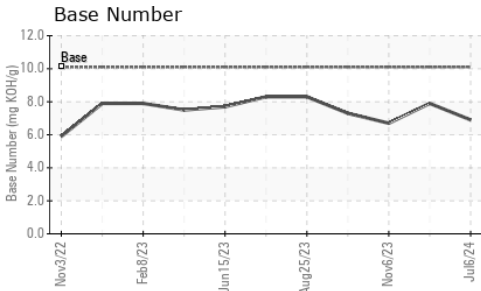
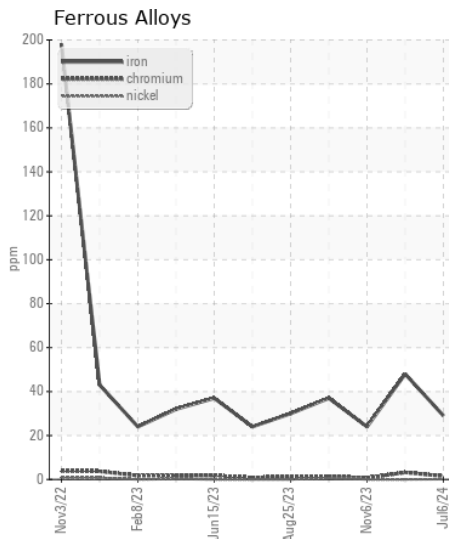
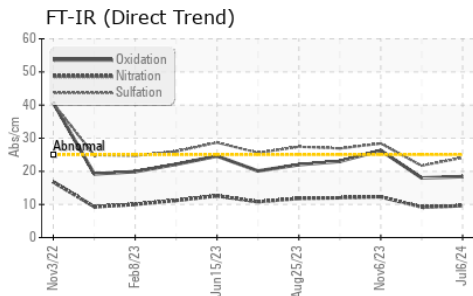
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	<b>12</b>	▲ 31	6
Potassium	ppm	ASTM D5185m	>20	<b>7</b>	7	0
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>0.8</b>	0.6	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.6</b>	9.2	12.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.1</b>	21.7	28.4
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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>6</b>	11	0
Boron	ppm	ASTM D5185m	316	<b>216</b>	19	151
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	1	0
Molybdenum	ppm	ASTM D5185m	1.2	<b>88</b>	68	132
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	3	<1
Magnesium	ppm	ASTM D5185m	24	<b>396</b>	432	716
Calcium	ppm	ASTM D5185m	2292	<b>1492</b>	1809	1621
Phosphorus	ppm	ASTM D5185m	1064	<b>1021</b>	1048	751
Zinc	ppm	ASTM D5185m	1160	<b>1254</b>	1284	923
Sulfur	ppm	ASTM D5185m	4996	<b>3037</b>	3485	2486
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.4</b>	18.0	26.3
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	<b>6.9</b>	7.9	6.7
Visc @ 100°C	cSt	ASTM D445	15.7	<b>12.9</b>	12.9	13.4



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0050896 **Received** : 18 Jul 2024  
**Lab Number** : 06239914 **Tested** : 18 Jul 2024  
**Unique Number** : 11128748 **Diagnosed** : 19 Jul 2024 - Don Baldridge  
**Test Package** : CONST ( Additional Tests: TBN )

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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)