



# OIL ANALYSIS REPORT

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

Area  
**Store 9 - Marietta**  
Machine Id  
**JOHN DEERE TE95**  
Component  
**Diesel Engine**  
Fluid  
**SHELL 15W40 (7 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LEC0051352</b>	LEC0025420	LEC0023550
Sample Date		Client Info		<b>28 Jun 2024</b>	16 May 2022	03 Dec 2021
Machine Age	hrs	Client Info		<b>4556</b>	3628	3276
Oil Age	hrs	Client Info		<b>438</b>	352	415
Filter Age	hrs	Client Info		<b>438</b>	352	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>43</b>	57	▲ 100
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	1	2
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	2
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>31	<b>4</b>	4	5
Lead	ppm	ASTM D5185m	>26	<b>&lt;1</b>	1	<1
Copper	ppm	ASTM D5185m	>26	<b>4</b>	2	6
Tin	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
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.

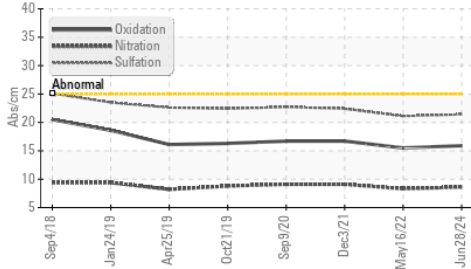
Silicon	ppm	ASTM D5185m	>120	<b>6</b>	7	8
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	2	2
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.6</b>	8.3	9.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.4</b>	21.1	22.4
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	>0.21	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

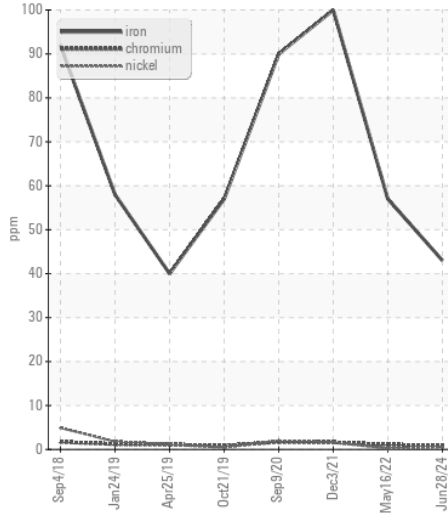
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>150	<b>4</b>	2	2
Boron	ppm	ASTM D5185m		<b>204</b>	228	167
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>231</b>	253	258
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m		<b>757</b>	864	824
Calcium	ppm	ASTM D5185m		<b>1672</b>	1494	1507
Phosphorus	ppm	ASTM D5185m		<b>948</b>	886	853
Zinc	ppm	ASTM D5185m		<b>1115</b>	1048	1053
Sulfur	ppm	ASTM D5185m		<b>3488</b>	2661	2466
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.9</b>	15.5	16.7
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.8</b>	8.7	9.7
Visc @ 100°C	cSt	ASTM D445		<b>13.1</b>	13.2	13.3

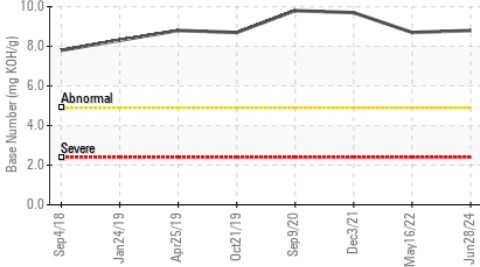
**FT-IR (Direct Trend)**



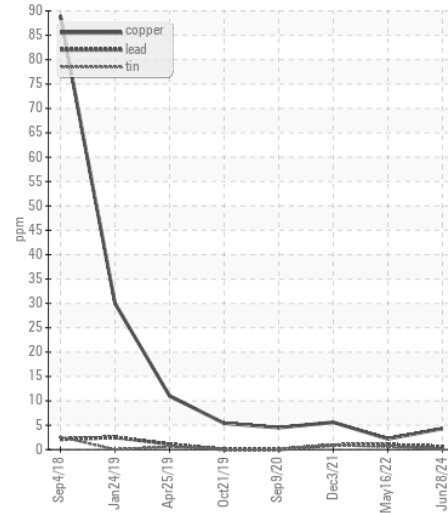
**Ferrous Alloys**



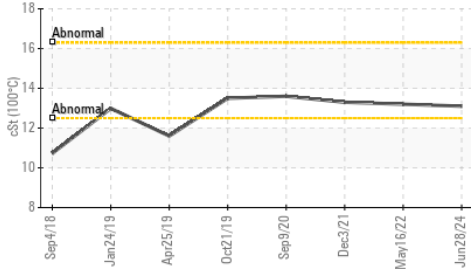
**Base Number**



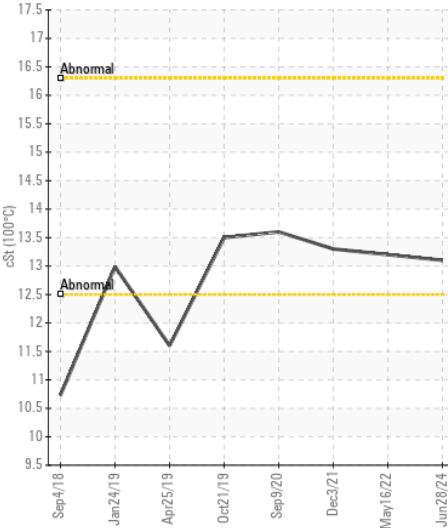
**Non-ferrous Metals**



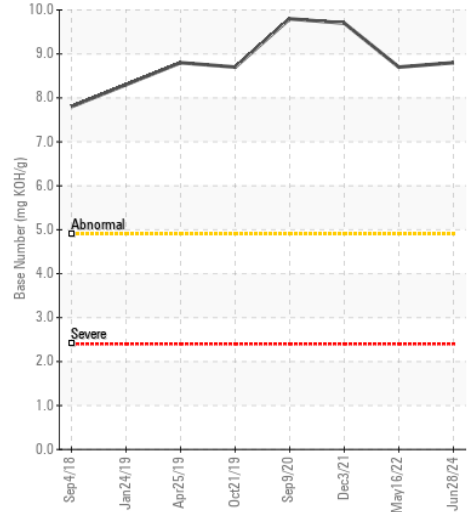
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0051352 **Received** : 11 Jul 2024  
**Lab Number** : 06233082 **Tested** : 12 Jul 2024  
**Unique Number** : 11116575 **Diagnosed** : 12 Jul 2024 - Wes Davis  
**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)