



# OIL ANALYSIS REPORT

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



Area  
**Store 9 - Marietta**  
Machine Id  
**JOHN DEERE 544L 1DW544LZVKF695734**  
Component  
**Diesel Engine**  
Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (5 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LEC0043819</b>	LEC0038218	LEC0037156
Sample Date		Client Info		<b>17 Aug 2023</b>	06 Apr 2023	20 Dec 2022
Machine Age	hrs	Client Info		<b>6864</b>	6347	5934
Oil Age	hrs	Client Info		<b>517</b>	413	986
Filter Age	hrs	Client Info		<b>517</b>	413	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	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>29</b>	21	39
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	0	1
Nickel	ppm	ASTM D5185m	>5	<b>1</b>	<1	3
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>4</b>	4	6
Lead	ppm	ASTM D5185m	>26	<b>0</b>	0	2
Copper	ppm	ASTM D5185m	>26	<b>3</b>	1	6
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	3
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

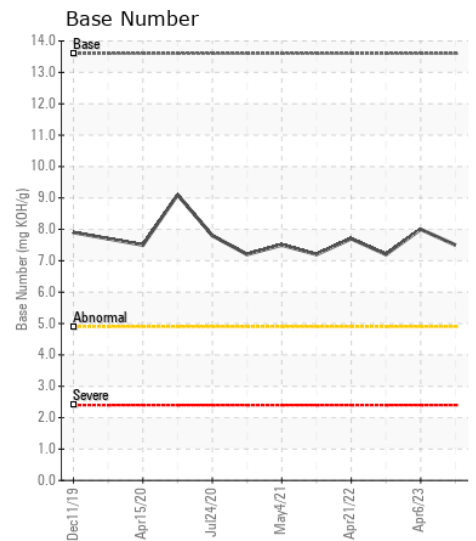
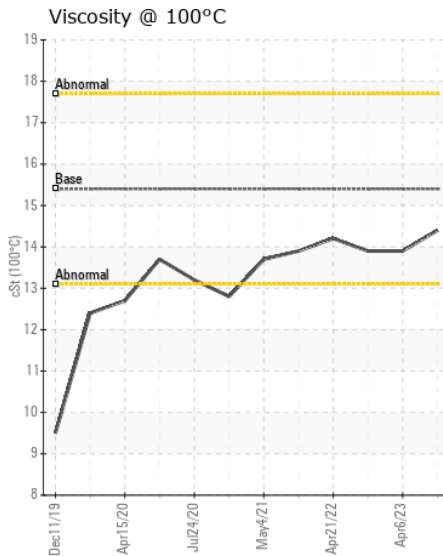
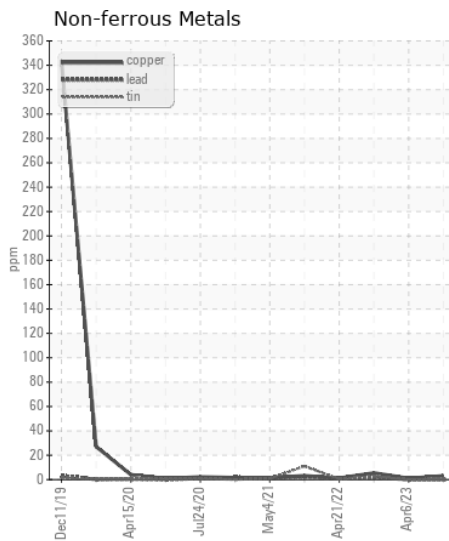
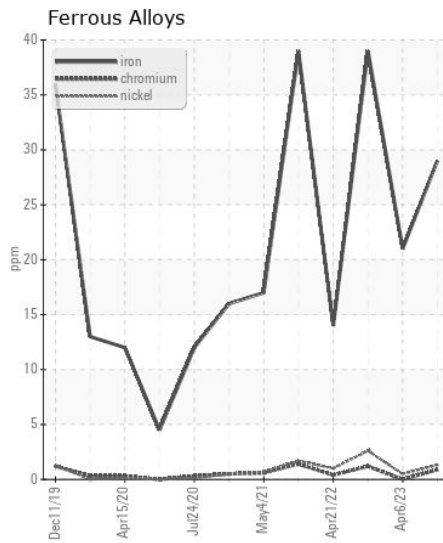
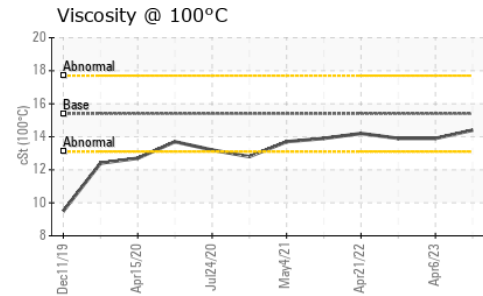
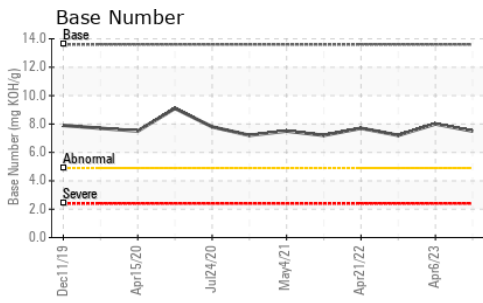
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	<b>9</b>	8	8
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	1	5
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>1.3</b>	0.8	1
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.2</b>	10.1	12.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>25.1</b>	24.2	31.8
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	>31	<b>4</b>	3	6
Boron	ppm	ASTM D5185m		<b>112</b>	159	32
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>256</b>	232	228
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>786</b>	785	719
Calcium	ppm	ASTM D5185m		<b>1500</b>	1571	1684
Phosphorus	ppm	ASTM D5185m		<b>912</b>	891	1015
Zinc	ppm	ASTM D5185m		<b>1123</b>	1137	1194
Sulfur	ppm	ASTM D5185m		<b>3066</b>	3158	3295
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.6</b>	18.9	26.7
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>7.5</b>	8.0	7.2
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.4</b>	13.9	13.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0043819 **Received** : 22 Aug 2023  
**Lab Number** : 05930697 **Tested** : 22 Aug 2023  
**Unique Number** : 10615968 **Diagnosed** : 22 Aug 2023 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**LESLIE EQUIPMENT COMPANY**  
 105 TENNIS CENTER DR.  
 MARIETTA, OH  
 US 45750-9765  
 Contact: LEANNE KENDALL  
 KendalLeanne@lec1.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)

T: (740)373-5570