



# OIL ANALYSIS REPORT

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



Area  
**Store 8 - Pikeville**  
Machine Id  
**JOHN DEERE 850L 1T0850LXLMF390846**  
Component  
**Diesel Engine**  
Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 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>LEC0042152</b>	LEC0035940	LEC0034761
Sample Date		Client Info		<b>10 Jul 2023</b>	09 Feb 2023	04 Nov 2022
Machine Age	hrs	Client Info		<b>1360</b>	1022	924
Oil Age	hrs	Client Info		<b>338</b>	372	274
Filter Age	hrs	Client Info		<b>338</b>	372	274
Oil Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>11</b>	21	24
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>1</b>	5	7
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>8</b>	2	3
Lead	ppm	ASTM D5185m	>26	<b>5</b>	<1	<1
Copper	ppm	ASTM D5185m	>26	<b>6</b>	<1	2
Tin	ppm	ASTM D5185m	>4	<b>2</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

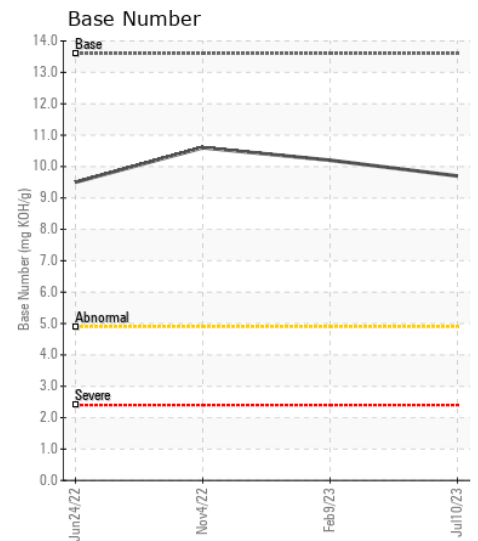
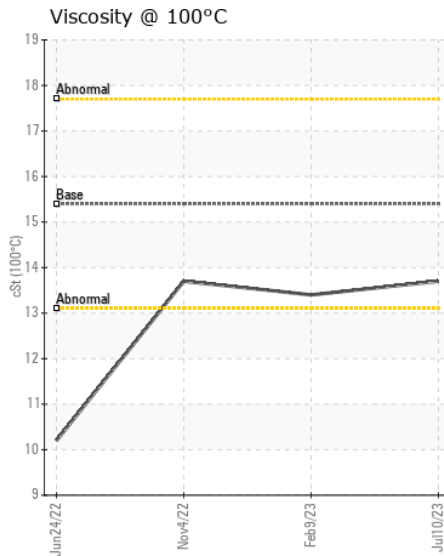
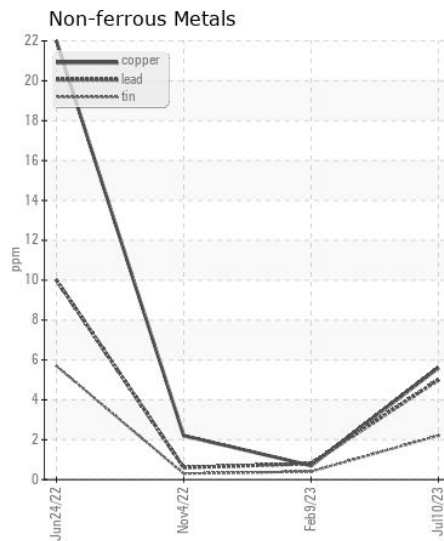
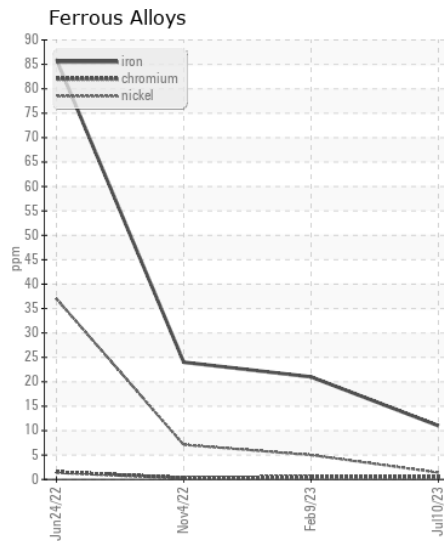
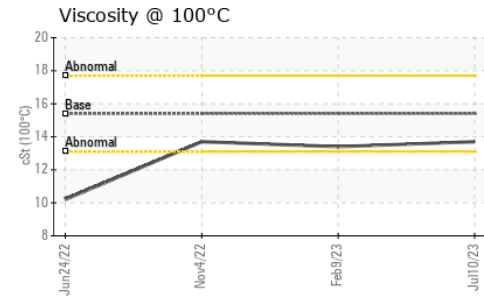
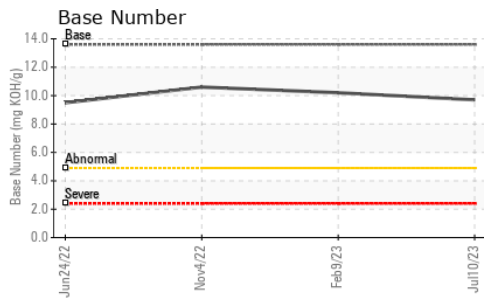
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	<b>9</b>	6	6
Potassium	ppm	ASTM D5185m	>20	<b>8</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>0.1</b>	0.1	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.9</b>	6.3	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.0</b>	19.6	22.9
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>	1	3
Boron	ppm	ASTM D5185m		<b>248</b>	266	236
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>220</b>	212	192
Manganese	ppm	ASTM D5185m		<b>2</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>882</b>	746	739
Calcium	ppm	ASTM D5185m		<b>1544</b>	1498	1452
Phosphorus	ppm	ASTM D5185m		<b>987</b>	890	774
Zinc	ppm	ASTM D5185m		<b>1202</b>	1062	959
Sulfur	ppm	ASTM D5185m		<b>4171</b>	3666	3032
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.4</b>	14.2	16.7
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>9.7</b>	10.2	10.6
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.7</b>	13.4	13.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0042152 **Received** : 12 Jul 2023  
**Lab Number** : 05895945 **Tested** : 12 Jul 2023  
**Unique Number** : 10551755 **Diagnosed** : 13 Jul 2023 - Don Baldrige  
**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