



# OIL ANALYSIS REPORT

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



Area  
**[ro#149165]**  
 Machine Id  
**JOHN DEERE 850K 1T0850KXHJF339085**  
 Component  
**Diesel Engine**  
 Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (7 GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LEC0048540</b>	LEC0042031	LEC0046754
Sample Date		Client Info		<b>08 Apr 2024</b>	21 Mar 2024	13 Dec 2023
Machine Age	hrs	Client Info		<b>6975</b>	6974	6552
Oil Age	hrs	Client Info		<b>680</b>	679	257
Filter Age	hrs	Client Info		<b>680</b>	679	257
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Sample Status				<b>NORMAL</b>	SEVERE	SEVERE

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>&lt;1</b>	25	25
Chromium	ppm	ASTM D5185m	>11	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>1</b>	8	5
Lead	ppm	ASTM D5185m	>26	<b>0</b>	2	2
Copper	ppm	ASTM D5185m	>26	<b>0</b>	6	6
Tin	ppm	ASTM D5185m	>4	<b>0</b>	1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

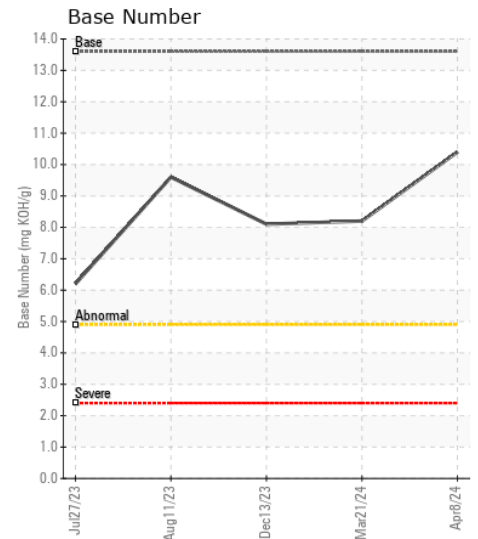
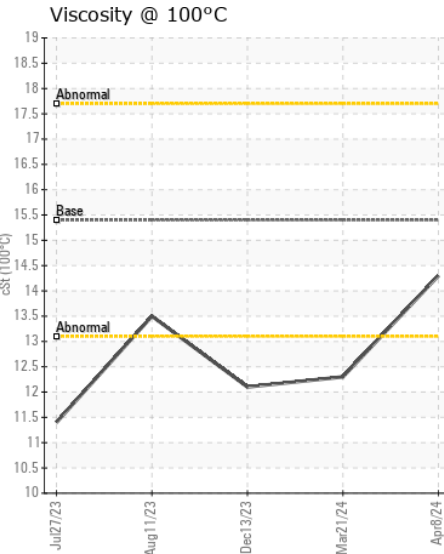
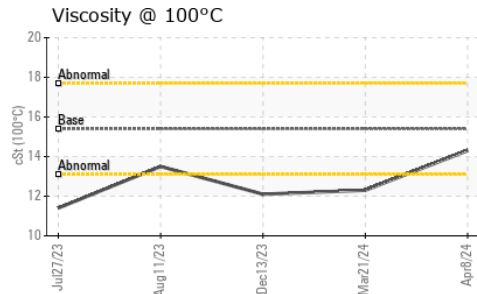
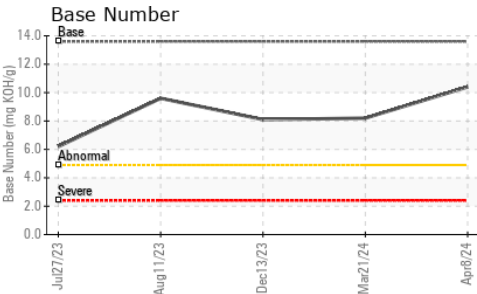
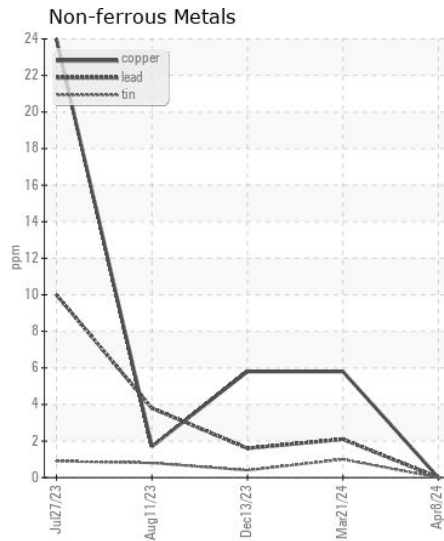
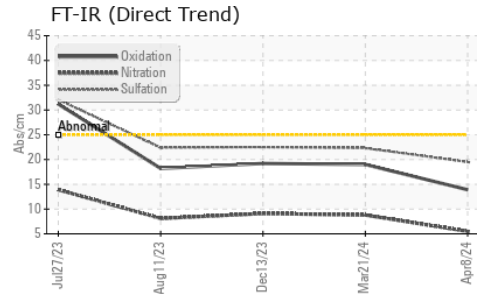
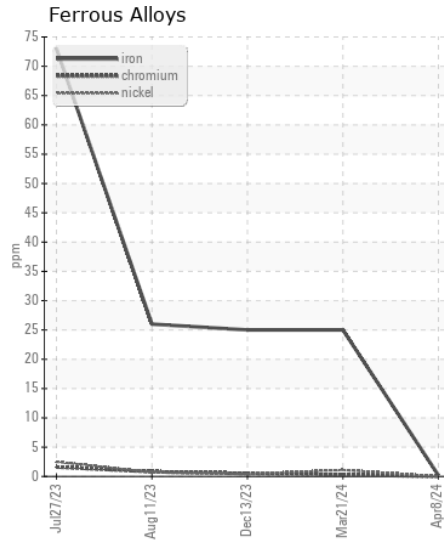
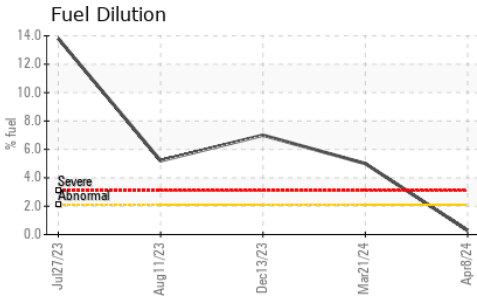
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	<b>5</b>	15	10
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	4	2
Fuel	%	ASTM D3524	>2.1	<b>0.3</b>	▲ 5.0	▲ 7.0
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0</b>	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.5</b>	8.8	9.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.5</b>	22.3	22.5
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>0</b>	3	2
Boron	ppm	ASTM D5185m		<b>285</b>	201	206
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>244</b>	227	242
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>873</b>	775	794
Calcium	ppm	ASTM D5185m		<b>1532</b>	1300	1441
Phosphorus	ppm	ASTM D5185m		<b>994</b>	851	878
Zinc	ppm	ASTM D5185m		<b>1136</b>	1011	1077
Sulfur	ppm	ASTM D5185m		<b>3909</b>	3125	3058
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.9</b>	19.0	19.2
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>10.4</b>	8.2	8.1
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.3</b>	▲ 12.3	▲ 12.1



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0048540 **Received** : 12 Apr 2024  
**Lab Number** : 06146978 **Tested** : 17 Apr 2024  
**Unique Number** : 10977056 **Diagnosed** : 17 Apr 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: PercentFuel, 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)

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