



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area  
**Store 9 - Marietta**  
Machine Id  
**JOHN DEERE 850K 1T0850KXEKF349022**  
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>LEC0047222</b>	LEC0044102	LEC0033902
Sample Date		Client Info		<b>11 Jan 2024</b>	24 Aug 2023	15 Nov 2022
Machine Age	hrs	Client Info		<b>2876</b>	2317	1816
Oil Age	hrs	Client Info		<b>559</b>	501	329
Filter Age	hrs	Client Info		<b>559</b>	501	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>15</b>	23	23
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	1
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>5</b>	5	4
Lead	ppm	ASTM D5185m	>26	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>26	<b>&lt;1</b>	2	6
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

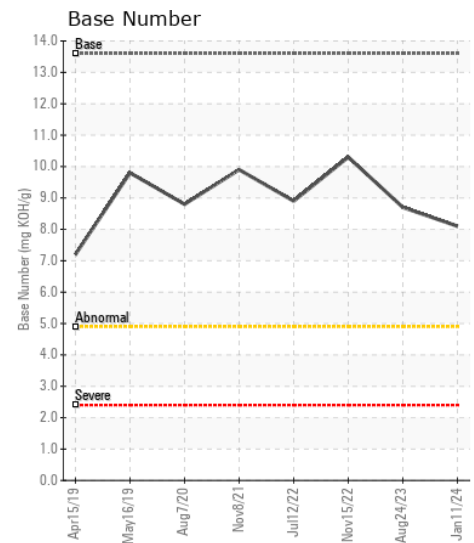
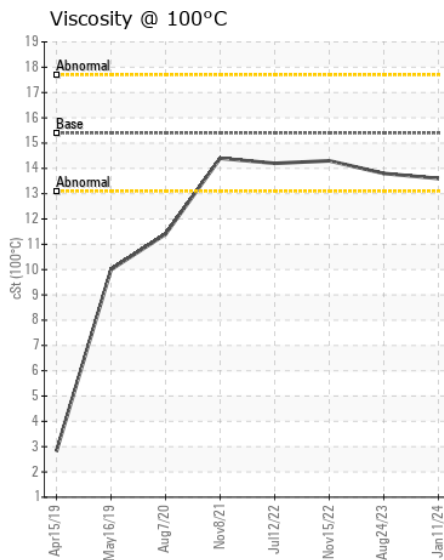
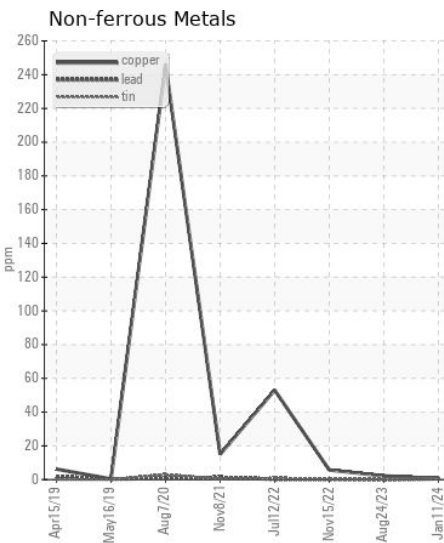
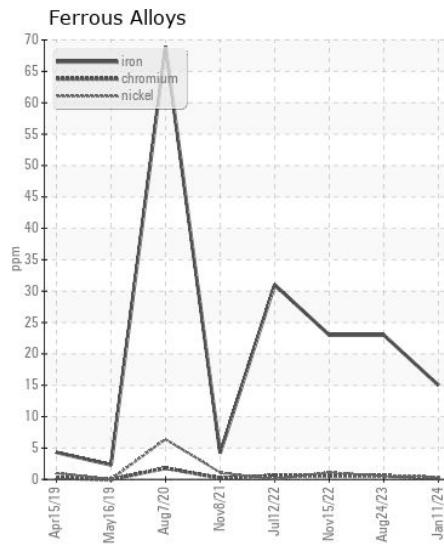
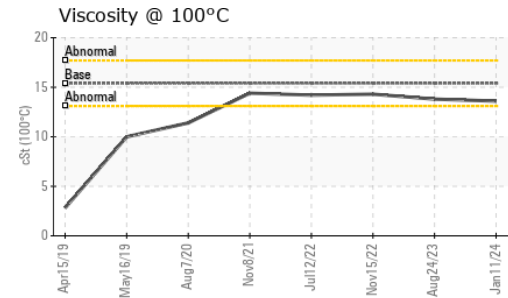
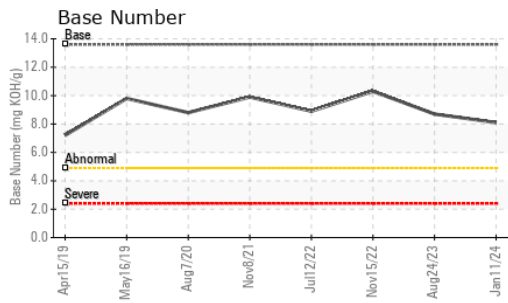
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	<b>7</b>	7	7
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0	1
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>9.6</b>	9.2	10.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.8</b>	22.1	23.9
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>2</b>	4	2
Boron	ppm	ASTM D5185m		<b>201</b>	270	195
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>246</b>	259	256
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>790</b>	871	808
Calcium	ppm	ASTM D5185m		<b>1449</b>	1648	1559
Phosphorus	ppm	ASTM D5185m		<b>957</b>	970	900
Zinc	ppm	ASTM D5185m		<b>1124</b>	1168	1161
Sulfur	ppm	ASTM D5185m		<b>3060</b>	3729	3455
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.9</b>	17.3	18.6
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>8.1</b>	8.7	10.3
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.6</b>	13.8	14.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0047222 **Received** : 17 Jan 2024  
**Lab Number** : 06063324 **Diagnosed** : 18 Jan 2024  
**Unique Number** : 10834706 **Diagnostician** : 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)