



# OIL ANALYSIS REPORT

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

Area

**Store 9 - Marietta [115425]**

Machine Id

**JOHN DEERE 948L 1DW948LBAJF692523**

Component

**Diesel Engine**

Fluid

**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (8 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LEC0019421</b>	LEC0014292	---
Sample Date		Client Info		<b>13 Apr 2021</b>	15 Sep 2020	---
Machine Age	hrs	Client Info		<b>2048</b>	1274	---
Oil Age	hrs	Client Info		<b>774</b>	788	---
Filter Age	hrs	Client Info		<b>774</b>	788	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	ABNORMAL	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>38</b>	▲ 52	---
Chromium	ppm	ASTM D5185m	>11	<b>1</b>	1	---
Nickel	ppm	ASTM D5185m	>5	<b>1</b>	1	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>31	<b>6</b>	5	---
Lead	ppm	ASTM D5185m	>26	<b>2</b>	2	---
Copper	ppm	ASTM D5185m	>26	<b>23</b>	▲ 89	---
Tin	ppm	ASTM D5185m	>4	<b>2</b>	3	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

## CONTAMINATION

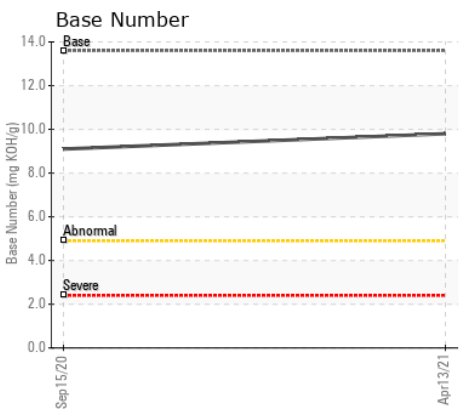
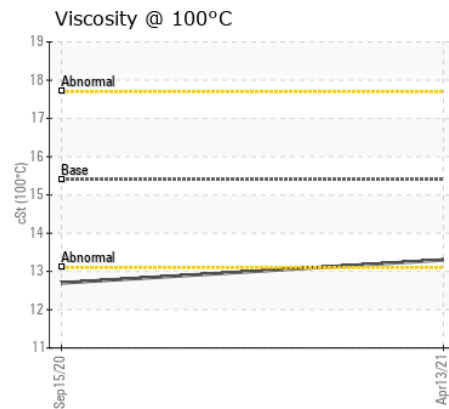
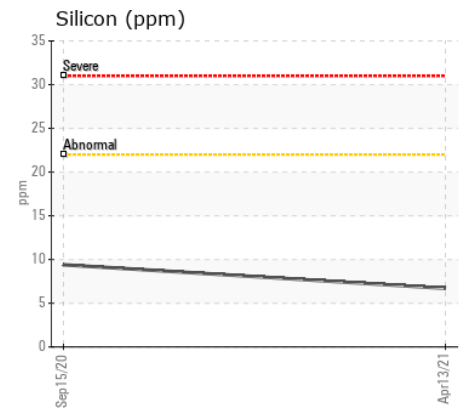
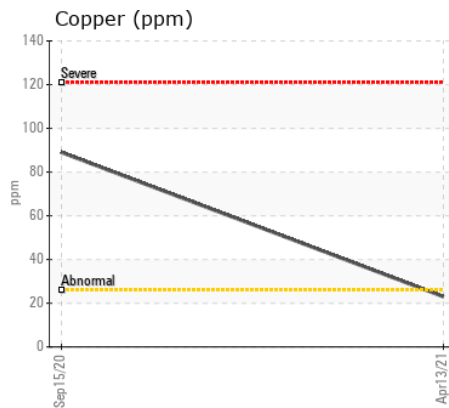
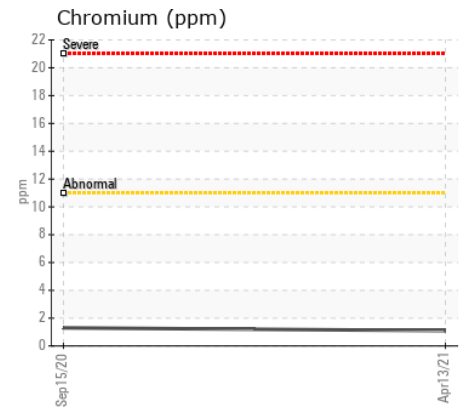
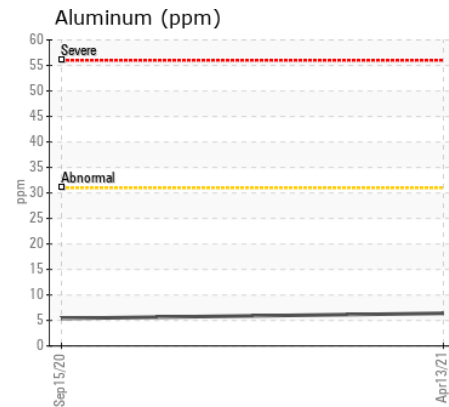
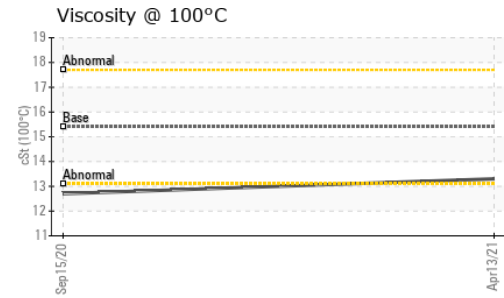
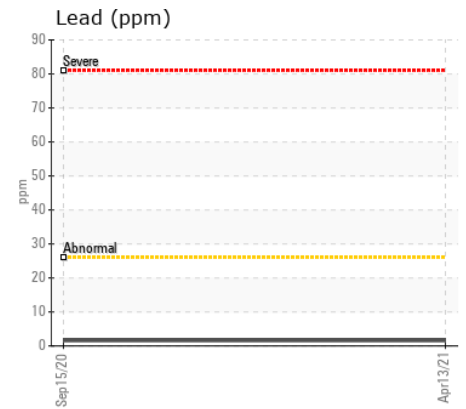
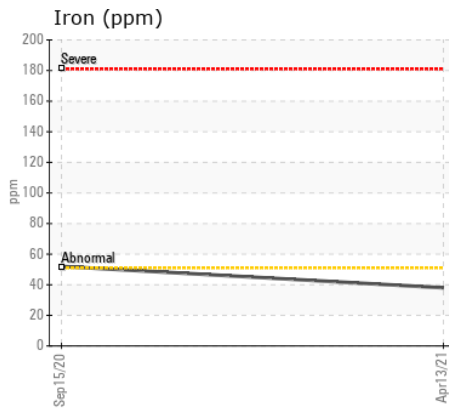
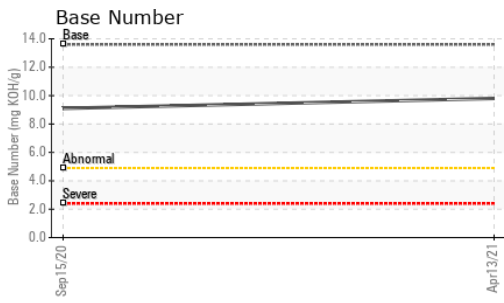
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>7</b>	9	---
Potassium	ppm	ASTM D5185m	>20	<b>14</b>	30	---
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.21	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>0.7</b>	1	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.9</b>	10	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>25.1</b>	24.3	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.21	<b>NEG</b>	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>	2	---
Boron	ppm	ASTM D5185m		<b>225</b>	180	---
Barium	ppm	ASTM D5185m		<b>0</b>	2	---
Molybdenum	ppm	ASTM D5185m		<b>292</b>	284	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	---
Magnesium	ppm	ASTM D5185m		<b>887</b>	817	---
Calcium	ppm	ASTM D5185m		<b>1530</b>	1442	---
Phosphorus	ppm	ASTM D5185m		<b>920</b>	875	---
Zinc	ppm	ASTM D5185m		<b>1157</b>	1011	---
Sulfur	ppm	ASTM D5185m		<b>2692</b>	2460	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.3</b>	17.5	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>9.8</b>	9.1	---
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.3</b>	12.7	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0019421 **Received** : 19 Apr 2021  
**Lab Number** : 05232542 **Diagnosed** : 20 Apr 2021  
**Unique Number** : 9466449 **Diagnostician** : Wes Davis  
**Test Package** : MOBCE ( Additional Tests: TBN )

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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