



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Area  
**WARRIOR USED (748L ii) [A35889]**

Machine Id  
**748 LII (1DW748LBTNF713003)**

Component  
**Drain Diesel Engine**

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

## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. ( Customer Sample Comment: A35889 )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WE0007681</b>	---	---
Sample Date		Client Info		<b>11 Jul 2024</b>	---	---
Machine Age	hrs	Client Info		<b>3250</b>	---	---
Oil Age	hrs	Client Info		<b>100</b>	---	---
Filter Age	hrs	Client Info		<b>100</b>	---	---
Oil Changed		Client Info		<b>Changed</b>	---	---
Filter Changed		Client Info		<b>Changed</b>	---	---
Sample Status				<b>ATTENTION</b>	---	---

## WEAR

All component wear rates are normal.

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

## CONTAMINATION

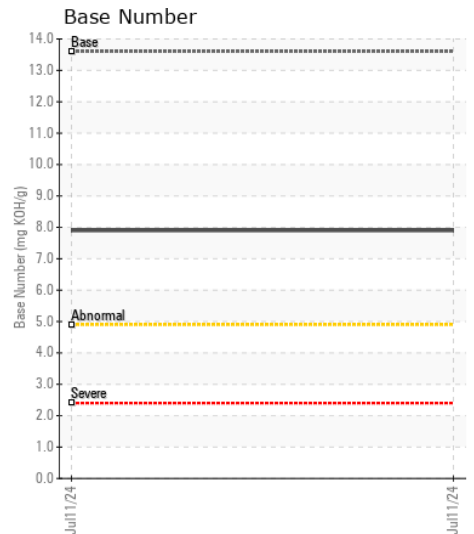
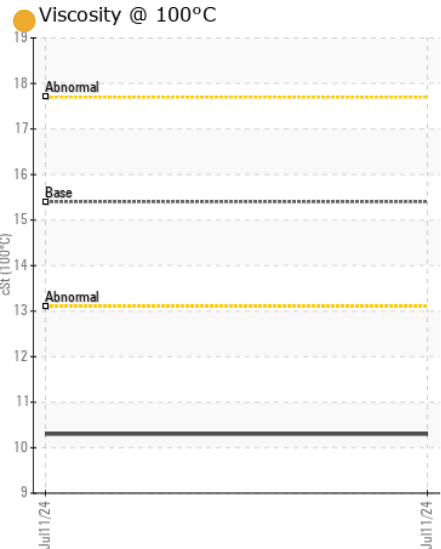
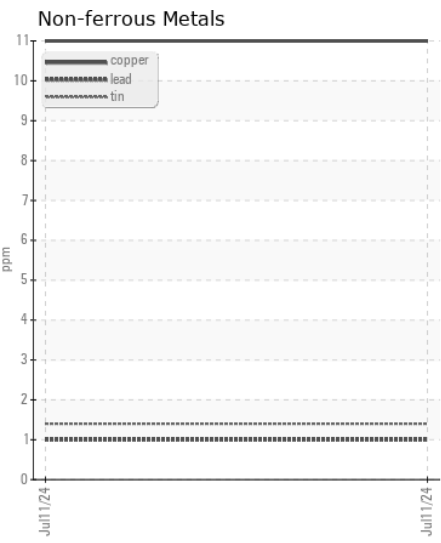
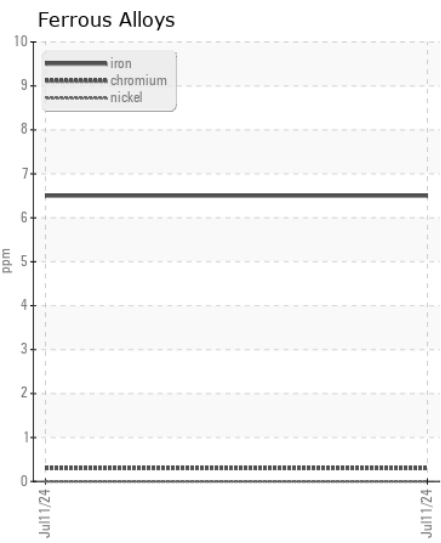
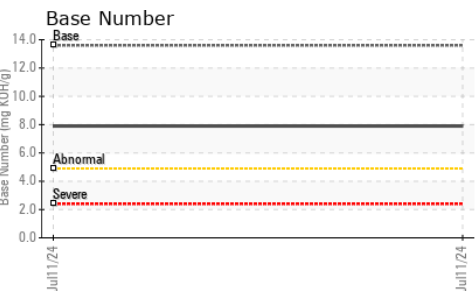
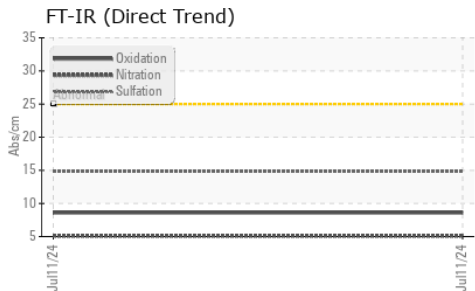
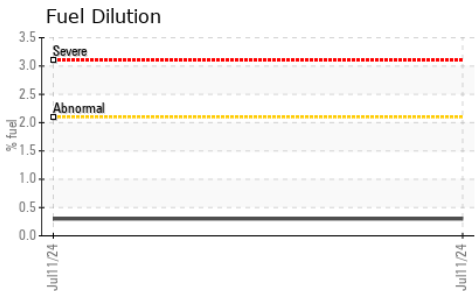
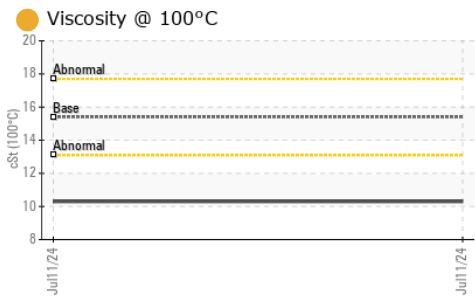
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>7</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	---	---
Fuel	%	ASTM D3524	>2.1	<b>0.3</b>	---	---
Water		WC Method	>0.21	<b>NEG</b>	---	---
Glycol		WC Method		<b>NEG</b>	---	---
Soot %	%	*ASTM D7844	>3	<b>0</b>	---	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.1</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>14.8</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual	>0.21	<b>NEG</b>	---	---

## FLUID CONDITION

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>31	<b>0</b>	---	---
Boron	ppm	ASTM D5185m		<b>2</b>	---	---
Barium	ppm	ASTM D5185m		<b>2</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>3</b>	---	---
Manganese	ppm	ASTM D5185m		<b>3</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>41</b>	---	---
Calcium	ppm	ASTM D5185m		<b>2253</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>794</b>	---	---
Zinc	ppm	ASTM D5185m		<b>1012</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>3316</b>	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>8.6</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>7.9</b>	---	---
Visc @ 100°C	cSt	ASTM D445	15.4	<b>10.3</b>	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WE0007681 **Received** : 15 Jul 2024  
**Lab Number** : 06235582 **Tested** : 16 Jul 2024  
**Unique Number** : 11124416 **Diagnosed** : 16 Jul 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: FuelDilution, PercentFuel, TBN )

**WARRIOR TRACTOR AND EQUIPMENT - HUNTSVILLE**  
 25135 ONE AVIATION WAY SW  
 MADISON, AL  
 US 35756  
 Contact: HERBERT STONE  
 WTE013@WARRIORTRACTOR.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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F: