



# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**JOHN DEERE 843L 1DW843LBHKF696476**

Component  
**Diesel Engine**

Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- QTS)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### 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.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WE0005185</b>	---	---
Sample Date	Client Info		<b>02 Oct 2023</b>	---	---
Machine Age	hrs	Client Info	<b>5089</b>	---	---
Oil Age	hrs	Client Info	<b>1</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>NORMAL</b>	---	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>2.1	<b>&lt;1.0</b>	---	---
Glycol	WC Method		<b>NEG</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>51	<b>1</b>	---
Chromium	ppm	ASTM D5185m	>11	<b>0</b>	---
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	---
Titanium	ppm	ASTM D5185m		<b>0</b>	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	---
Aluminum	ppm	ASTM D5185m	>31	<b>2</b>	---
Lead	ppm	ASTM D5185m	>26	<b>&lt;1</b>	---
Copper	ppm	ASTM D5185m	>26	<b>4</b>	---
Tin	ppm	ASTM D5185m	>4	<b>0</b>	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	---
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>364</b>	---
Barium	ppm	ASTM D5185m		<b>0</b>	---
Molybdenum	ppm	ASTM D5185m		<b>270</b>	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---
Magnesium	ppm	ASTM D5185m		<b>930</b>	---
Calcium	ppm	ASTM D5185m		<b>1546</b>	---
Phosphorus	ppm	ASTM D5185m		<b>972</b>	---
Zinc	ppm	ASTM D5185m		<b>1201</b>	---
Sulfur	ppm	ASTM D5185m		<b>3287</b>	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>22	<b>10</b>	---
Sodium	ppm	ASTM D5185m	>31	<b>2</b>	---
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	---

## INFRA-RED

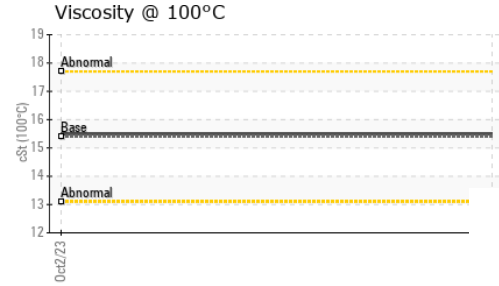
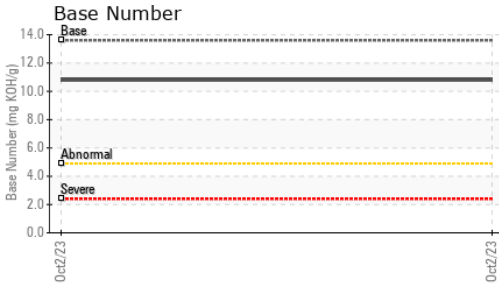
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.0</b>	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.3</b>	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.2</b>	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>10.8</b>	---



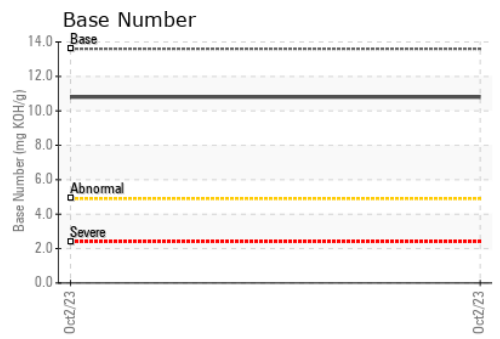
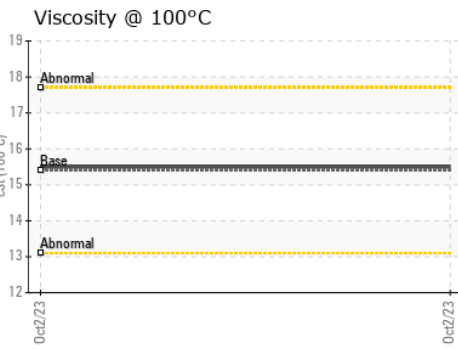
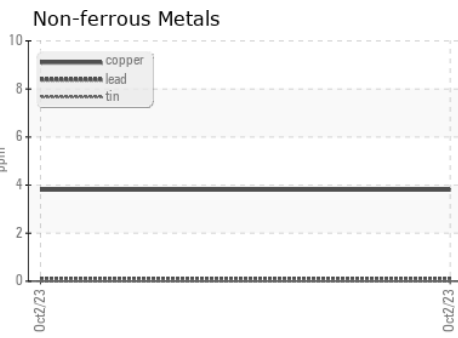
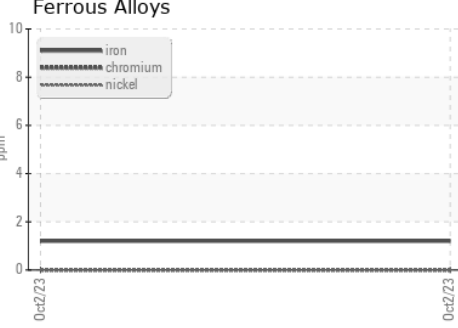
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.21	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.4	<b>15.5</b>	---	---

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WE0005185      **Received** : 04 Oct 2023  
**Lab Number** : **05968702**      **Diagnosed** : 04 Oct 2023  
**Unique Number** : 10675253      **Diagnostician** : Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**WARRIOR TRACTOR AND EQUIPMENT - NORTHPORT**  
 P.O. BOX 412  
 NORTHPORT, AL  
 US 35476  
 Contact: PAMELA CLARK  
 pamela@warriortractor.com  
 T: (205)339-0300  
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Certificate L2367  
 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)