



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

Area

**[05W47448]**

Machine Id

**JOHN DEERE 1T0700LXTRF460773**

Component

**Diesel Engine**

Fluid

**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (28 GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0218643</b>	JR0210974	---
Sample Date		Client Info		<b>14 Jun 2024</b>	29 Mar 2024	---
Machine Age	hrs	Client Info		<b>993</b>	486	---
Oil Age	hrs	Client Info		<b>507</b>	486	---
Filter Age	hrs	Client Info		<b>507</b>	486	---
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>14</b>	36	---
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	0	---
Nickel	ppm	ASTM D5185m	>5	<b>3</b>	8	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>31	<b>5</b>	4	---
Lead	ppm	ASTM D5185m	>26	<b>0</b>	0	---
Copper	ppm	ASTM D5185m	>26	<b>11</b>	▲ 94	---
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	1	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
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.

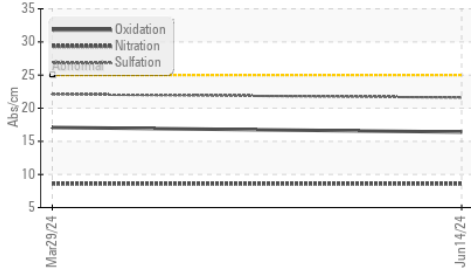
Silicon	ppm	ASTM D5185m	>22	<b>7</b>	8	---
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	2	---
Fuel	%	ASTM D3524	>2.1	<b>&lt;1.0</b>	0.3	---
Water		WC Method	>0.21	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.6</b>	8.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.6</b>	22.1	---
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

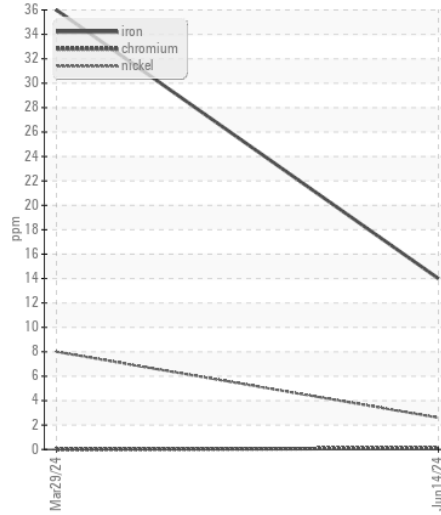
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	<b>4</b>	5	---
Boron	ppm	ASTM D5185m		<b>207</b>	250	---
Barium	ppm	ASTM D5185m		<b>0</b>	2	---
Molybdenum	ppm	ASTM D5185m		<b>240</b>	251	---
Manganese	ppm	ASTM D5185m		<b>1</b>	4	---
Magnesium	ppm	ASTM D5185m		<b>829</b>	880	---
Calcium	ppm	ASTM D5185m		<b>1448</b>	1582	---
Phosphorus	ppm	ASTM D5185m		<b>920</b>	935	---
Zinc	ppm	ASTM D5185m		<b>1086</b>	1070	---
Sulfur	ppm	ASTM D5185m		<b>3534</b>	3653	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.4</b>	17.1	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>8.6</b>	9.1	---
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.9</b>	● 9.9	---

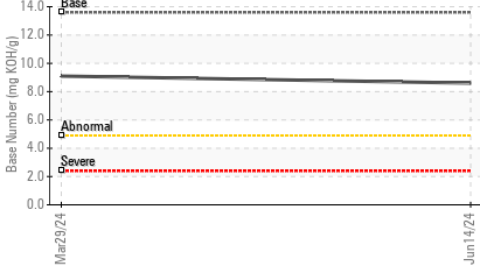
**FT-IR (Direct Trend)**



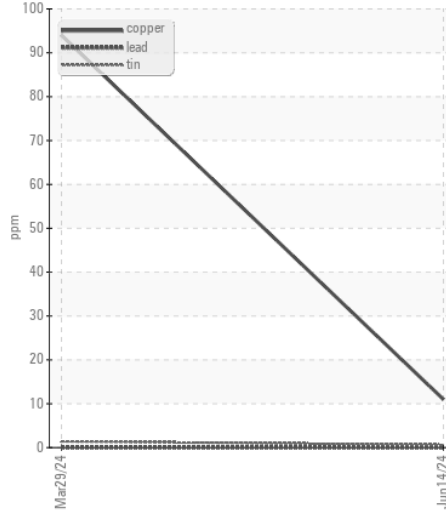
**Ferrous Alloys**



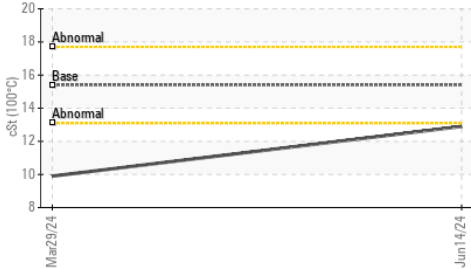
**Base Number**



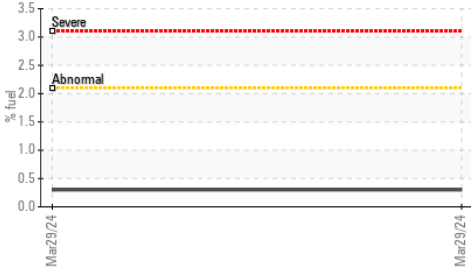
**Non-ferrous Metals**



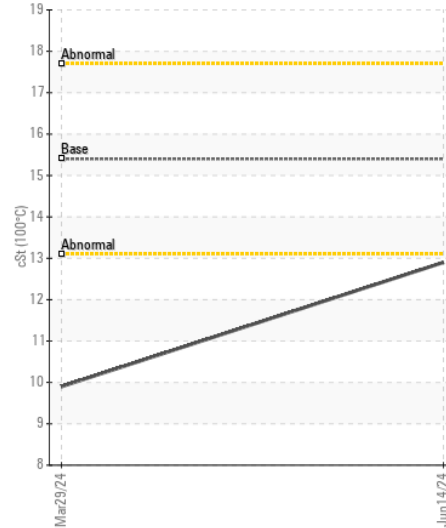
**Viscosity @ 100°C**



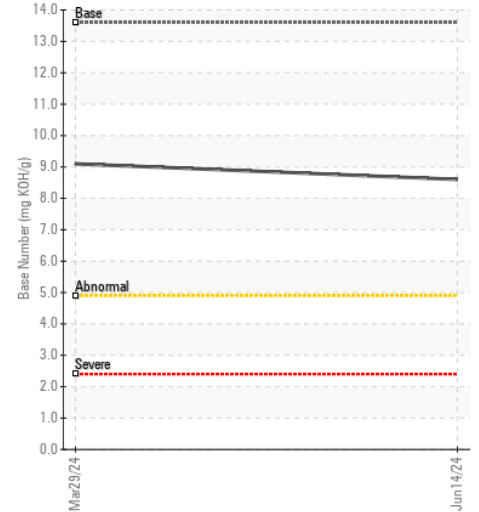
**Fuel Dilution**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0218643 **Received** : 17 Jun 2024  
**Lab Number** : 06211439 **Tested** : 18 Jun 2024  
**Unique Number** : 11084303 **Diagnosed** : 18 Jun 2024 - Jonathan Hester  
**Test Package** : CONST ( Additional Tests: FuelDilution, TBN )

**CWS-STRITTMATTER**  
 9102 OWENS DR  
 MANASSAS PARK, VA  
 US 20111

Contact: EDDIE GARRETSON  
 egarretson@strittmattercompanies.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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