



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

Area

**[05W46143]**

Machine Id

**JOHN DEERE 410L 1T0410LXCNF420511**

Component

**Diesel Engine**

Fluid

**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (14 QTS)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0210965</b>	JR0173048	---
Sample Date		Client Info		<b>10 May 2024</b>	02 May 2023	---
Machine Age	hrs	Client Info		<b>982</b>	442	---
Oil Age	hrs	Client Info		<b>540</b>	442	---
Filter Age	hrs	Client Info		<b>540</b>	442	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	ATTENTION	---

### WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>51	<b>125</b>	37	---
Chromium	ppm	ASTM D5185m	>11	<b>3</b>	1	---
Nickel	ppm	ASTM D5185m	>5	<b>9</b>	1	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>31	<b>10</b>	10	---
Lead	ppm	ASTM D5185m	>26	<b>4</b>	5	---
Copper	ppm	ASTM D5185m	>26	<b>25</b>	31	---
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	2	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

### CONTAMINATION

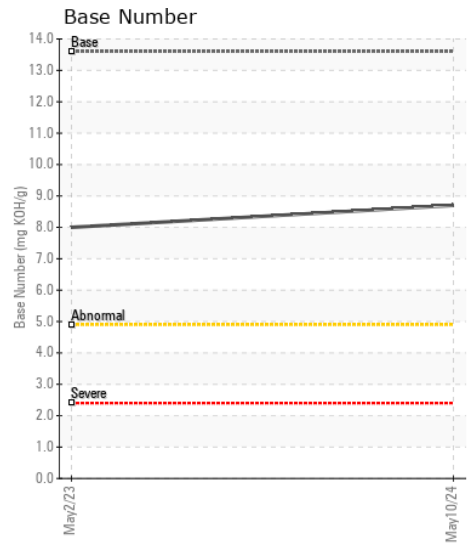
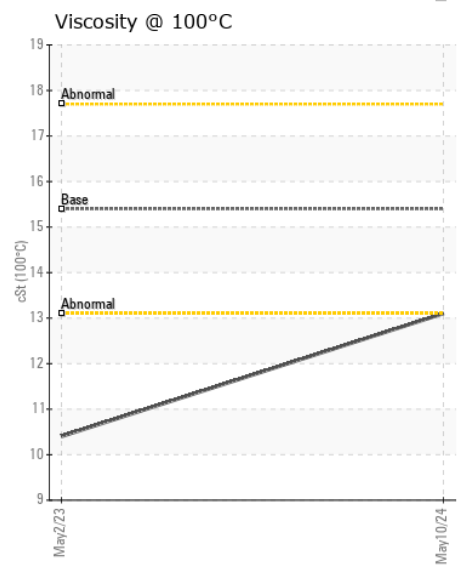
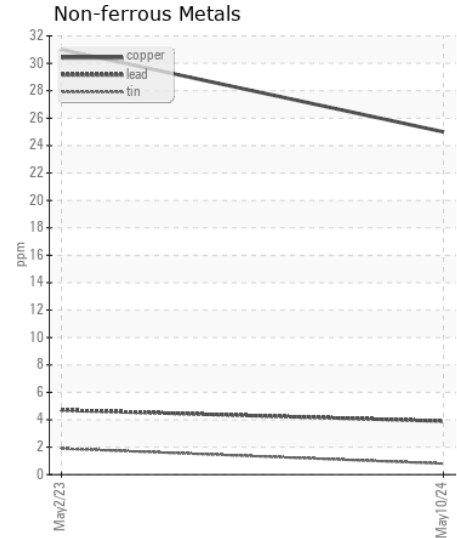
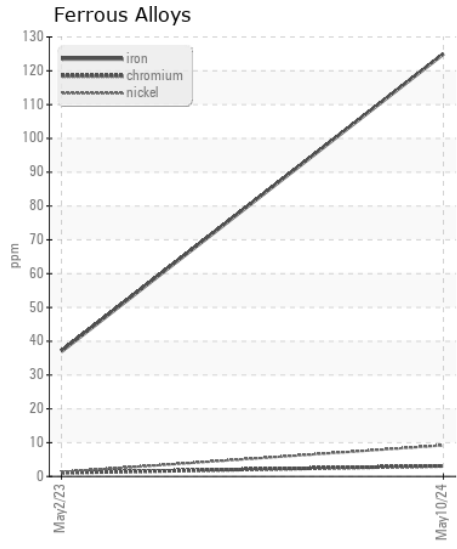
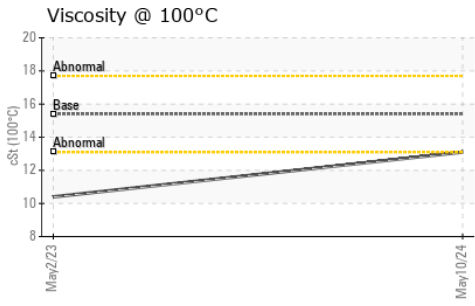
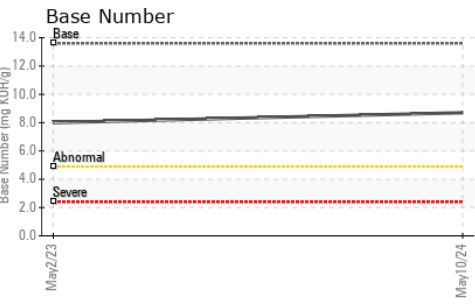
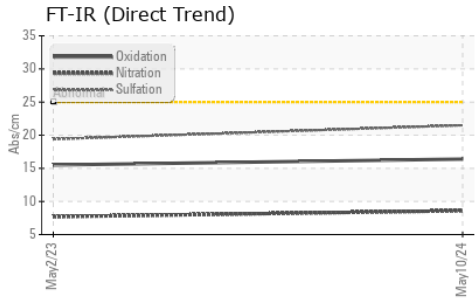
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>26</b>	16	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	3	---
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	0.5	---
Water		WC Method	>0.21	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.6</b>	7.7	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.5</b>	19.4	---
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>	4	---
Boron	ppm	ASTM D5185m		<b>253</b>	249	---
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	3	---
Molybdenum	ppm	ASTM D5185m		<b>258</b>	238	---
Manganese	ppm	ASTM D5185m		<b>2</b>	4	---
Magnesium	ppm	ASTM D5185m		<b>838</b>	852	---
Calcium	ppm	ASTM D5185m		<b>1574</b>	1468	---
Phosphorus	ppm	ASTM D5185m		<b>951</b>	925	---
Zinc	ppm	ASTM D5185m		<b>1140</b>	1123	---
Sulfur	ppm	ASTM D5185m		<b>3651</b>	3621	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.4</b>	15.5	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>8.7</b>	8.0	---
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.1</b>	10.4	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0210965 **Received** : 13 May 2024  
**Lab Number** : 06177005 **Tested** : 14 May 2024  
**Unique Number** : 11023058 **Diagnosed** : 14 May 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**JRE - MANASSAS PARK**  
 9107 OWENS DRIVE  
 MANASSAS PARK, VA  
 US 20111  
 Contact: DON VEST  
 dvest@jamesriverequipment.com  
 T: (703)631-8500  
 F: (703)631-4715

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)