



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

Machine Id  
**JOHN DEERE 135G 1FF135GXHNF503432**  
 Component  
**Diesel Engine**  
 Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0220305</b>	JR0179448	---
Sample Date		Client Info		<b>11 Jul 2024</b>	13 Oct 2023	---
Machine Age	hrs	Client Info		<b>961</b>	661	---
Oil Age	hrs	Client Info		<b>300</b>	661	---
Filter Age	hrs	Client Info		<b>0</b>	661	---
Oil Changed		Client Info		<b>N/A</b>	Changed	---
Filter Changed		Client Info		<b>N/A</b>	Changed	---
Sample Status				<b>NORMAL</b>	ATTENTION	---

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>7</b>	9	---
Chromium	ppm	ASTM D5185m	>11	<b>0</b>	<1	---
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185m	>31	<b>4</b>	4	---
Lead	ppm	ASTM D5185m	>26	<b>0</b>	0	---
Copper	ppm	ASTM D5185m	>26	<b>11</b>	31	---
Tin	ppm	ASTM D5185m	>4	<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>0</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.

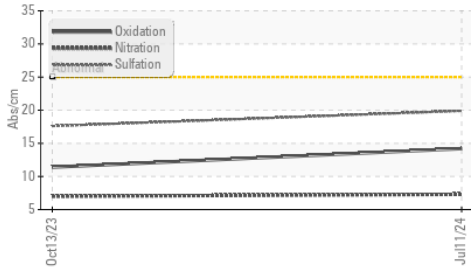
Silicon	ppm	ASTM D5185m	>22	<b>9</b>	18	---
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	3	---
Fuel	%	ASTM D3524	>2.1	<b>&lt;1.0</b>	1.9	---
Water		WC Method	>0.21	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.3</b>	7.0	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.9</b>	17.6	---
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

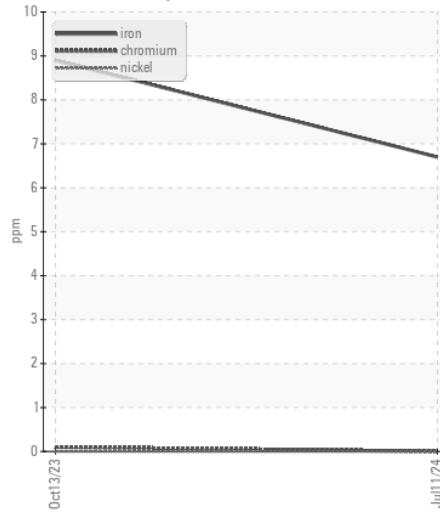
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	<b>3</b>	1	---
Boron	ppm	ASTM D5185m		<b>270</b>	229	---
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>210</b>	19	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>695</b>	102	---
Calcium	ppm	ASTM D5185m		<b>1544</b>	2055	---
Phosphorus	ppm	ASTM D5185m		<b>932</b>	1049	---
Zinc	ppm	ASTM D5185m		<b>1044</b>	1269	---
Sulfur	ppm	ASTM D5185m		<b>3340</b>	2859	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.2</b>	11.4	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>9.2</b>	7.7	---
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.7</b>	11.9	---

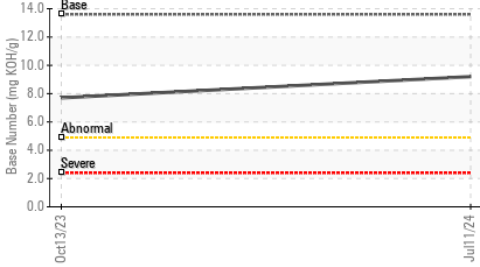
**FT-IR (Direct Trend)**



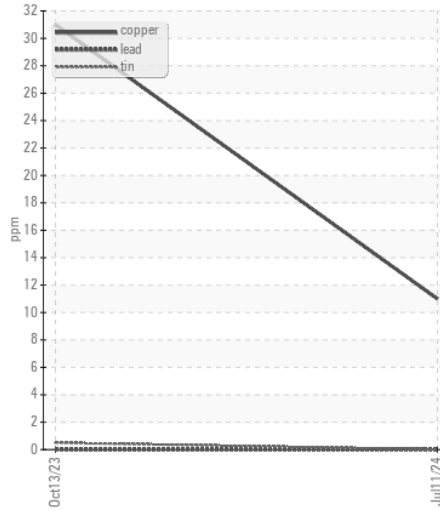
**Ferrous Alloys**



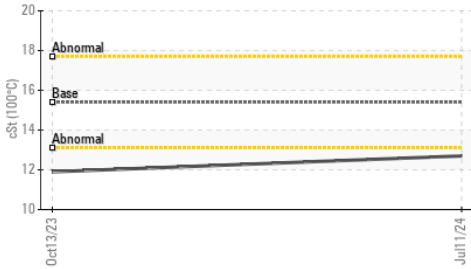
**Base Number**



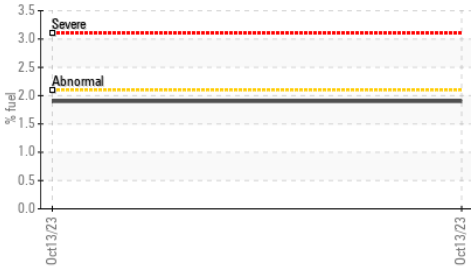
**Non-ferrous Metals**



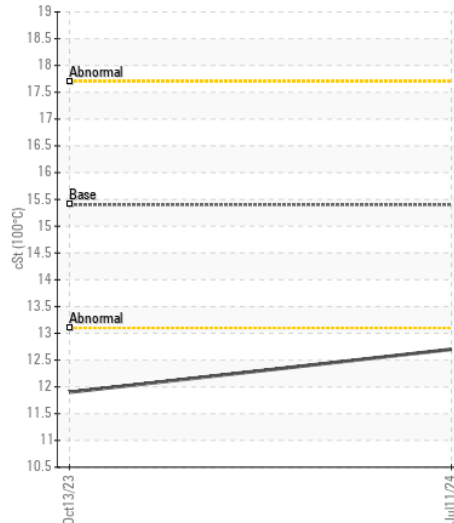
**Viscosity @ 100°C**



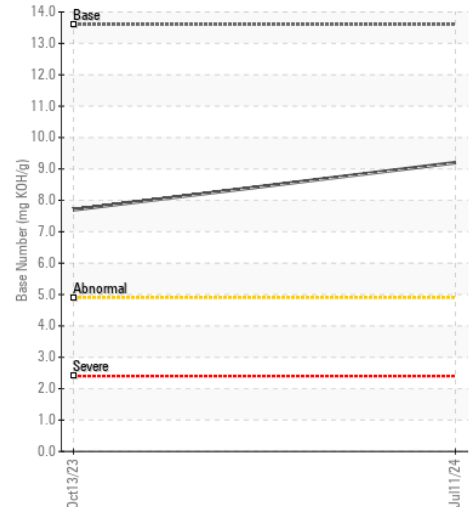
**Fuel Dilution**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0220305 **Received** : 15 Jul 2024  
**Lab Number** : 06235677 **Tested** : 16 Jul 2024  
**Unique Number** : 11124511 **Diagnosed** : 16 Jul 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: FuelDilution, TBN )

**JRE - CHARLOTTE**  
 9550 STATESVILLE ROAD  
 CHARLOTTE, NC  
 US 28269

Contact: CHARLOTTE SHOP  
 myoung@jamesriverequipment.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)

T: (704)597-0211

F: (704)596-6198