



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

Machine Id  
**JOHN DEERE 1T0310SLHGF295648**  
 Component  
**Diesel Engine**  
 Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (13 QTS)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0217999</b>	JR0173089	JR0146658
Sample Date		Client Info		<b>30 May 2024</b>	03 May 2023	19 Oct 2022
Machine Age	hrs	Client Info		<b>2631</b>	2348	2208
Oil Age	hrs	Client Info		<b>283</b>	140	2208
Filter Age	hrs	Client Info		<b>283</b>	140	2208
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>29</b>	16	14
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>6</b>	3	3
Lead	ppm	ASTM D5185m	>26	<b>2</b>	0	<1
Copper	ppm	ASTM D5185m	>26	<b>2</b>	<1	<1
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

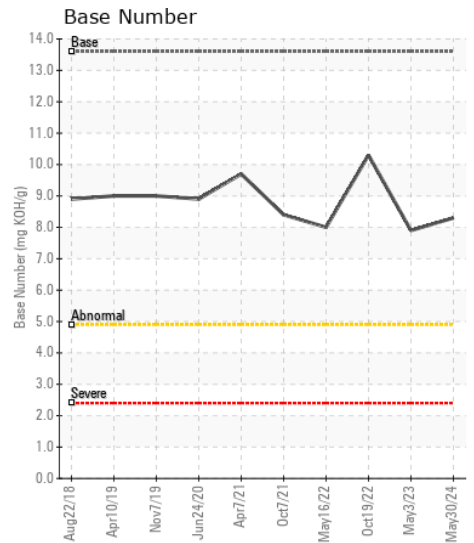
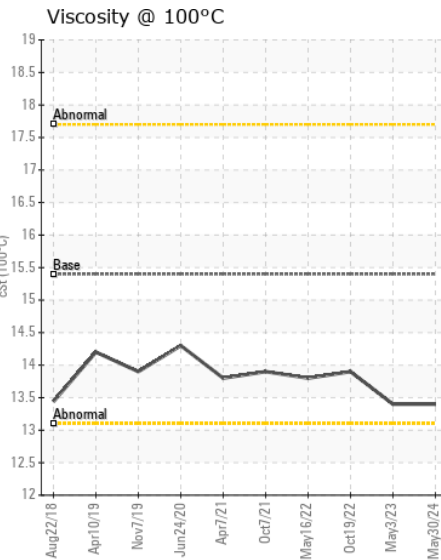
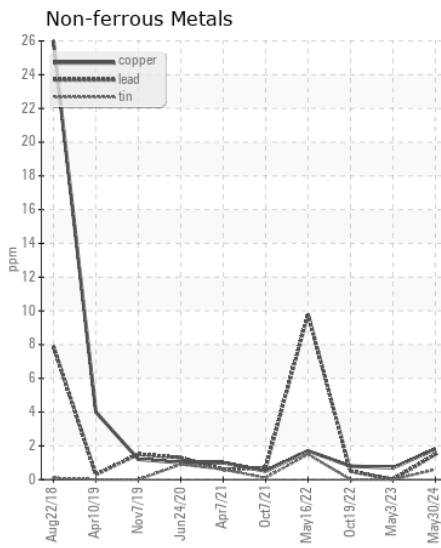
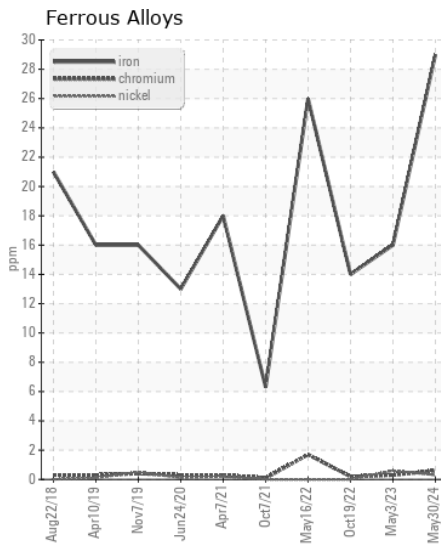
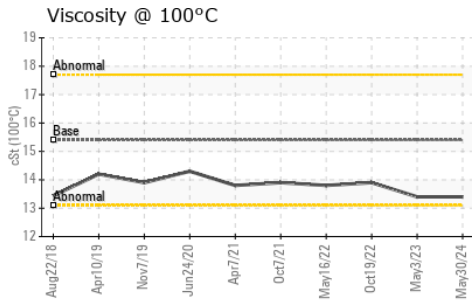
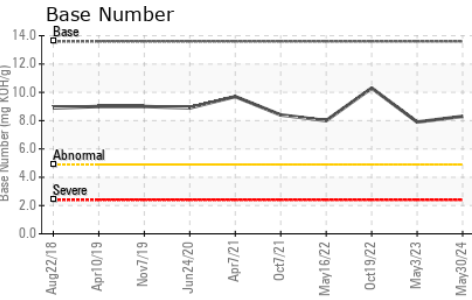
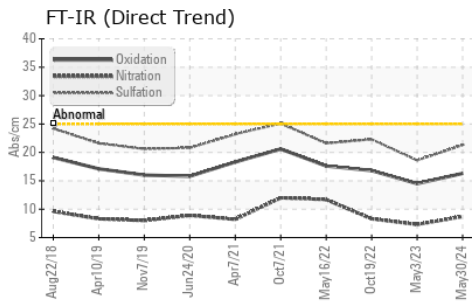
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>7</b>	7	7
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	1	2
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.7</b>	7.3	8.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.3</b>	18.6	22.3
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.21	<b>NEG</b>	NEG	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>0</b>	1	0
Boron	ppm	ASTM D5185m		<b>292</b>	278	243
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>267</b>	239	246
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>814</b>	858	777
Calcium	ppm	ASTM D5185m		<b>1428</b>	1429	1393
Phosphorus	ppm	ASTM D5185m		<b>968</b>	933	894
Zinc	ppm	ASTM D5185m		<b>1122</b>	1124	1059
Sulfur	ppm	ASTM D5185m		<b>3502</b>	3769	3410
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.3</b>	14.5	16.8
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>8.3</b>	7.9	10.3
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.4</b>	13.4	13.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0217999 **Received** : 03 Jun 2024  
**Lab Number** : 06197454 **Tested** : 04 Jun 2024  
**Unique Number** : 11059577 **Diagnosed** : 04 Jun 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**NPL CONSTRUCTION**  
 7611 COPPERMINE DR  
 MANASSAS, VA  
 US 20109-2668  
 Contact: BRANDON

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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