



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

Machine Id  
**JOHN DEERE 1T0850LXHMF405251**

Component  
**Diesel Engine**

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

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0151702</b>	JR0151735	JR0166756
Sample Date		Client Info		<b>12 Jan 2024</b>	21 Oct 2023	28 Apr 2023
Machine Age	hrs	Client Info		<b>5884</b>	5313	4363
Oil Age	hrs	Client Info		<b>250</b>	250	0
Filter Age	hrs	Client Info		<b>250</b>	250	0
Oil Changed		Client Info		<b>Changed</b>	Changed	N/A
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>18</b>	42	12
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	1	<1
Nickel	ppm	ASTM D5185m	>5	<b>4</b>	10	8
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>2</b>	5	1
Lead	ppm	ASTM D5185m	>26	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>26	<b>2</b>	3	1
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

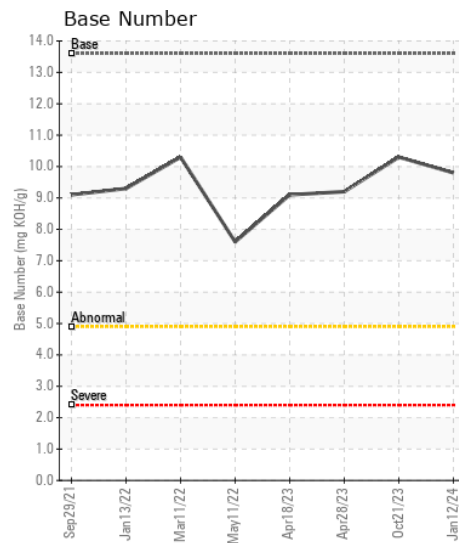
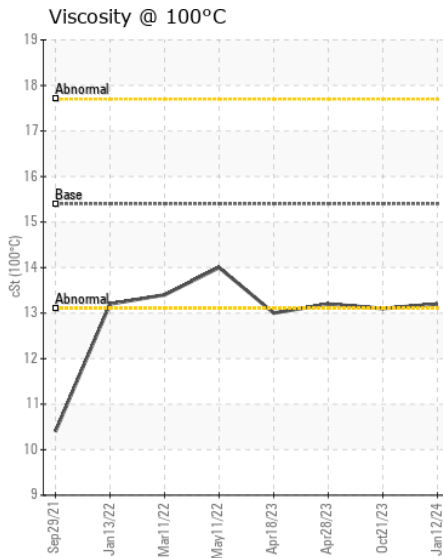
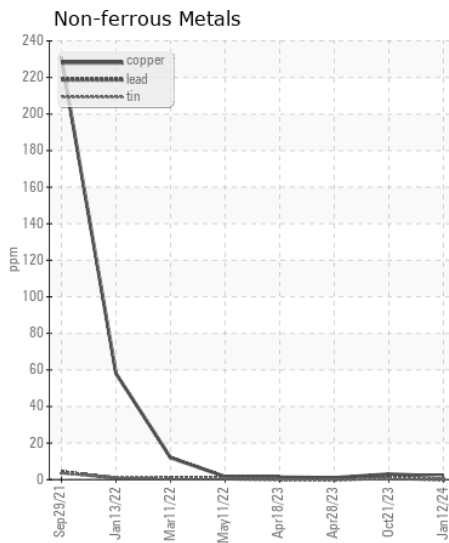
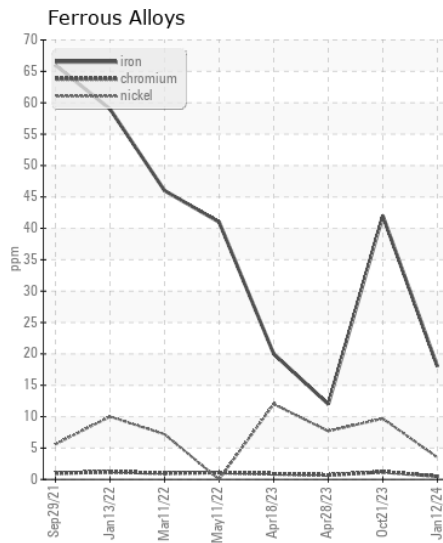
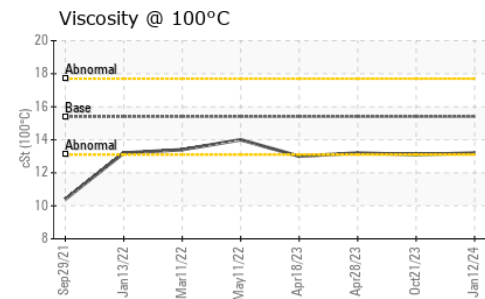
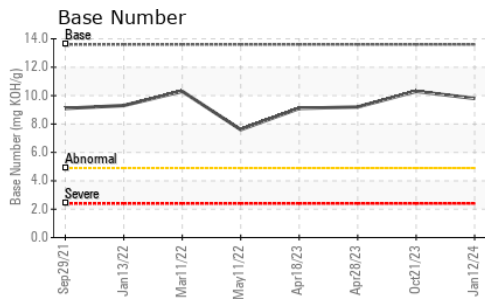
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>7</b>	8	3
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	5	0
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>0.4</b>	0.5	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.5</b>	6.7	4.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.0</b>	19.5	17.2
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>49</b>	23	1
Boron	ppm	ASTM D5185m		<b>4</b>	4	7
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	3	0
Molybdenum	ppm	ASTM D5185m		<b>60</b>	65	56
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>956</b>	934	920
Calcium	ppm	ASTM D5185m		<b>1172</b>	1218	1158
Phosphorus	ppm	ASTM D5185m		<b>1119</b>	997	1007
Zinc	ppm	ASTM D5185m		<b>1334</b>	1279	1250
Sulfur	ppm	ASTM D5185m		<b>3556</b>	3726	3995
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.1</b>	14.7	13.4
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>9.8</b>	10.3	9.2
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.2</b>	13.1	13.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0151702 **Received** : 13 Feb 2024  
**Lab Number** : 06087934 **Tested** : 14 Feb 2024  
**Unique Number** : 10875379 **Diagnosed** : 15 Feb 2024 - Sean Felton  
**Test Package** : CONST ( Additional Tests: TBN )

**ROCKINGHAM COUNTY**  
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 HARRISONBURG, VA  
 US 22801

Contact: LENORA MCMAHAN  
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 T: (540)271-3894

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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