



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

Machine Id  
**JOHN DEERE 644 X 1DW644XACPFW18652**

Component  
**Diesel Engine**

Fluid  
**{not provided} (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0204806</b>	JR0194510	JR0187177
Sample Date		Client Info		<b>25 Feb 2024</b>	20 Dec 2023	11 Oct 2023
Machine Age	hrs	Client Info		<b>1695</b>	1175	740
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	ABNORMAL	ABNORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>9</b>	17	43
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	1	2
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	2	3
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>2</b>	▲ 10	3
Lead	ppm	ASTM D5185m	>26	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>26	<b>6</b>	▲ 51	▲ 504
Tin	ppm	ASTM D5185m	>4	<b>0</b>	<1	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

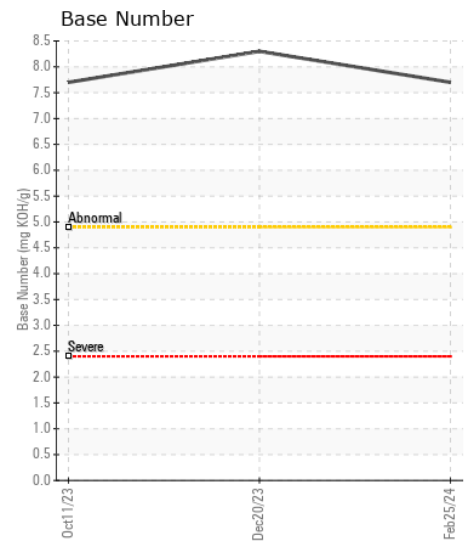
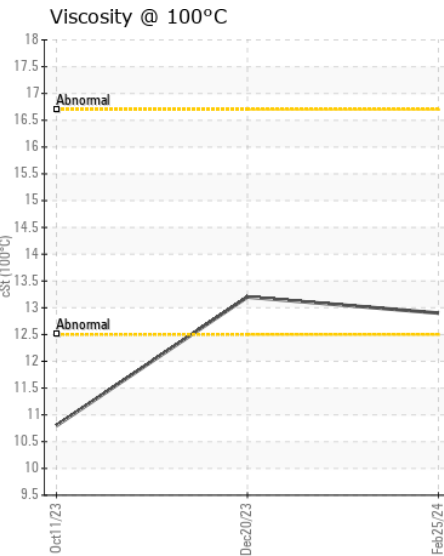
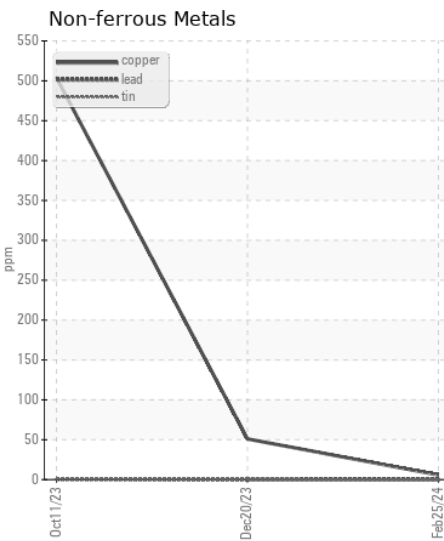
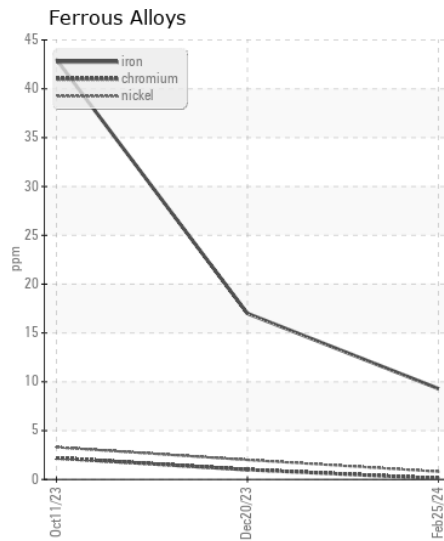
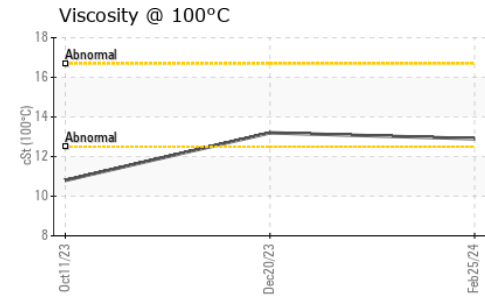
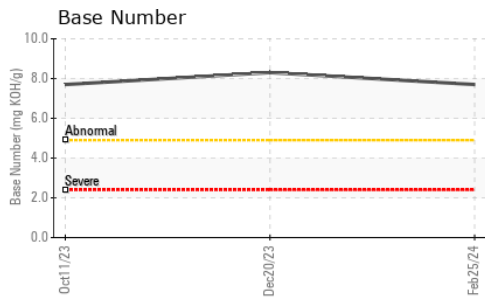
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>11</b>	▲ 26	21
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	2	4
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	0.5
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>	0.4	0.7
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.3</b>	8.2	8.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.3</b>	21.5	22.2
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>0</b>	2	4
Boron	ppm	ASTM D5185m		<b>172</b>	207	100
Barium	ppm	ASTM D5185m		<b>9</b>	0	4
Molybdenum	ppm	ASTM D5185m		<b>237</b>	263	297
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	8
Magnesium	ppm	ASTM D5185m		<b>687</b>	842	1129
Calcium	ppm	ASTM D5185m		<b>1209</b>	1384	1685
Phosphorus	ppm	ASTM D5185m		<b>850</b>	949	1182
Zinc	ppm	ASTM D5185m		<b>954</b>	1102	1411
Sulfur	ppm	ASTM D5185m		<b>2776</b>	2948	3955
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.1</b>	15.9	16.9
Base Number (BN)	mg KOH/g	ASTM D2896		<b>7.7</b>	8.3	7.7
Visc @ 100°C	cSt	ASTM D445		<b>12.9</b>	13.2	10.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0204806 **Received** : 26 Feb 2024  
**Lab Number** : 06099991 **Tested** : 27 Feb 2024  
**Unique Number** : 10898221 **Diagnosed** : 27 Feb 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

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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