



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



Machine Id  
**JOHN DEERE 410E 1DW410EBEMF708746**

Component  
**Diesel Engine**

Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- 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>JR0203841</b>	JR0192527	JR0171471
Sample Date		Client Info		<b>28 Feb 2024</b>	21 Nov 2023	27 Jun 2023
Machine Age	hrs	Client Info		<b>5035</b>	3944	3944
Oil Age	hrs	Client Info		<b>1091</b>	3944	500
Filter Age	hrs	Client Info		<b>0</b>	0	500
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>7</b>	17	17
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	1
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>5</b>	10	4
Lead	ppm	ASTM D5185m	>26	<b>3</b>	12	13
Copper	ppm	ASTM D5185m	>26	<b>4</b>	6	8
Tin	ppm	ASTM D5185m	>4	<b>2</b>	2	3
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

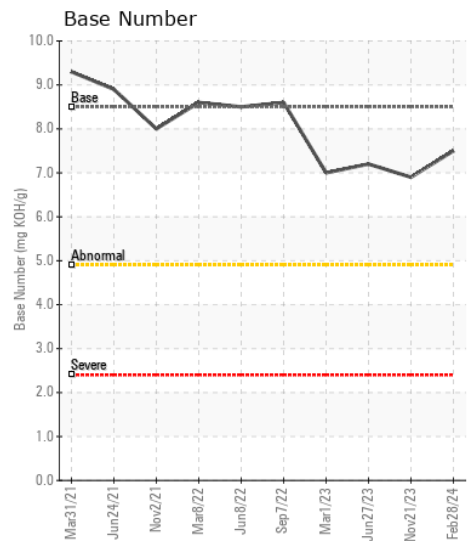
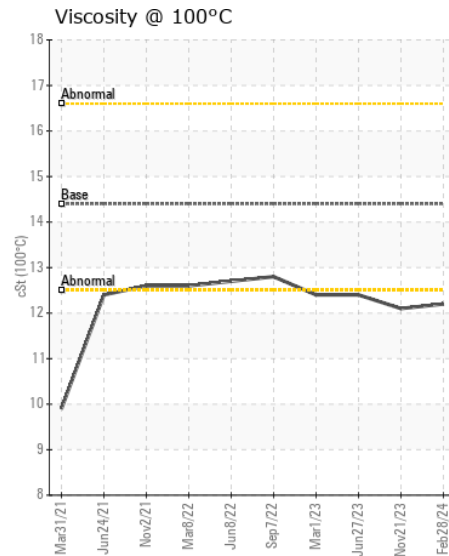
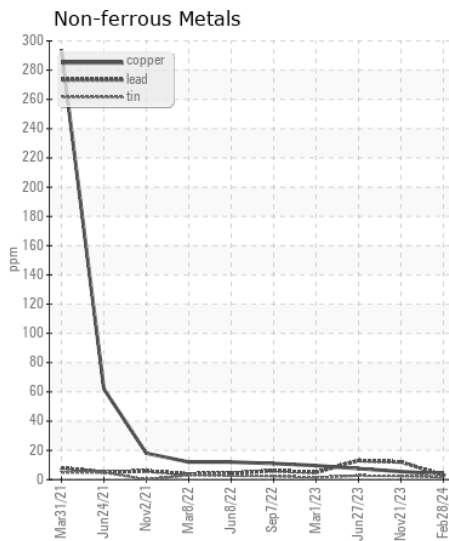
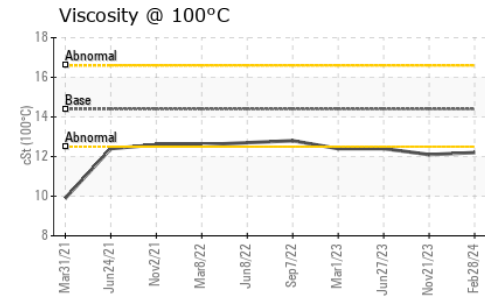
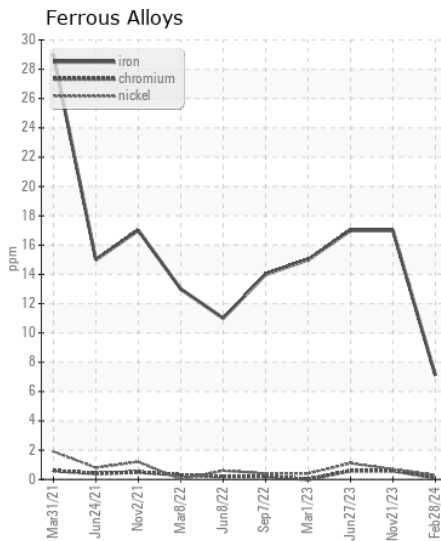
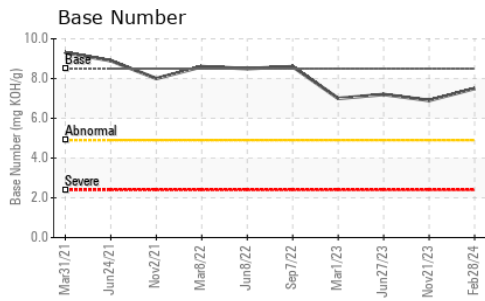
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>6</b>	10	6
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	1	2
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	3.9	<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>0.3</b>	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.7</b>	10.0	10.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.8</b>	25.3	25.5
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	>158	<b>3</b>	4	4
Boron	ppm	ASTM D5185m	250	<b>158</b>	61	75
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>223</b>	235	233
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	1
Magnesium	ppm	ASTM D5185m	450	<b>743</b>	795	830
Calcium	ppm	ASTM D5185m	3000	<b>1198</b>	1395	1480
Phosphorus	ppm	ASTM D5185m	1150	<b>828</b>	846	855
Zinc	ppm	ASTM D5185m	1350	<b>1000</b>	1025	1090
Sulfur	ppm	ASTM D5185m	4250	<b>2653</b>	2773	3512
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.3</b>	20.2	21.2
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>7.5</b>	6.9	7.2
Visc @ 100°C	cSt	ASTM D445	14.4	<b>12.2</b>	12.1	12.4



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0203841 **Received** : 01 Mar 2024  
**Lab Number** : 06105904 **Tested** : 04 Mar 2024  
**Unique Number** : 10909401 **Diagnosed** : 04 Mar 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

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Certificate L2367  
 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)