



**James River  
Equipment**

**OIL ANALYSIS REPORT**

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



Machine Id

**JOHN DEERE 410E 1DW410EBHNF716068**

Component

**Rear Differential**

Fluid

**JOHN DEERE HY-GARD HYDRAULIC/RANSMISSION (10 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0220046</b>	JR0215605	JR0192732
Sample Date		Client Info		<b>24 Jun 2024</b>	28 May 2024	16 Nov 2023
Machine Age	mls	Client Info		<b>2511</b>	2322	4751682
Oil Age	mls	Client Info		<b>4749360</b>	0	4751682
Filter Age	mls	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changed</b>	Changed	Not Changed
Filter Changed		Client Info		<b>Not Changed</b>	Changed	Not Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

PQ		ASTM D8184		<b>18</b>	21	11
Iron	ppm	ASTM D5185m	>500	<b>33</b>	34	2
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>&lt;1</b>	<1	1
Lead	ppm	ASTM D5185m	>25	<b>1</b>	<1	0
Copper	ppm	ASTM D5185m	>100	<b>9</b>	11	<1
Tin	ppm	ASTM D5185m	>10	<b>0</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**

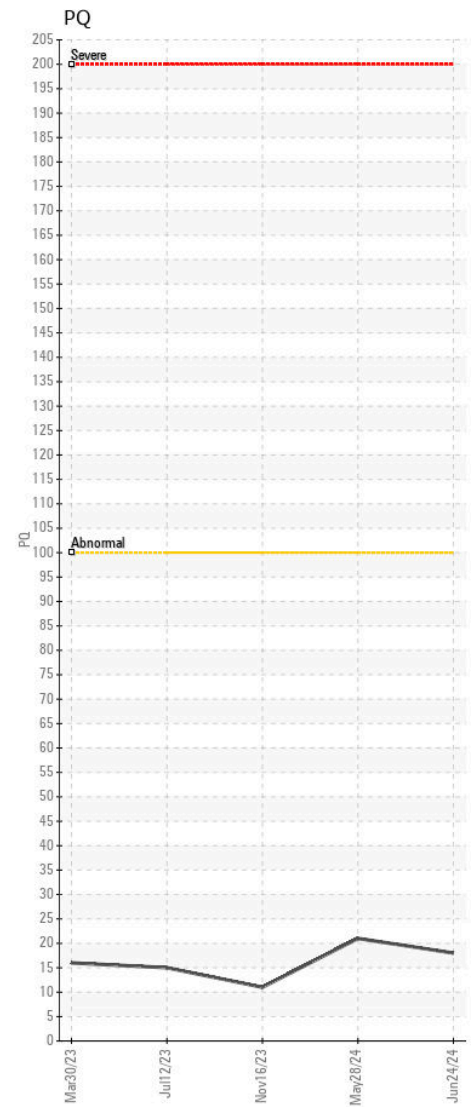
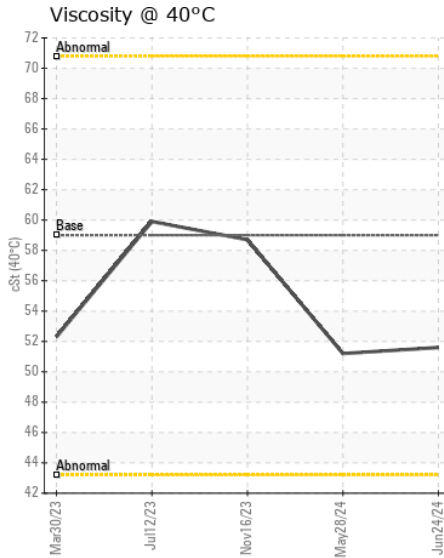
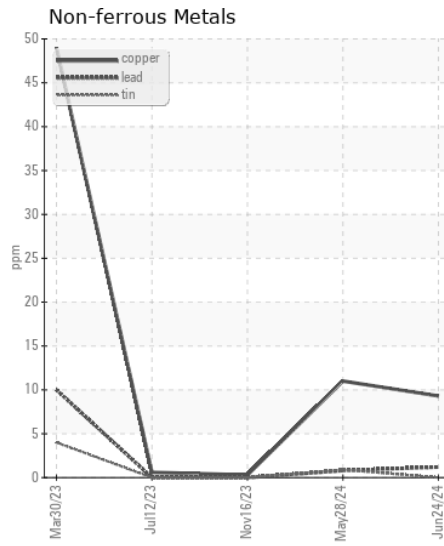
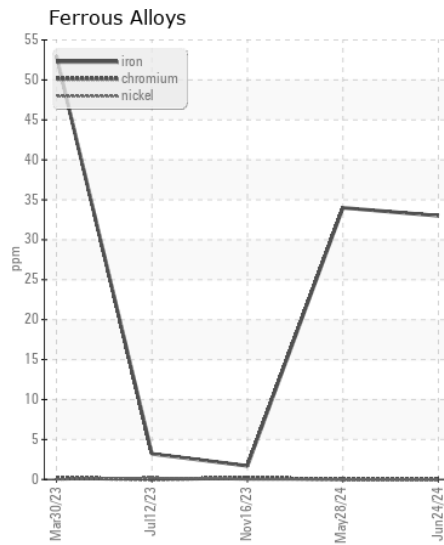
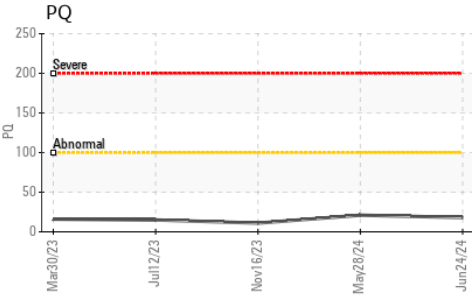
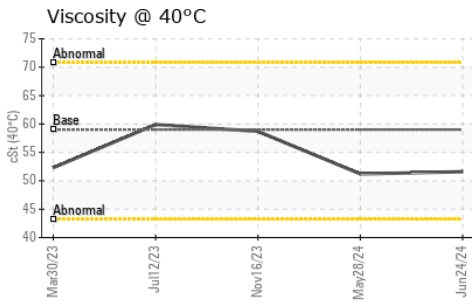
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	<b>5</b>	4	5
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	2
Water		WC Method	>.2	<b>NEG</b>	NEG	NEG
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	>.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>3</b>	3	0
Boron	ppm	ASTM D5185m		<b>6</b>	0	<1
Barium	ppm	ASTM D5185m		<b>3</b>	4	0
Molybdenum	ppm	ASTM D5185m		<b>4</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>2</b>	3	0
Magnesium	ppm	ASTM D5185m		<b>121</b>	106	101
Calcium	ppm	ASTM D5185m		<b>3624</b>	3618	3378
Phosphorus	ppm	ASTM D5185m		<b>1024</b>	1099	1004
Zinc	ppm	ASTM D5185m		<b>1218</b>	1268	1238
Sulfur	ppm	ASTM D5185m		<b>4174</b>	4377	3937
Visc @ 40°C	cSt	ASTM D445	59	<b>51.6</b>	51.2	58.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0220046 **Received** : 26 Jun 2024  
**Lab Number** : 06221492 **Tested** : 27 Jun 2024  
**Unique Number** : 11099689 **Diagnosed** : 27 Jun 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: PQ )

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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)