



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



Machine Id  
**JOHN DEERE 410E-II 1DW410EBTMF708927**

Component  
**Front Differential**

Fluid  
**Differential Oil (--- GAL)**

### RECOMMENDATION

No corrective action is recommended at this time. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0193139</b>	JR0178315	JR0162402
Sample Date		Client Info		<b>02 Jan 2024</b>	18 Sep 2023	11 Apr 2023
Machine Age	hrs	Client Info		<b>3539</b>	3539	2968
Oil Age	hrs	Client Info		<b>2533</b>	3104	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	N/A
Filter Changed		Client Info		<b>Changed</b>	Not Changd	N/A
Sample Status				<b>ABNORMAL</b>	NORMAL	ABNORMAL

### WEAR

Bearing and/or bushing wear is indicated.

PQ		ASTM D8184		<b>124</b>	7	17
Iron	ppm	ASTM D5185m	>500	<b>224</b>	1	24
Chromium	ppm	ASTM D5185m	>10	<b>1</b>	0	<1
Nickel	ppm	ASTM D5185m	>10	<b>4</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	<1	4
Lead	ppm	ASTM D5185m	>25	<b>0</b>	0	13
Copper	ppm	ASTM D5185m	>100	<b>▲ 164</b>	0	5
Tin	ppm	ASTM D5185m	>10	<b>▲ 6</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>MODER</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

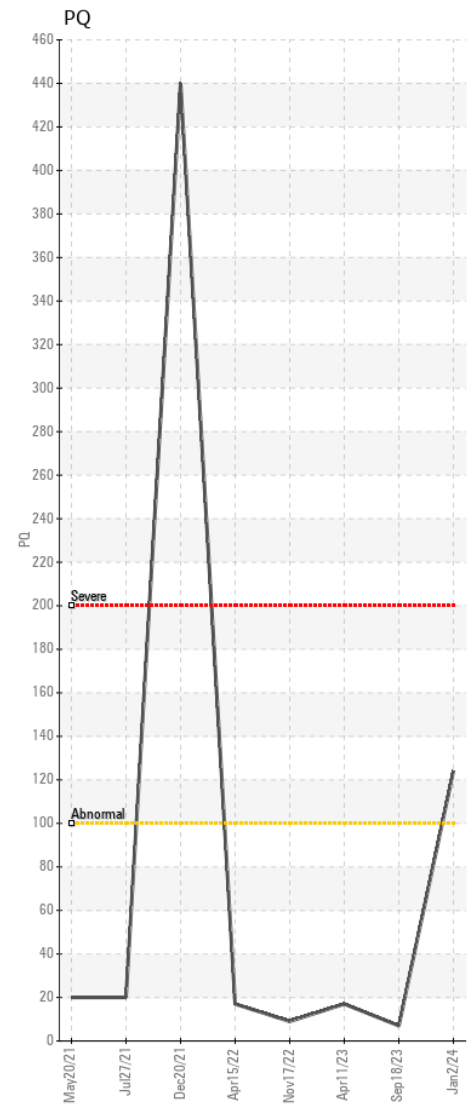
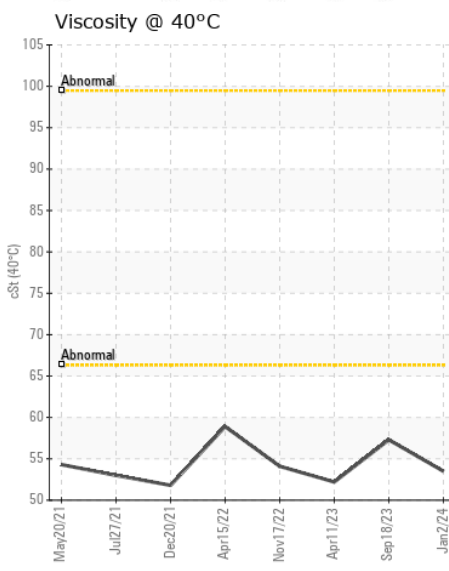
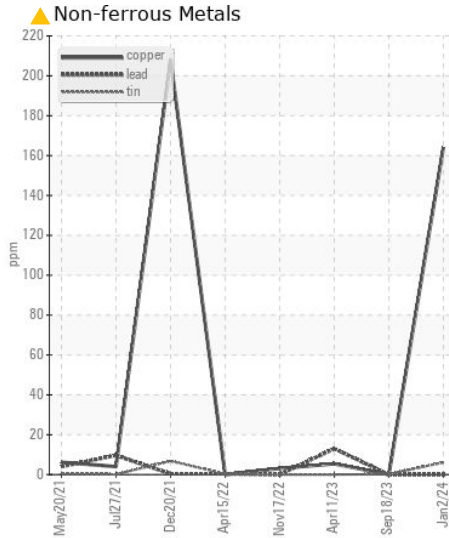
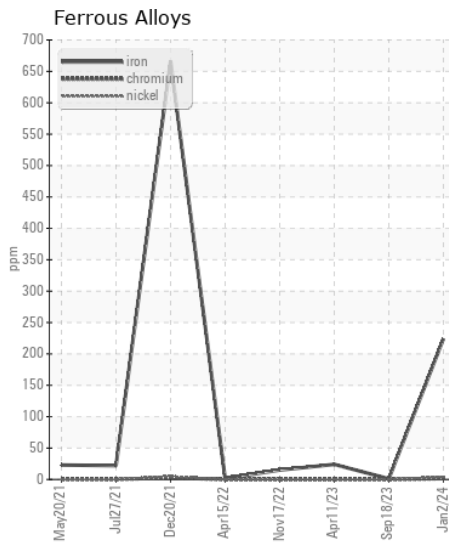
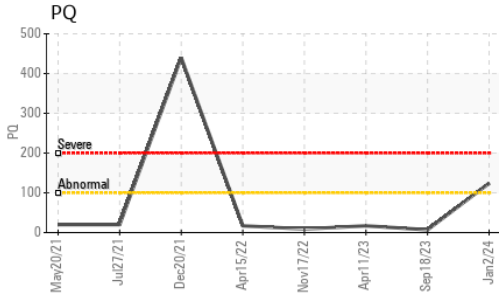
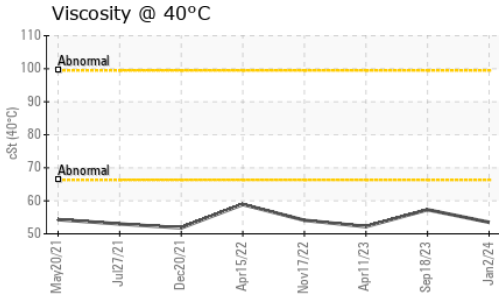
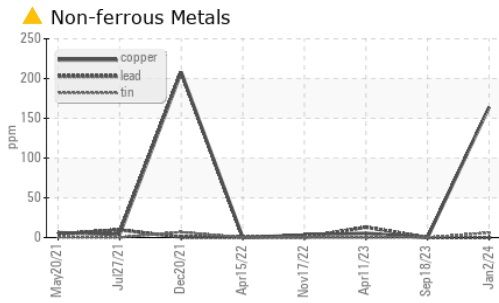
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	<b>13</b>	5	6
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	▲ MODER
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>4</b>	<1	<1
Boron	ppm	ASTM D5185m		<b>6</b>	<1	0
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	<1	2
Manganese	ppm	ASTM D5185m		<b>10</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>94</b>	102	93
Calcium	ppm	ASTM D5185m		<b>3217</b>	3348	3766
Phosphorus	ppm	ASTM D5185m		<b>1003</b>	998	1150
Zinc	ppm	ASTM D5185m		<b>1217</b>	1233	1330
Sulfur	ppm	ASTM D5185m		<b>3242</b>	4139	3873
Visc @ 40°C	cSt	ASTM D445		<b>53.5</b>	57.3	52.2



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0193139 **Received** : 12 Jan 2024  
**Lab Number** : 06059520 **Diagnosed** : 16 Jan 2024  
**Unique Number** : 10830902 **Diagnostician** : Jonathan Hester  
**Test Package** : CONST ( Additional Tests: PQ )

**CARLTON'S BACKHOE**  
 9550 STATESVILLE ROAD  
 CHARLOTTE, NC  
 US 28269  
 Contact: LEO

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)

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 F: