



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



Machine Id  
**JOHN DEERE 310E 1DW310EXHJF691304**

Component  
**Hydraulic System**

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>JR0221379</b>	JR0192278	JR0176456
Sample Date		Client Info		<b>17 Jun 2024</b>	30 Nov 2023	14 Jun 2023
Machine Age	hrs	Client Info		<b>5988</b>	5466	4963
Oil Age	hrs	Client Info		<b>0</b>	4521	1000
Filter Age	hrs	Client Info		<b>0</b>	0	1000
Oil Changed		Client Info		<b>Not Chngd</b>	N/A	Not Chngd
Filter Changed		Client Info		<b>Not Chngd</b>	N/A	Not Chngd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	<b>14</b>	9	15
Iron	ppm	ASTM D5185m	>71	<b>15</b>	10	8
Chromium	ppm	ASTM D5185m	>11	<b>2</b>	1	<1
Nickel	ppm	ASTM D5185m	>6	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>11	<b>3</b>	2	<1
Lead	ppm	ASTM D5185m	>13	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>21	<b>3</b>	<1	2
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

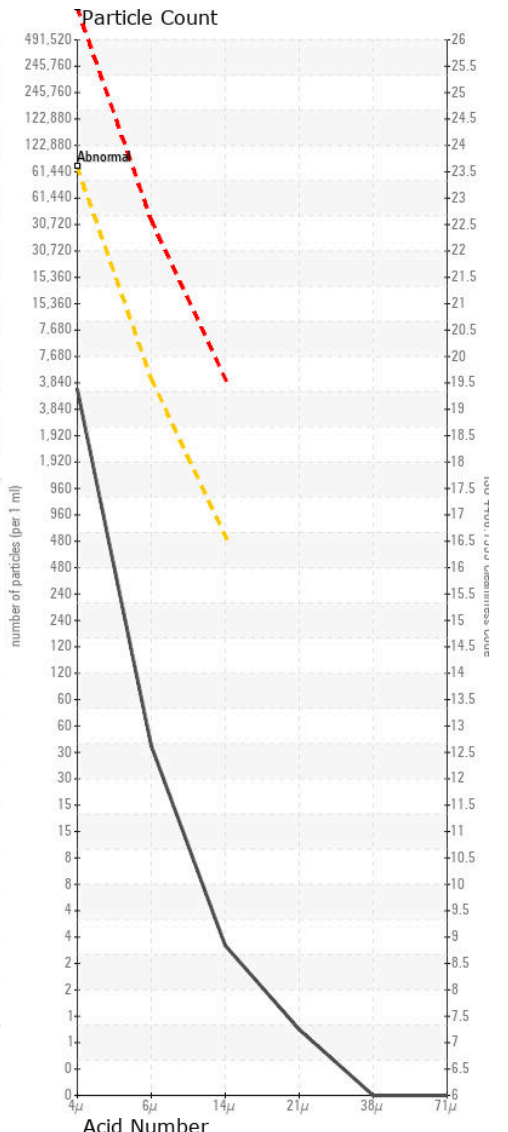
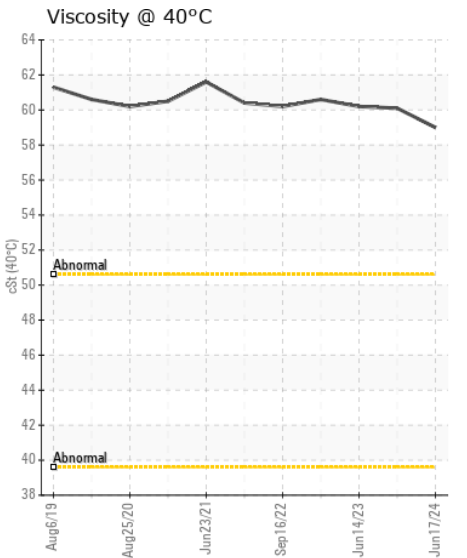
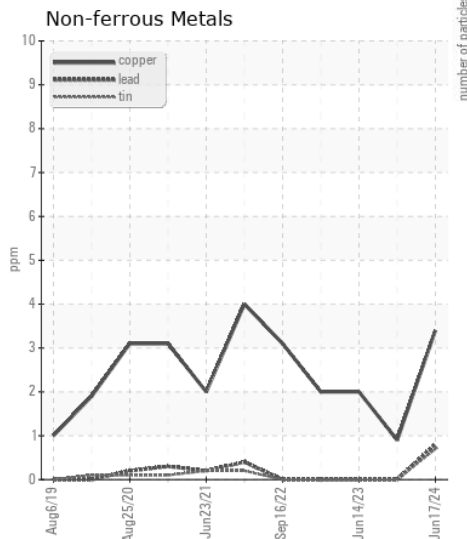
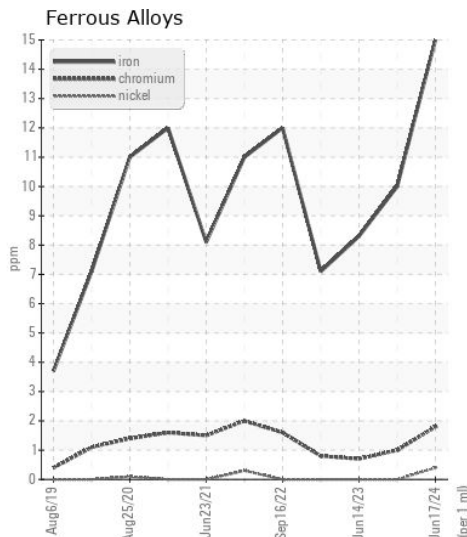
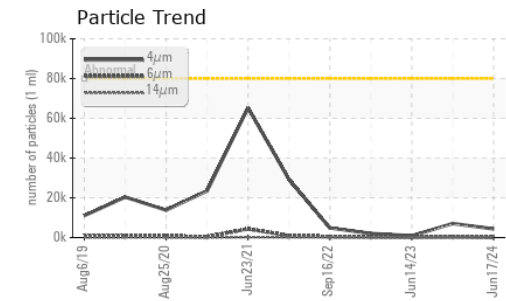
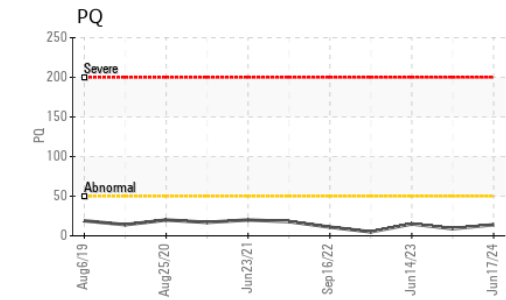
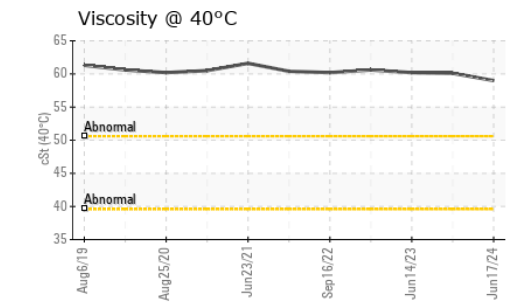
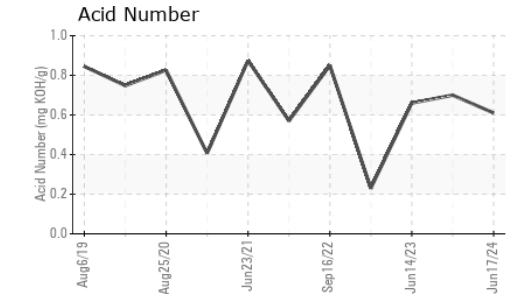
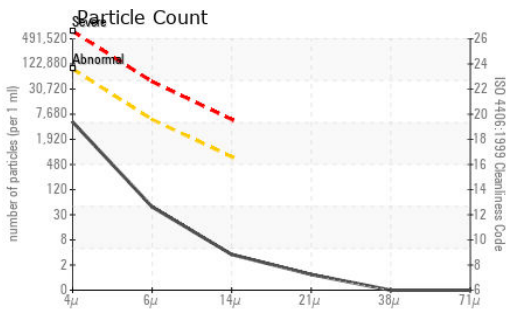
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>24	<b>6</b>	3	2
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	<1
Water		WC Method	>0.075	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>80000	<b>4360</b>	7058	895
Particles >6µm		ASTM D7647	>5000	<b>41</b>	431	243
Particles >14µm		ASTM D7647	>640	<b>3</b>	22	32
Particles >21µm		ASTM D7647	>160	<b>1</b>	6	9
Particles >38µm		ASTM D7647	>40	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>23/19/16	<b>19/13/9</b>	20/16/12	17/15/12
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	>0.075	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>21	<b>&lt;1</b>	0	1
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>1</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>3</b>	2	3
Calcium	ppm	ASTM D5185m		<b>106</b>	104	103
Phosphorus	ppm	ASTM D5185m		<b>713</b>	634	617
Zinc	ppm	ASTM D5185m		<b>884</b>	840	846
Sulfur	ppm	ASTM D5185m		<b>1762</b>	1586	1960
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.61</b>	0.70	0.66
Visc @ 40°C	cSt	ASTM D445		<b>59.0</b>	60.1	60.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0221379 **Received** : 21 Jun 2024  
**Lab Number** : 06216769 **Tested** : 24 Jun 2024  
**Unique Number** : 11089633 **Diagnosed** : 24 Jun 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: PQ )

**HERITAGE SITE DEVELOPMENT**  
 26 CATTLEMANS DR  
 BERRYVILLE, VA  
 US 20134  
 Contact: SERVICE MANAGER  
 dieselpro44@yahoo.com  
 T: (540)327-2857  
 F:

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)