



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



Machine Id  
**JOHN DEERE 310E 1DW310EXLJF690295**  
 Component  
**Hydraulic System**  
 Fluid  
**{not provided} (30 GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0104018</b>	JR0091314	JR0076142
Sample Date		Client Info		<b>11 Oct 2021</b>	18 Jun 2021	02 Mar 2021
Machine Age	hrs	Client Info		<b>5003</b>	4505	4115
Oil Age	hrs	Client Info		<b>0</b>	0	4115
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184	>50	<b>15</b>	18	22
Iron	ppm	ASTM D5185m	>71	<b>5</b>	4	9
Chromium	ppm	ASTM D5185m	>11	<b>1</b>	1	2
Nickel	ppm	ASTM D5185m	>6	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>11	<b>3</b>	0	<1
Lead	ppm	ASTM D5185m	>13	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>21	<b>1</b>	<1	2
Tin	ppm	ASTM D5185m	>5	<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

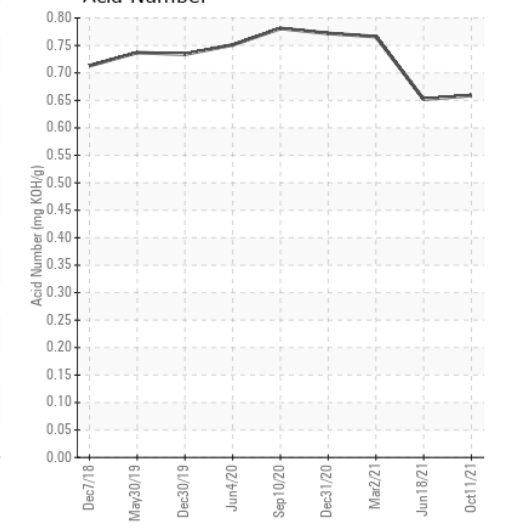
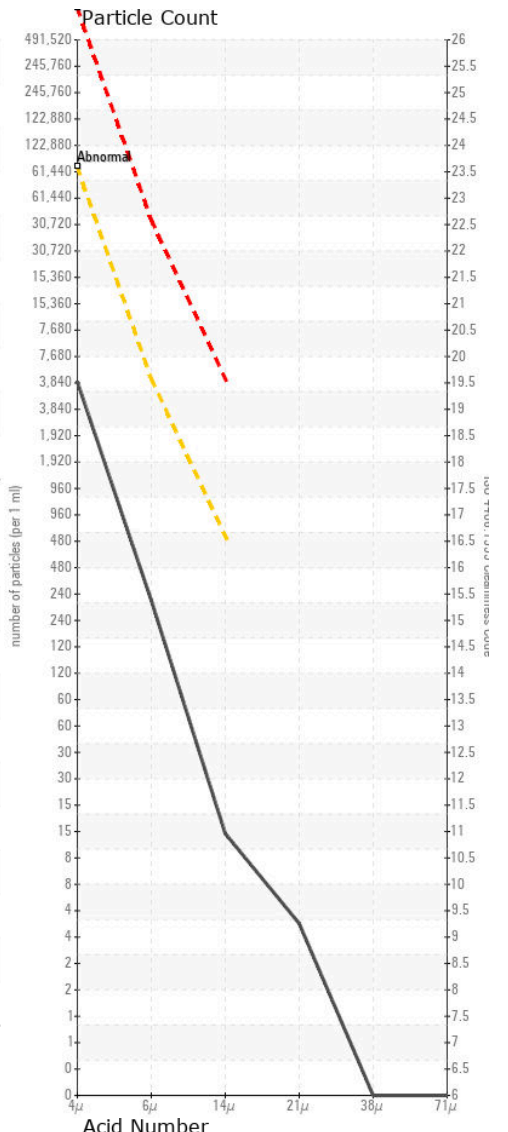
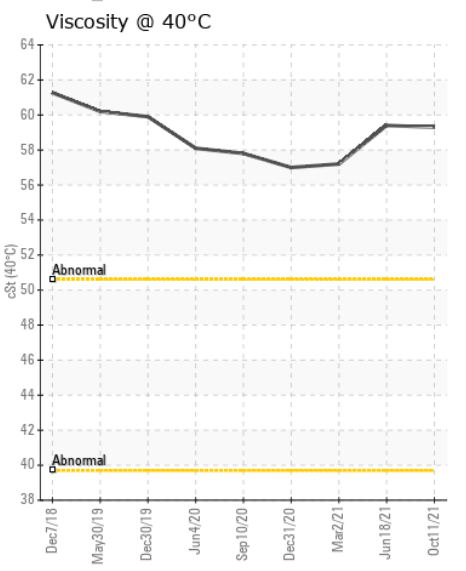
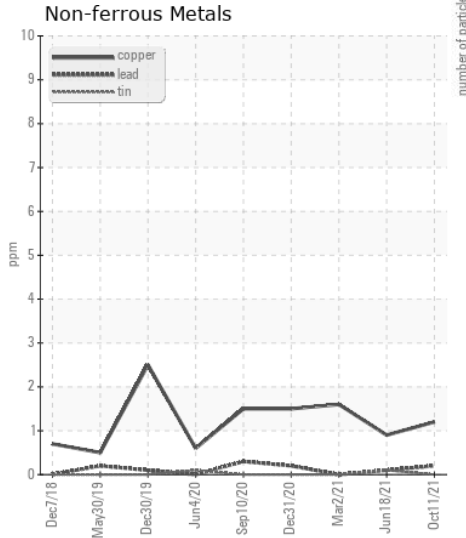
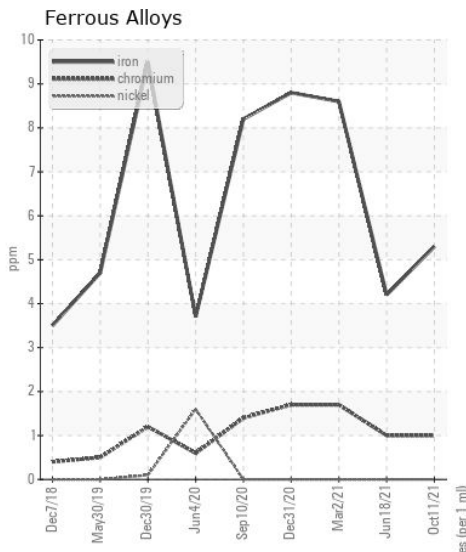
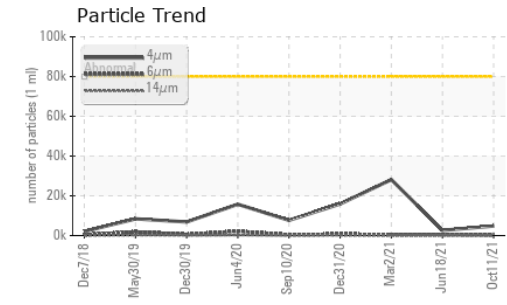
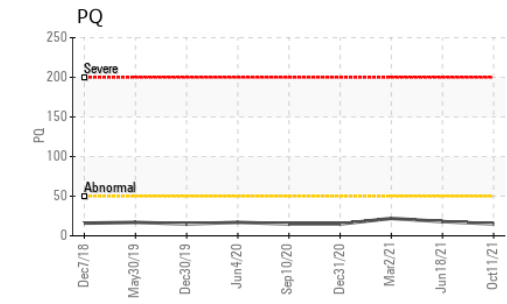
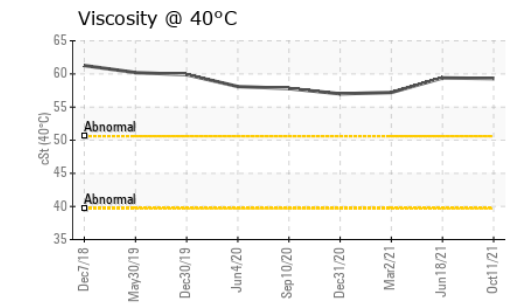
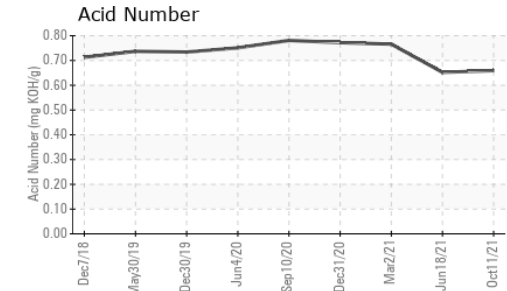
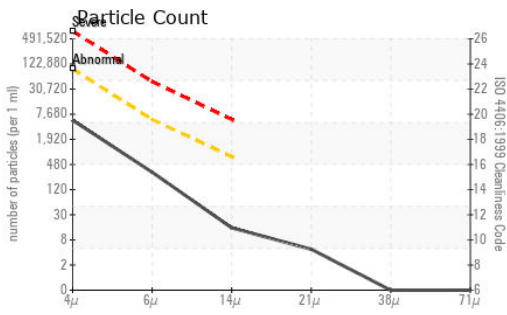
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>24	<b>&lt;1</b>	1	3
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Water		WC Method	>0.075	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>80000	<b>4804</b>	2614	28142
Particles >6µm		ASTM D7647	>5000	<b>275</b>	481	434
Particles >14µm		ASTM D7647	>640	<b>13</b>	58	37
Particles >21µm		ASTM D7647	>160	<b>4</b>	15	11
Particles >38µm		ASTM D7647	>40	<b>0</b>	0	1
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>23/19/16	<b>19/15/11</b>	19/16/13	22/16/12
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>	<1	3
Boron	ppm	ASTM D5185m		<b>3</b>	4	4
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>1</b>	1	2
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>5</b>	5	7
Calcium	ppm	ASTM D5185m		<b>387</b>	389	573
Phosphorus	ppm	ASTM D5185m		<b>631</b>	646	662
Zinc	ppm	ASTM D5185m		<b>811</b>	859	842
Sulfur	ppm	ASTM D5185m		<b>1617</b>	1591	1807
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.659</b>	0.652	0.766
Visc @ 40°C	cSt	ASTM D445		<b>59.3</b>	59.4	57.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0104018 **Received** : 13 Oct 2021  
**Lab Number** : 05373356 **Tested** : 14 Oct 2021  
**Unique Number** : 9697467 **Diagnosed** : 14 Oct 2021 - Doug Bogart  
**Test Package** : MOBCE ( Additional Tests: PQ )

**JRE - STEPHENSON**  
 245 YARDMASTER COURT  
 STEPHENSON, VA  
 US 22656-1761  
 Contact: PHIL DAUGHERTY  
 pdaugherty@jamesriverequipment.com

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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