



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

Machine Id  
**JOHN DEERE 310 P 1DW310PAEPFB06520**

Component  
**Hydraulic System**

Fluid  
**JOHN DEERE HYDRAU (--- GAL)**

### RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0198789</b>	JR0192493	JR0178753
Sample Date		Client Info		<b>17 Jan 2024</b>	16 Nov 2023	22 Aug 2023
Machine Age	hrs	Client Info		<b>1423</b>	1184	602
Oil Age	hrs	Client Info		<b>1423</b>	1184	602
Filter Age	hrs	Client Info		<b>0</b>	0	602
Oil Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Filter Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Sample Status				<b>ATTENTION</b>	SEVERE	SEVERE

### WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		<b>14</b>	16	15
Iron	ppm	ASTM D5185m	>20	<b>0</b>	1	1
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	2	0
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>75	<b>&lt;1</b>	<1	1
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	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

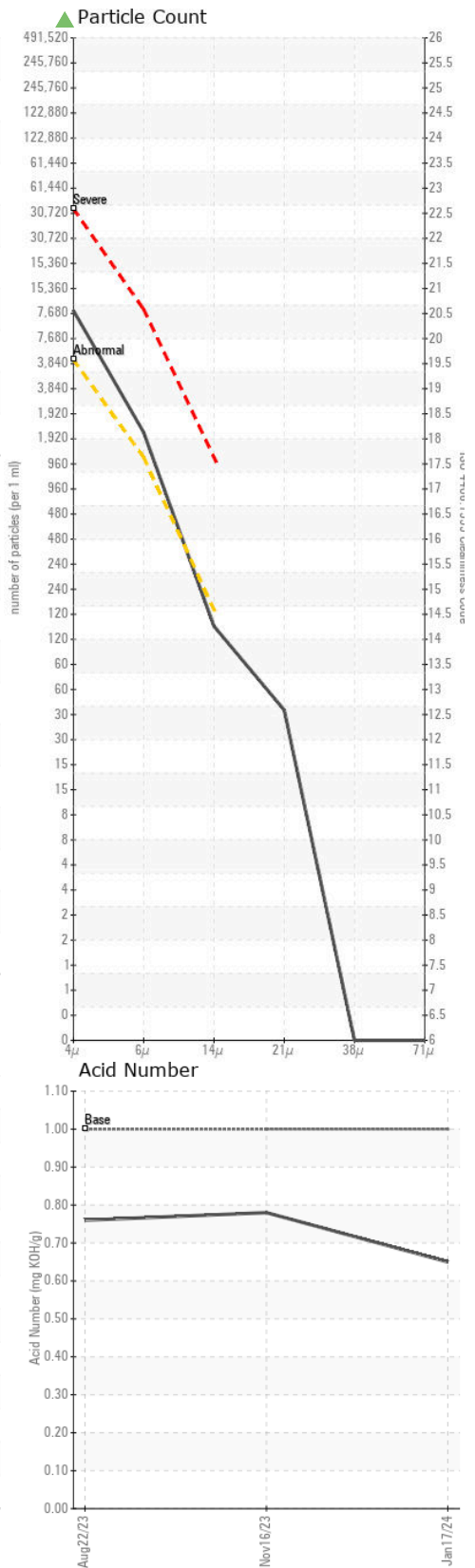
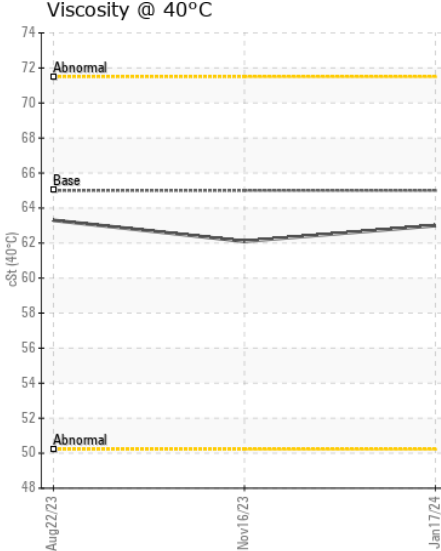
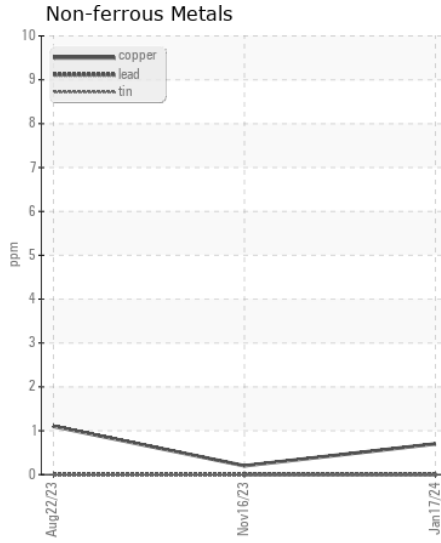
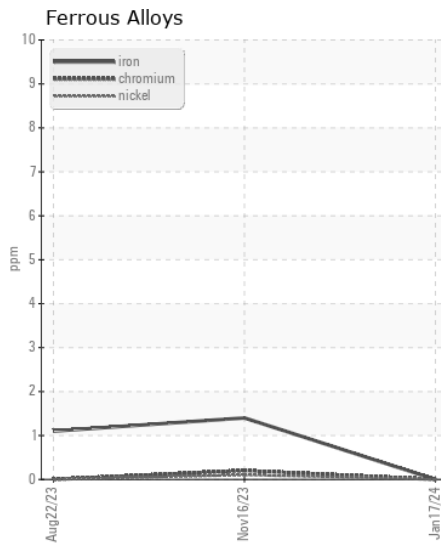
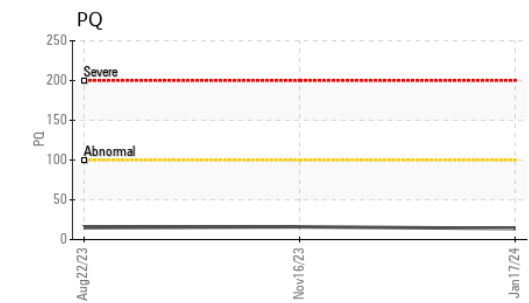
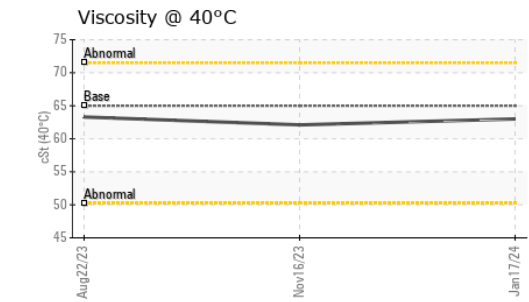
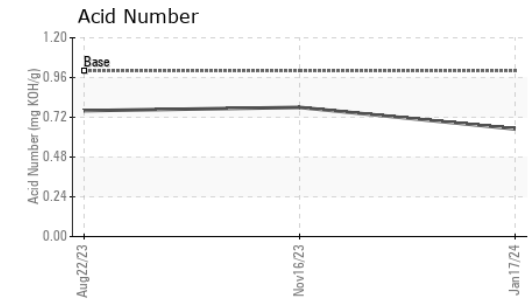
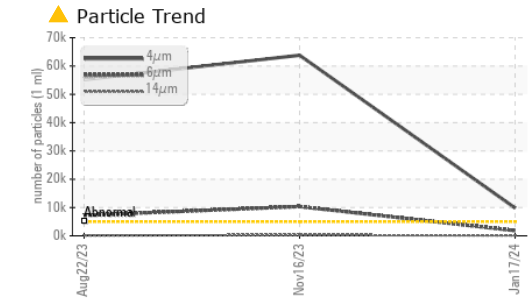
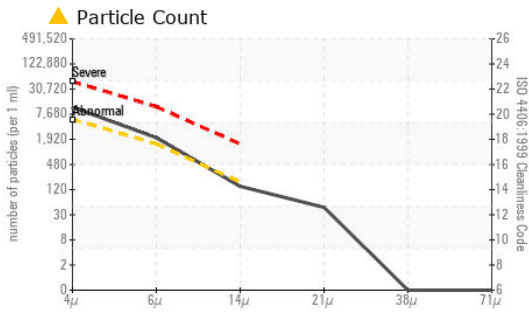
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>0</b>	1	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	2
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>▲ 9825</b>	● 63792	● 55212
Particles >6µm		ASTM D7647	>1300	<b>▲ 1832</b>	● 10331	▲ 7239
Particles >14µm		ASTM D7647	>160	<b>127</b>	▲ 247	125
Particles >21µm		ASTM D7647	>40	<b>40</b>	43	22
Particles >38µm		ASTM D7647	>10	<b>0</b>	1	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 20/18/14</b>	● 23/21/15	● 23/20/14
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	LIGHT	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	>0.1	<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		<b>0</b>	0	0
Boron	ppm	ASTM D5185m		<b>0</b>	8	6
Barium	ppm	ASTM D5185m		<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m		<b>3</b>	9	8
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>12</b>	25	26
Calcium	ppm	ASTM D5185m	87	<b>99</b>	130	138
Phosphorus	ppm	ASTM D5185m	727	<b>641</b>	676	670
Zinc	ppm	ASTM D5185m	900	<b>795</b>	884	843
Sulfur	ppm	ASTM D5185m	1500	<b>1476</b>	1794	1590
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.65</b>	0.78	0.76
Visc @ 40°C	cSt	ASTM D445	65	<b>63.0</b>	62.1	63.3



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0198789 **Received** : 19 Jan 2024  
**Lab Number** : 06065511 **Diagnosed** : 23 Jan 2024  
**Unique Number** : 10836893 **Diagnostician** : Wes Davis  
**Test Package** : CONST ( Additional Tests: PQ )

**JRE - CHARLOTTE**  
 9550 STATESVILLE ROAD  
 CHARLOTTE, NC  
 US 28269  
 Contact: CHARLOTTE SHOP  
 myoung@jamesriverequipment.com  
 T: (704)597-0211  
 F: (704)596-6198

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)