



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



Machine Id  
**JOHN DEERE 310E 1DW310EXPNF713863**  
Component  
**Hydraulic System**  
Fluid  
**JOHN DEERE HYDRAU (--- QTS)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0199334</b>	JR0183878	JR0174826
Sample Date		Client Info		<b>17 Jan 2024</b>	24 Aug 2023	23 May 2023
Machine Age	hrs	Client Info		<b>1969</b>	1447	944
Oil Age	hrs	Client Info		<b>1969</b>	1447	944
Filter Age	hrs	Client Info		<b>1969</b>	1447	944
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>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	<b>13</b>	9	13
Iron	ppm	ASTM D5185m	>71	<b>4</b>	3	2
Chromium	ppm	ASTM D5185m	>11	<b>1</b>	<1	1
Nickel	ppm	ASTM D5185m	>6	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>11	<b>2</b>	0	<1
Lead	ppm	ASTM D5185m	>13	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>21	<b>2</b>	<1	<1
Tin	ppm	ASTM D5185m	>5	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

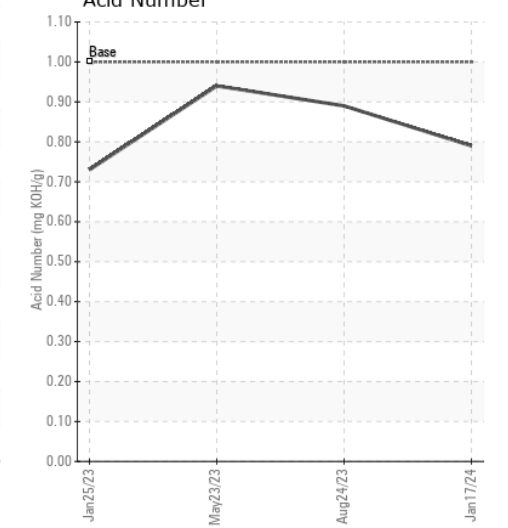
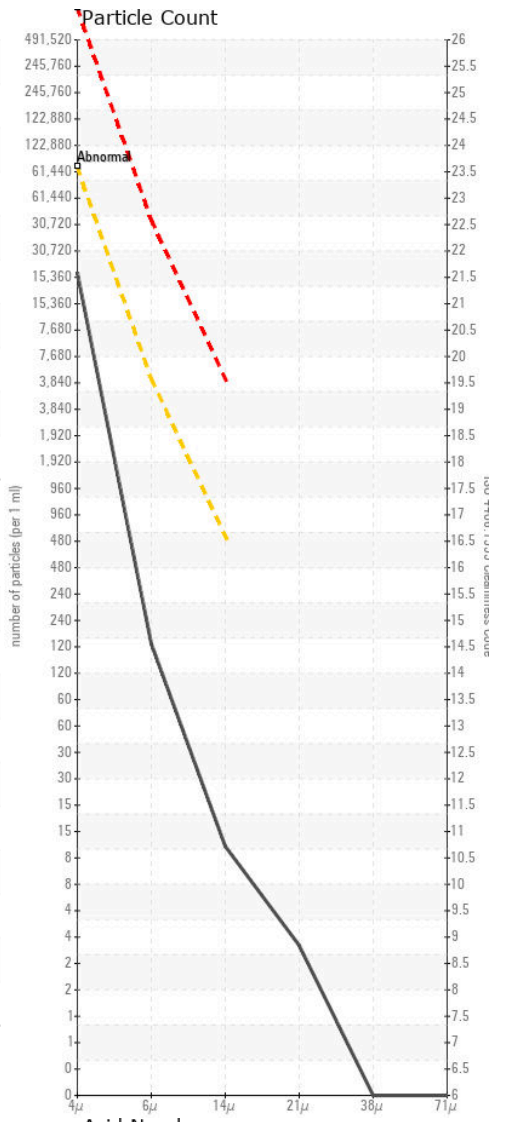
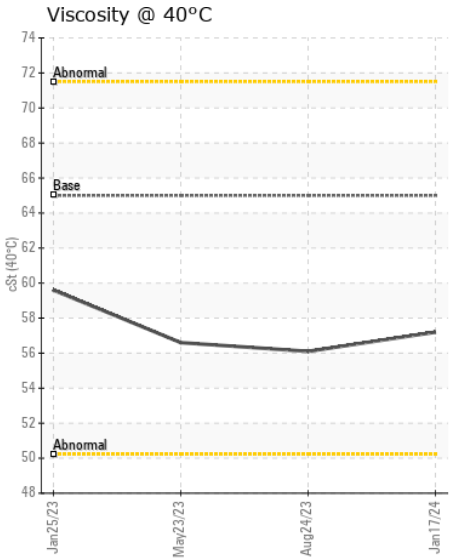
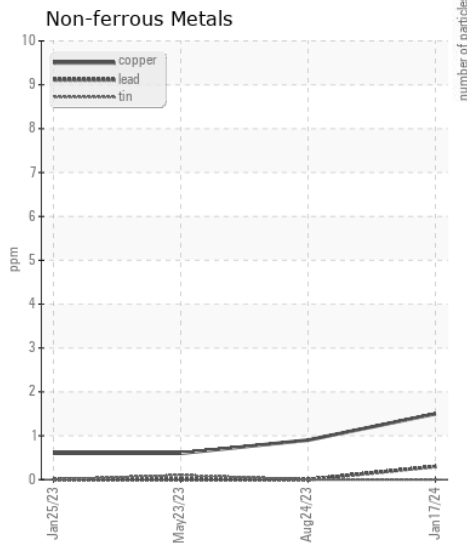
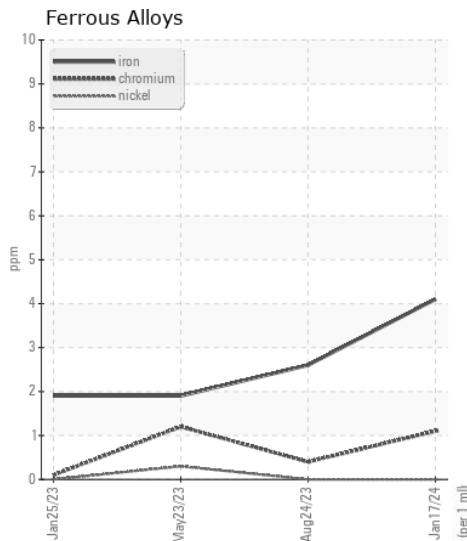
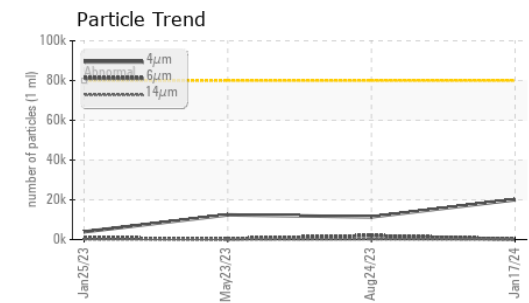
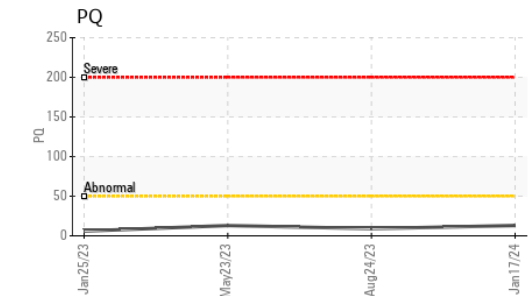
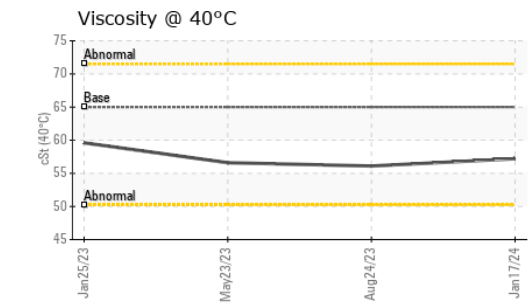
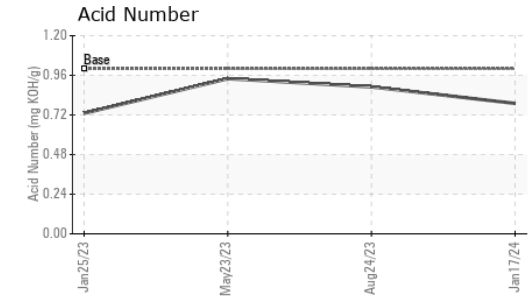
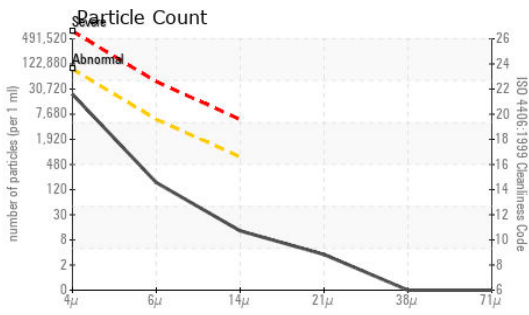
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>24	<b>4</b>	4	5
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	1	4
Water		WC Method	>0.075	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>80000	<b>20054</b>	11390	12428
Particles >6µm		ASTM D7647	>5000	<b>156</b>	1943	386
Particles >14µm		ASTM D7647	>640	<b>11</b>	162	34
Particles >21µm		ASTM D7647	>160	<b>3</b>	38	8
Particles >38µm		ASTM D7647	>40	<b>0</b>	1	0
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>23/19/16	<b>22/14/11</b>	21/18/15	21/16/12
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>0</b>	2	3
Boron	ppm	ASTM D5185m		<b>2</b>	<1	2
Barium	ppm	ASTM D5185m		<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>2</b>	2	3
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>8</b>	6	16
Calcium	ppm	ASTM D5185m	87	<b>798</b>	877	831
Phosphorus	ppm	ASTM D5185m	727	<b>782</b>	756	709
Zinc	ppm	ASTM D5185m	900	<b>953</b>	1018	944
Sulfur	ppm	ASTM D5185m	1500	<b>2348</b>	2605	2253
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.79</b>	0.89	0.94
Visc @ 40°C	cSt	ASTM D445	65	<b>57.2</b>	56.1	56.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0199334 **Received** : 18 Jan 2024  
**Lab Number** : 06064991 **Diagnosed** : 22 Jan 2024  
**Unique Number** : 10836373 **Diagnostician** : Wes Davis  
**Test Package** : CONST ( Additional Tests: PQ )

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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