



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



Machine Id  
**JOHN DEERE 310E 1DW310EXLMF712350**  
Component  
**Hydraulic System**  
Fluid  
**JOHN DEERE HYDRAU (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0212085</b>	JR0203634	JR0188756
Sample Date		Client Info		<b>13 Jun 2024</b>	30 Jan 2024	13 Oct 2023
Machine Age	hrs	Client Info		<b>2562</b>	2010	1647
Oil Age	hrs	Client Info		<b>0</b>	1647	1647
Filter Age	hrs	Client Info		<b>0</b>	1647	0
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	ABNORMAL

### WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184	>50	<b>16</b>	11	23
Iron	ppm	ASTM D5185m	>71	<b>7</b>	5	2
Chromium	ppm	ASTM D5185m	>11	<b>3</b>	3	0
Nickel	ppm	ASTM D5185m	>6	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>11	<b>2</b>	<1	<1
Lead	ppm	ASTM D5185m	>13	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>21	<b>2</b>	2	0
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</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

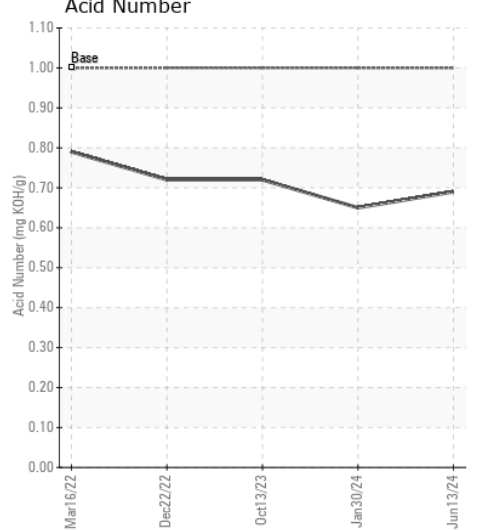
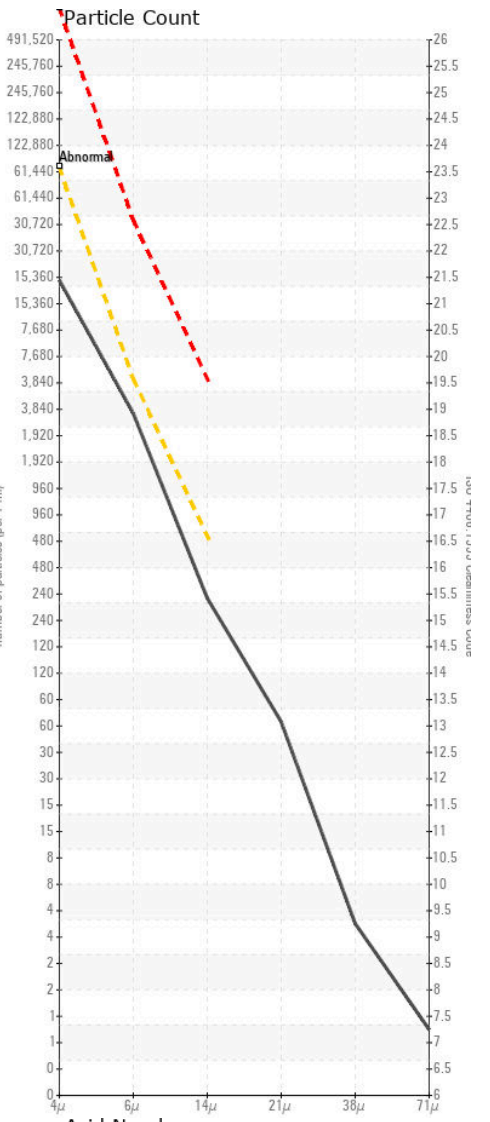
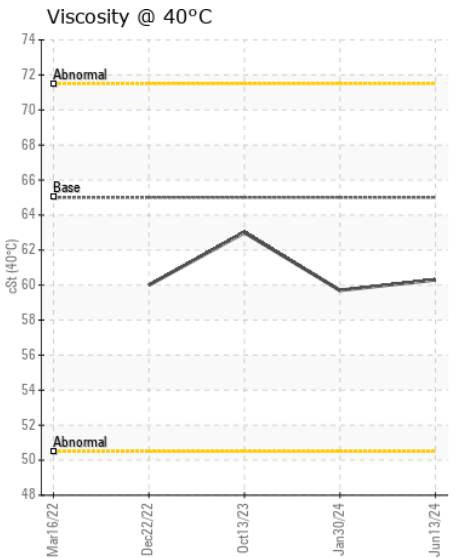
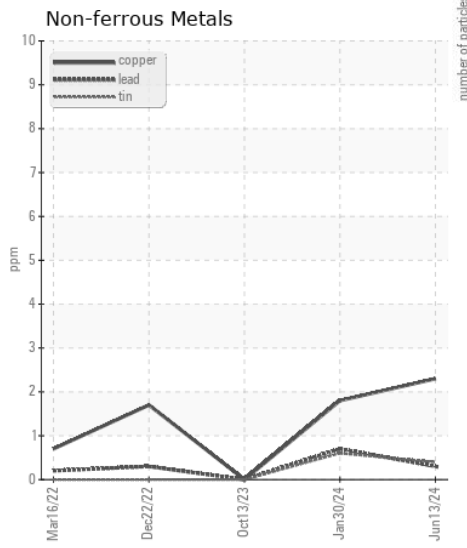
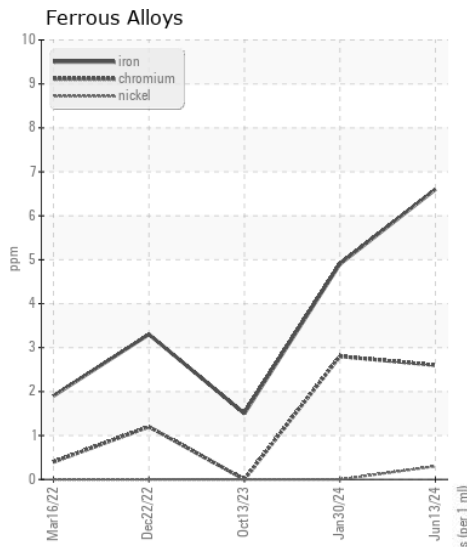
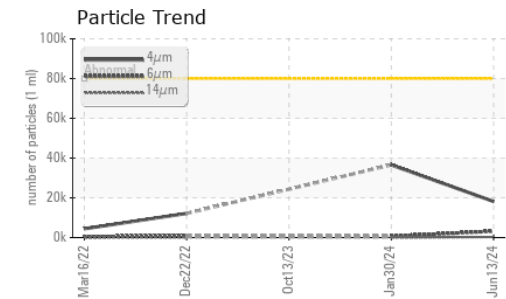
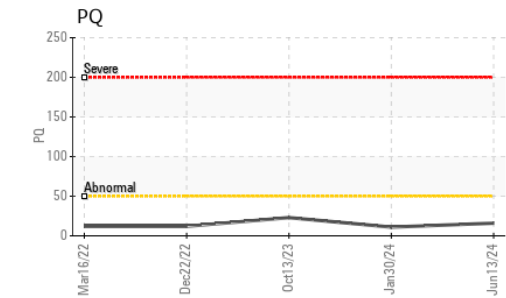
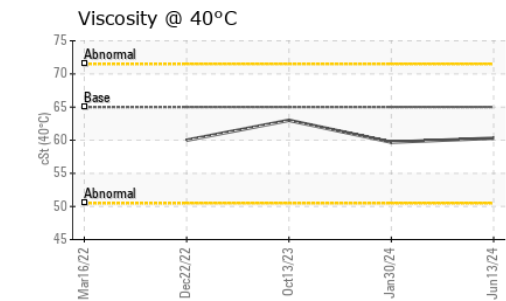
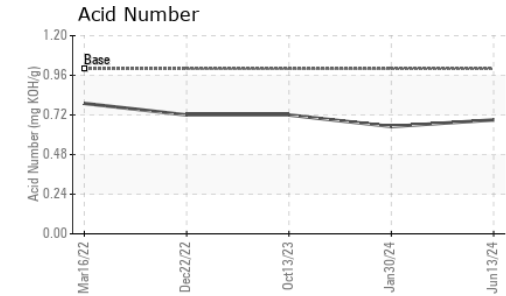
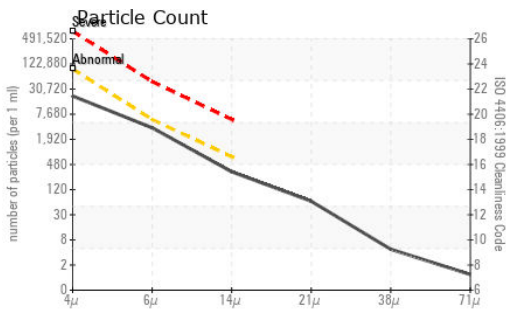
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>24	<b>4</b>	2	<1
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	2	<1
Water		WC Method	>0.075	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>80000	<b>18151</b>	36561	---
Particles >6µm		ASTM D7647	>5000	<b>3175</b>	678	---
Particles >14µm		ASTM D7647	>640	<b>283</b>	18	---
Particles >21µm		ASTM D7647	>160	<b>56</b>	3	---
Particles >38µm		ASTM D7647	>40	<b>4</b>	0	---
Particles >71µm		ASTM D7647	>10	<b>1</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>23/19/16	<b>21/19/15</b>	22/17/11	---
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	>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>	2	0
Boron	ppm	ASTM D5185m		<b>0</b>	0	4
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	0	4
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>2</b>	<1	11
Calcium	ppm	ASTM D5185m	87	<b>87</b>	46	116
Phosphorus	ppm	ASTM D5185m	727	<b>578</b>	652	654
Zinc	ppm	ASTM D5185m	900	<b>897</b>	861	879
Sulfur	ppm	ASTM D5185m	1500	<b>1735</b>	1614	1685
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.69</b>	0.65	0.72
Visc @ 40°C	cSt	ASTM D445	65	<b>60.3</b>	59.7	63.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0212085 **Received** : 18 Jun 2024  
**Lab Number** : 06213341 **Tested** : 19 Jun 2024  
**Unique Number** : 11086205 **Diagnosed** : 19 Jun 2024 - 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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