



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

Machine Id  
**JOHN DEERE 300G 1FF300GXHNF732154**

Component  
**Hydraulic System**

Fluid  
**HITACHI HYDRAULIC SUPER EX 46HN (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0197372</b>	JR0167836	---
Sample Date		Client Info		<b>05 Feb 2024</b>	05 Apr 2023	---
Machine Age	hrs	Client Info		<b>1252</b>	542	---
Oil Age	hrs	Client Info		<b>1252</b>	542	---
Filter Age	hrs	Client Info		<b>0</b>	542	---
Oil Changed		Client Info		<b>Not Chngd</b>	Not Chngd	---
Filter Changed		Client Info		<b>Changed</b>	Not Chngd	---
Sample Status				<b>NORMAL</b>	NORMAL	---

### WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	<b>15</b>	8	---
Iron	ppm	ASTM D5185m	>32	<b>2</b>	3	---
Chromium	ppm	ASTM D5185m	>9	<b>0</b>	0	---
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>9	<b>&lt;1</b>	0	---
Lead	ppm	ASTM D5185m	>28	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m	>50	<b>2</b>	4	---
Tin	ppm	ASTM D5185m	>5	<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

### CONTAMINATION

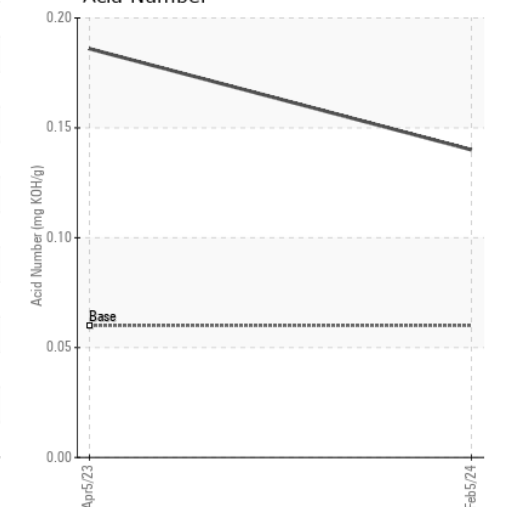
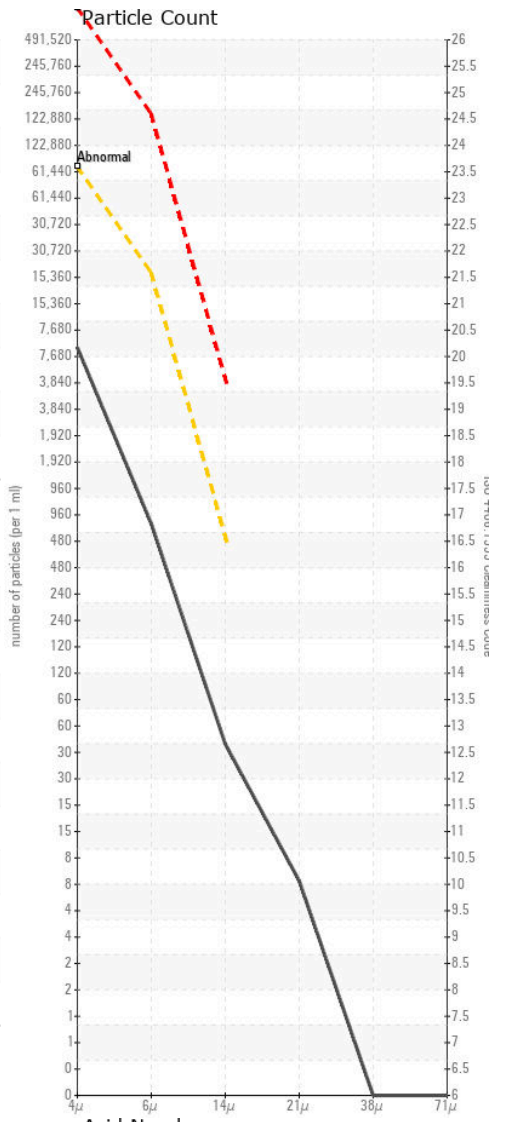
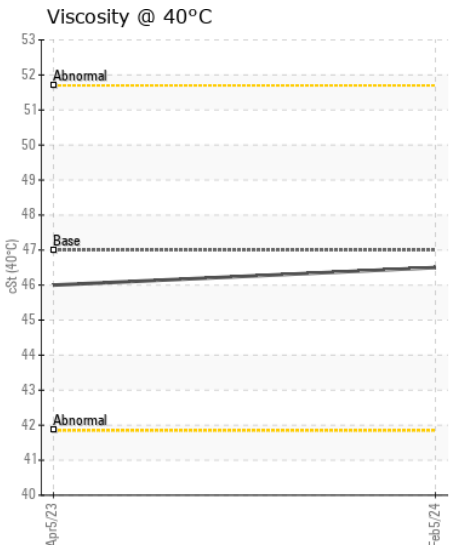
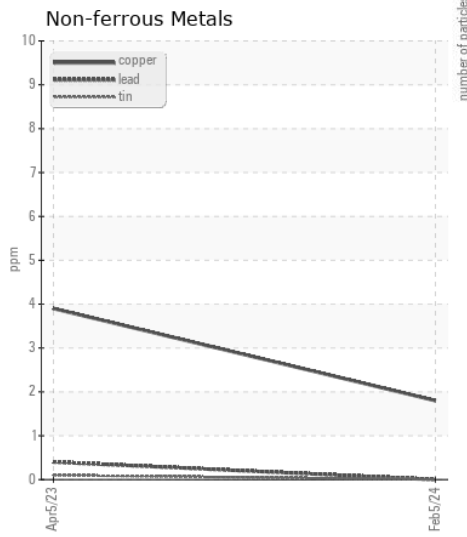
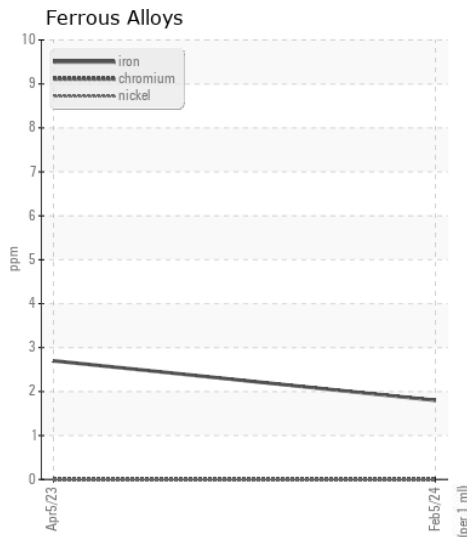
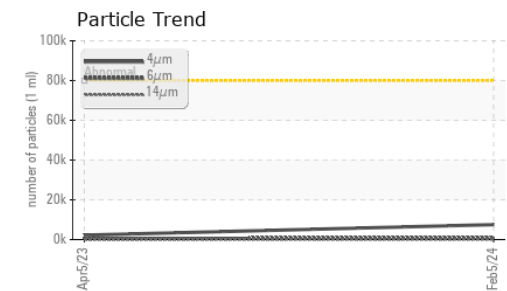
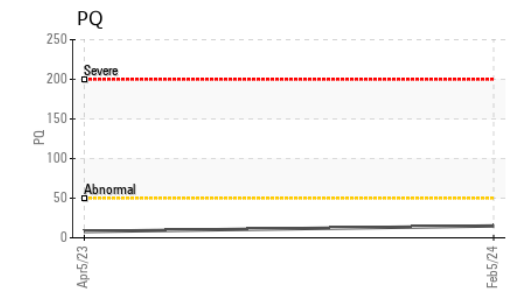
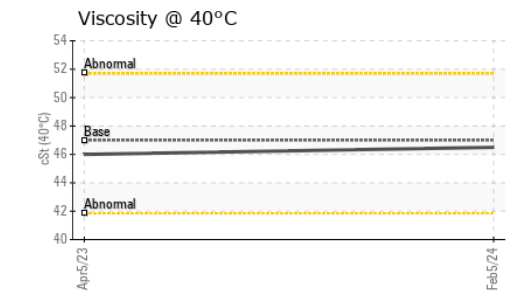
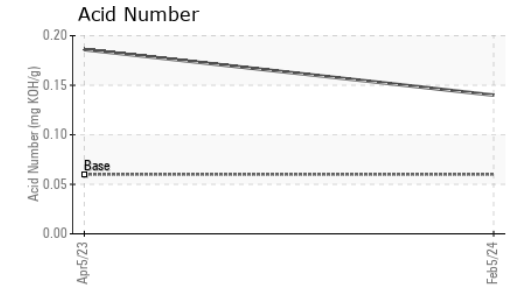
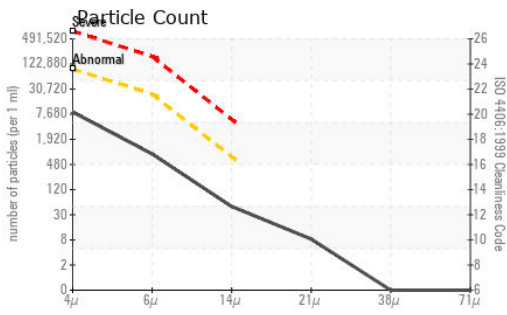
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	---
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	---
Water		WC Method	>0.075	<b>NEG</b>	NEG	---
Particles >4µm		ASTM D7647	>80000	<b>7536</b>	2228	---
Particles >6µm		ASTM D7647	>20000	<b>750</b>	479	---
Particles >14µm		ASTM D7647	>640	<b>42</b>	20	---
Particles >21µm		ASTM D7647	>160	<b>7</b>	3	---
Particles >38µm		ASTM D7647	>40	<b>0</b>	0	---
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>23/21/16	<b>20/17/13</b>	18/16/11	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.075	<b>NEG</b>	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	---
Boron	ppm	ASTM D5185m		<b>0</b>	0	---
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>0</b>	<1	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Magnesium	ppm	ASTM D5185m		<b>0</b>	<1	---
Calcium	ppm	ASTM D5185m		<b>2</b>	3	---
Phosphorus	ppm	ASTM D5185m	827	<b>511</b>	517	---
Zinc	ppm	ASTM D5185m	0	<b>23</b>	29	---
Sulfur	ppm	ASTM D5185m	13	<b>81</b>	94	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	<b>0.14</b>	0.186	---
Visc @ 40°C	cSt	ASTM D445	47	<b>46.5</b>	46.0	---



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0197372 **Received** : 13 Feb 2024  
**Lab Number** : 06087186 **Tested** : 14 Feb 2024  
**Unique Number** : 10874631 **Diagnosed** : 14 Feb 2024 - Angela Borella  
**Test Package** : CONST ( Additional Tests: PQ )

**JRE - GARNER**  
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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)