



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

Machine Id  
**JOHN DEERE 35G 1FF035GXKMK295532**  
 Component  
**Hydraulic System**  
 Fluid  
**HITACHI HYDRAULIC SUPER EX 46HN (--- GAL)**

### RECOMMENDATION

Recommend drain oil if not already done. Reduce drain interval to 2000 hours or drain and flush and use recommended zinc free oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0211035</b>	JR0157443	---
Sample Date		Client Info		<b>09 Apr 2024</b>	13 Jan 2023	---
Machine Age	hrs	Client Info		<b>1366</b>	463	---
Oil Age	hrs	Client Info		<b>1366</b>	463	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>Not Changed</b>	N/A	---
Filter Changed		Client Info		<b>Changed</b>	N/A	---
Sample Status				<b>ABNORMAL</b>	ABNORMAL	---

### WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	<b>22</b>	8	---
Iron	ppm	ASTM D5185m	>32	<b>6</b>	6	---
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>2</b>	0	---
Lead	ppm	ASTM D5185m	>28	<b>&lt;1</b>	<1	---
Copper	ppm	ASTM D5185m	>50	<b>13</b>	10	---
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	---
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

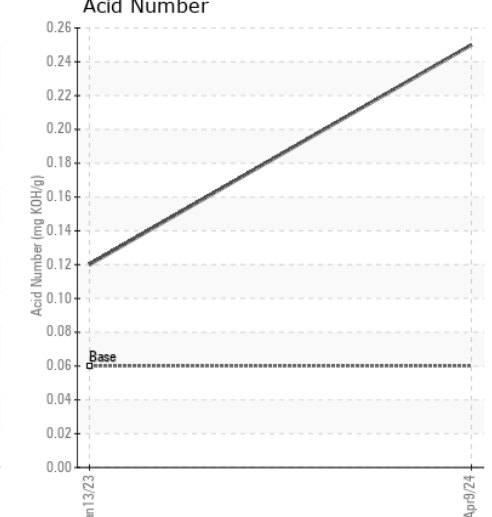
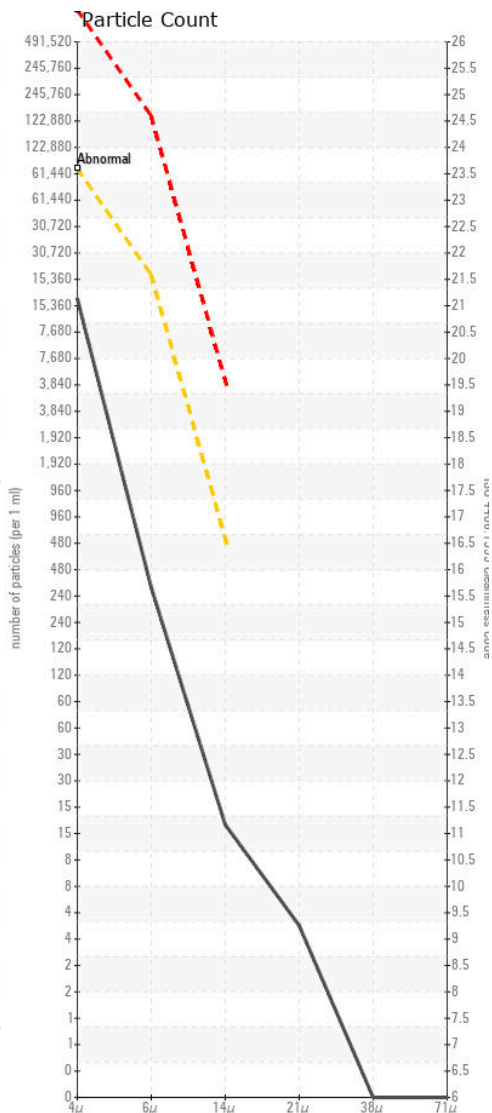
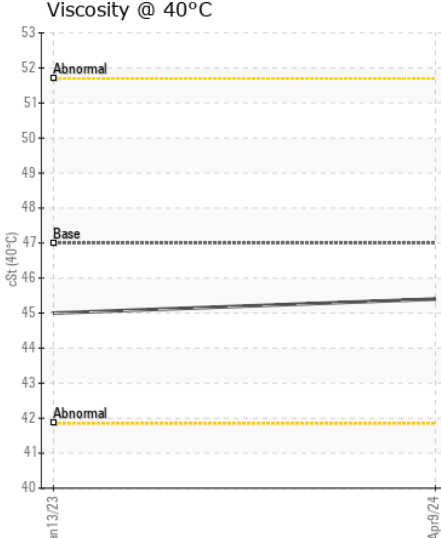
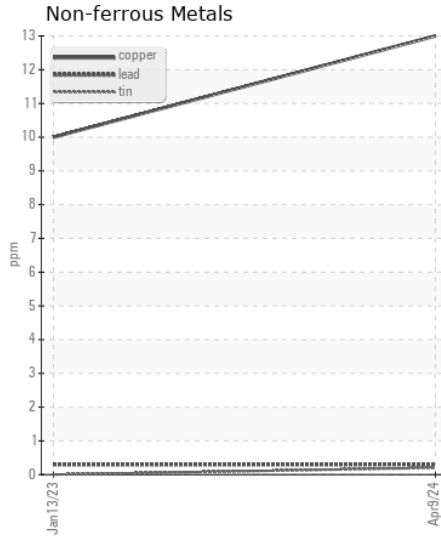
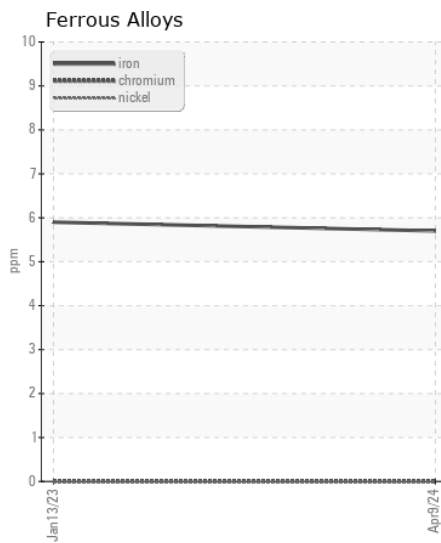
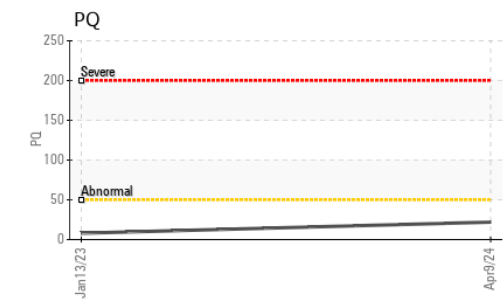
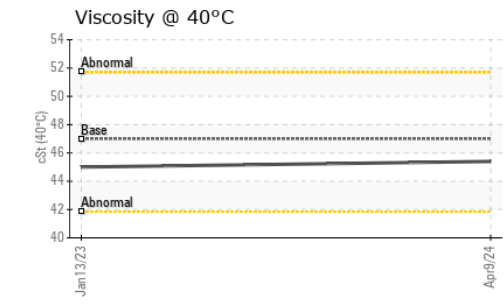
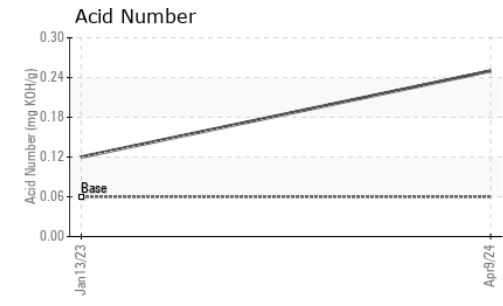
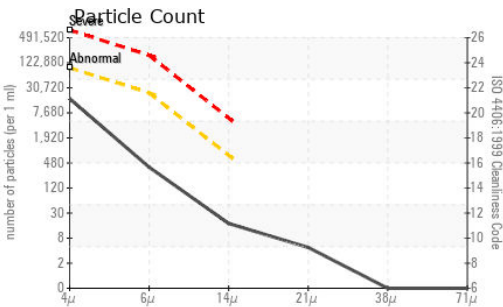
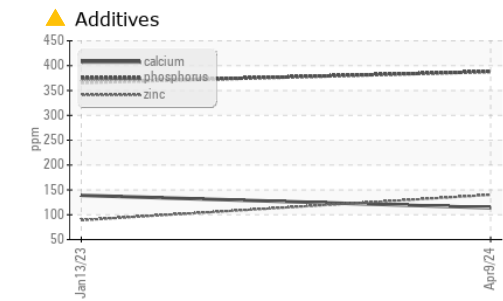
The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>11	<b>0</b>	2	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	1	---
Water		WC Method	>0.075	<b>NEG</b>	NEG	---
Particles >4µm		ASTM D7647	>80000	<b>14665</b>	28423	---
Particles >6µm		ASTM D7647	>20000	<b>334</b>	3581	---
Particles >14µm		ASTM D7647	>640	<b>15</b>	89	---
Particles >21µm		ASTM D7647	>160	<b>4</b>	16	---
Particles >38µm		ASTM D7647	>40	<b>0</b>	1	---
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>23/21/16	<b>21/16/11</b>	22/19/14	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>LIGHT</b>	LIGHT	---
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

Zinc level above manufacturer's recommendations. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m	>21	<b>0</b>	0	---
Boron	ppm	ASTM D5185m		<b>0</b>	0	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	---
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>12</b>	15	---
Calcium	ppm	ASTM D5185m		<b>114</b>	139	---
Phosphorus	ppm	ASTM D5185m	827	<b>388</b>	366	---
Zinc	ppm	ASTM D5185m	0	<b>▲ 140</b>	▲ 89	---
Sulfur	ppm	ASTM D5185m	13	<b>1797</b>	1652	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	<b>0.25</b>	0.12	---
Visc @ 40°C	cSt	ASTM D445	47	<b>45.4</b>	45.0	---



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0211035 **Received** : 10 Apr 2024  
**Lab Number** : 06145250 **Tested** : 13 Apr 2024  
**Unique Number** : 10970058 **Diagnosed** : 13 Apr 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: PQ )

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Certificate L2367  
 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)