



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

Machine Id  
**JOHN DEERE 85G 1FF085GXJM022275 (S/N 1FF085GXMJM022275)**

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>JR0211865</b>	JR0107424	---
Sample Date		Client Info		<b>05 Jul 2024</b>	09 Dec 2021	---
Machine Age	hrs	Client Info		<b>1178</b>	486	---
Oil Age	hrs	Client Info		<b>1000</b>	0	---
Filter Age	hrs	Client Info		<b>1000</b>	0	---
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	---
Filter Changed		Client Info		<b>Changed</b>	Not Changd	---
Sample Status				<b>ABNORMAL</b>	NORMAL	---

### WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	<b>21</b>	20	---
Iron	ppm	ASTM D5185m	>32	<b>11</b>	7	---
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>7</b>	2	---
Tin	ppm	ASTM D5185m	>5	<b>0</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

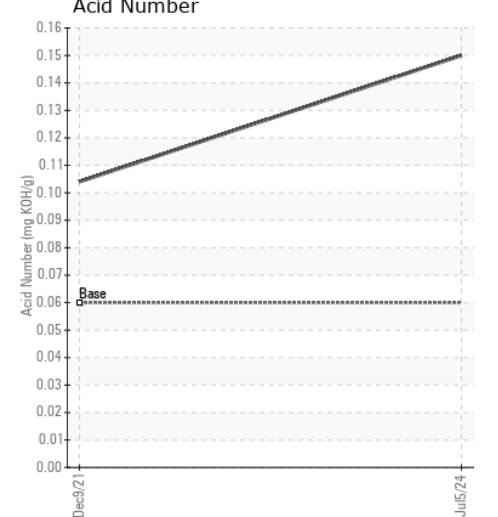
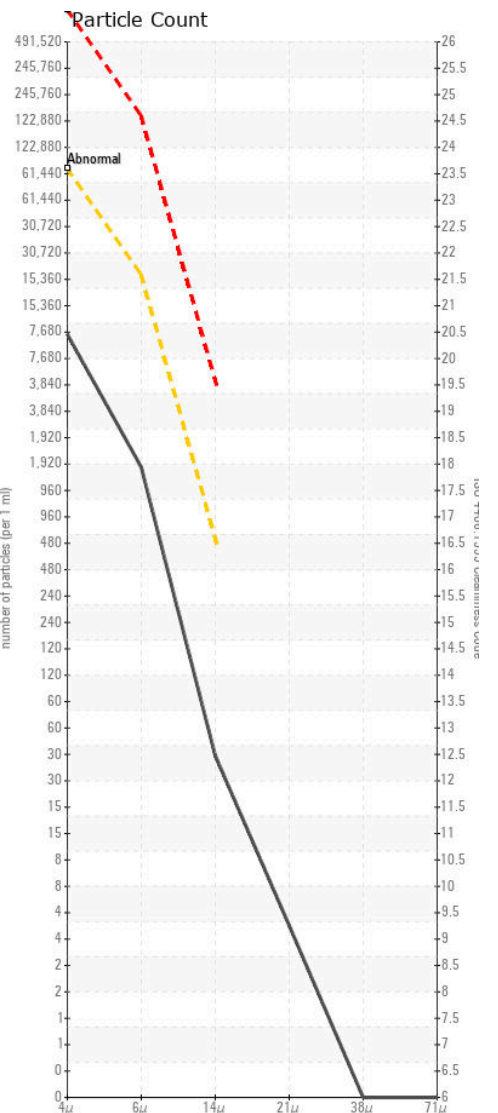
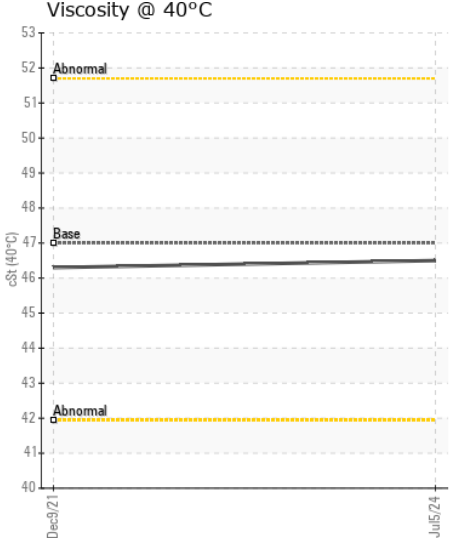
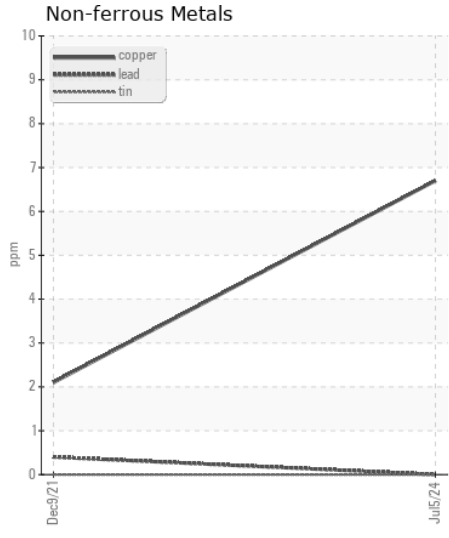
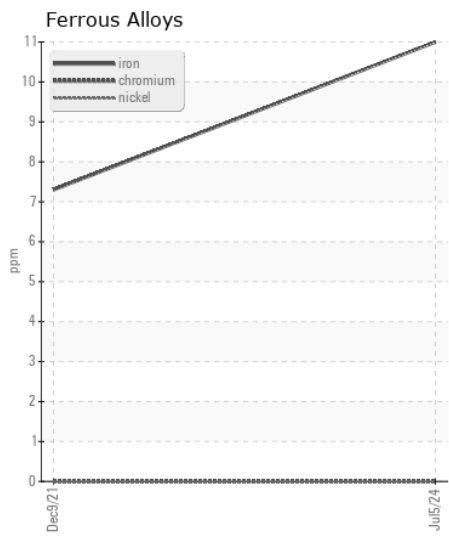
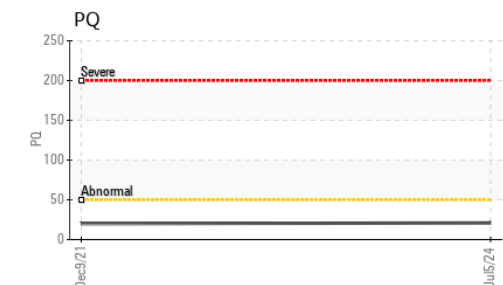
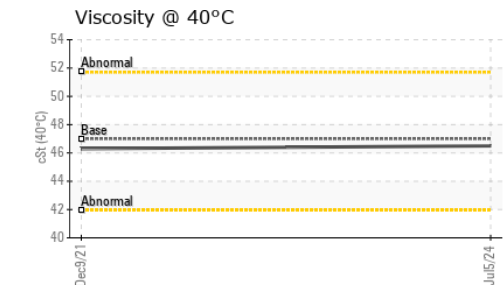
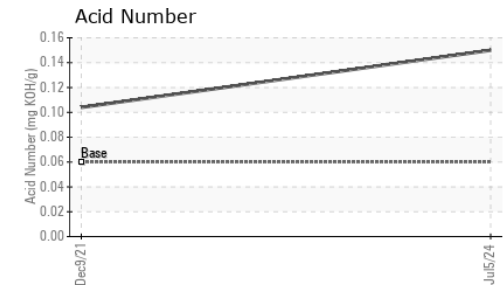
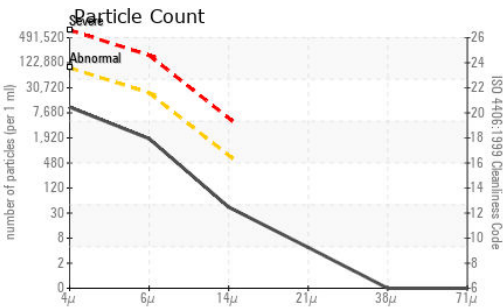
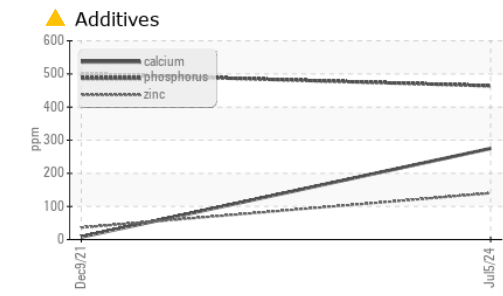
The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>11	<b>2</b>	1	---
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	---
Water		WC Method	>0.075	<b>NEG</b>	NEG	---
Particles >4µm		ASTM D7647	>80000	<b>9183</b>	4394	---
Particles >6µm		ASTM D7647	>20000	<b>1611</b>	1006	---
Particles >14µm		ASTM D7647	>640	<b>37</b>	77	---
Particles >21µm		ASTM D7647	>160	<b>4</b>	20	---
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>20/18/12</b>	19/17/13	---
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

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

Sodium	ppm	ASTM D5185m	>21	<b>2</b>	2	---
Boron	ppm	ASTM D5185m		<b>5</b>	<1	---
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	---
Manganese	ppm	ASTM D5185m		<b>0</b>	0	---
Magnesium	ppm	ASTM D5185m		<b>1</b>	2	---
Calcium	ppm	ASTM D5185m		<b>275</b>	8	---
Phosphorus	ppm	ASTM D5185m	827	<b>464</b>	500	---
Zinc	ppm	ASTM D5185m	0	<b>▲ 140</b>	36	---
Sulfur	ppm	ASTM D5185m	13	<b>670</b>	426	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	<b>0.15</b>	0.104	---
Visc @ 40°C	cSt	ASTM D445	47	<b>46.5</b>	46.3	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0211865 **Received** : 08 Jul 2024  
**Lab Number** : 06230055 **Tested** : 09 Jul 2024  
**Unique Number** : 11113548 **Diagnosed** : 09 Jul 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: PQ )

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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)