



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

Machine Id  
**JOHN DEERE 350G 1FF350GXTMF815037**  
 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>JR0214877</b>	JR0188962	JR0171829
Sample Date		Client Info		<b>22 May 2024</b>	08 Jan 2024	08 Jun 2023
Machine Age	hrs	Client Info		<b>4428</b>	4428	2984
Oil Age	hrs	Client Info		<b>2984</b>	3928	3484
Filter Age	hrs	Client Info		<b>0</b>	0	500
Oil Changed		Client Info		<b>N/A</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>N/A</b>	Changed	Not Changd
Sample Status				<b>ABNORMAL</b>	ABNORMAL	NORMAL

### WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	<b>14</b>	20	16
Iron	ppm	ASTM D5185m	>32	<b>9</b>	4	2
Chromium	ppm	ASTM D5185m	>9	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>2</b>	<1	0
Lead	ppm	ASTM D5185m	>28	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>8</b>	2	0
Tin	ppm	ASTM D5185m	>5	<b>0</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

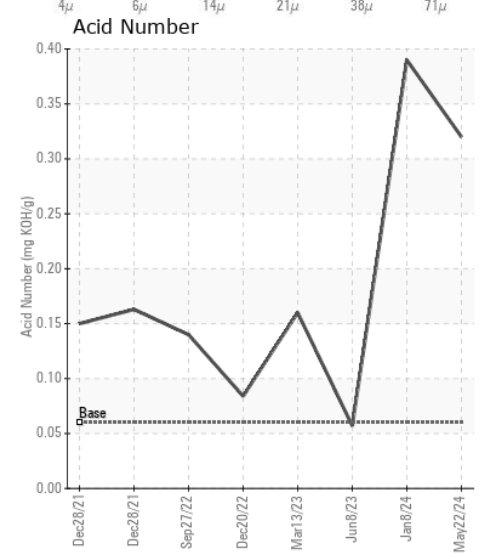
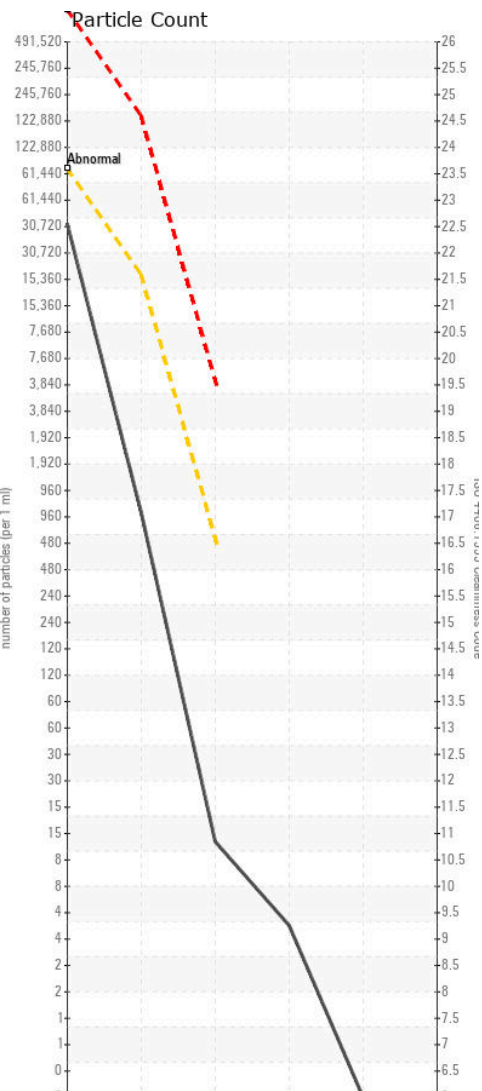
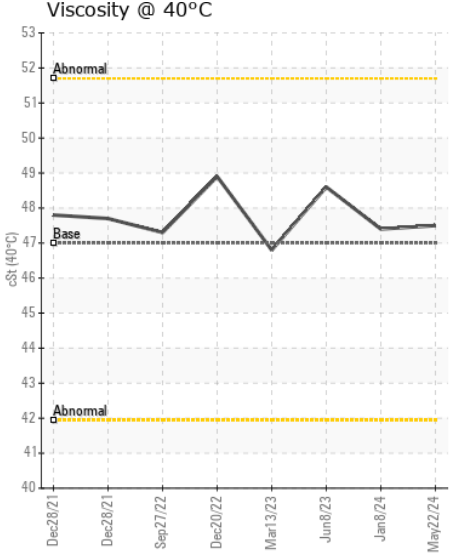
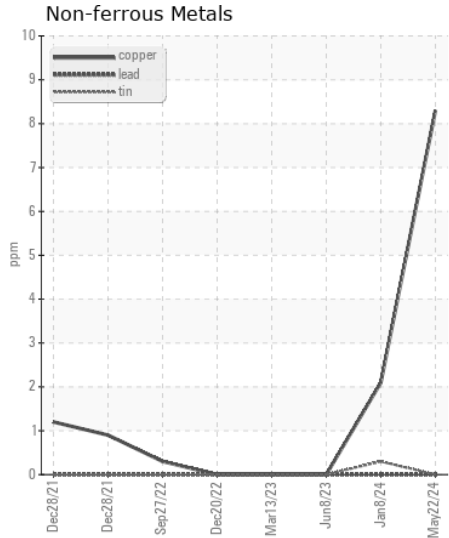
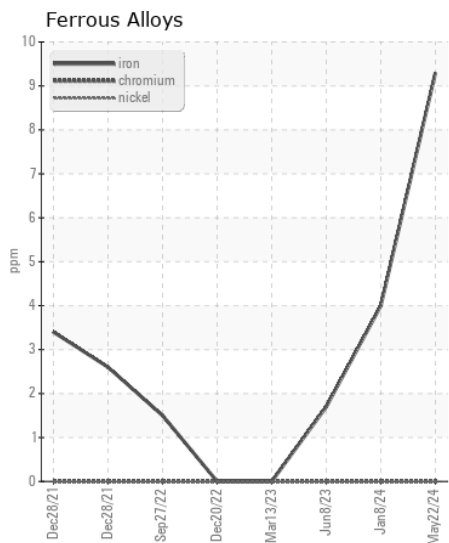
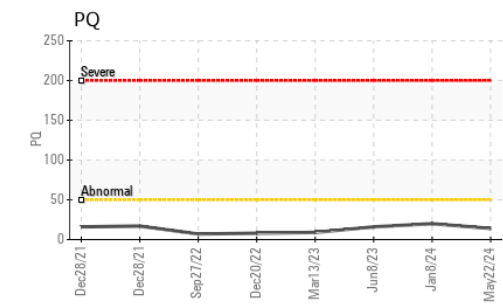
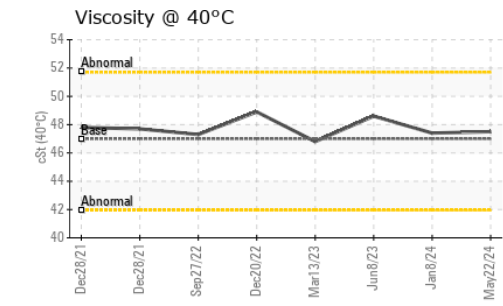
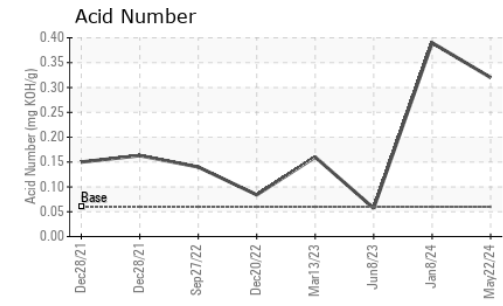
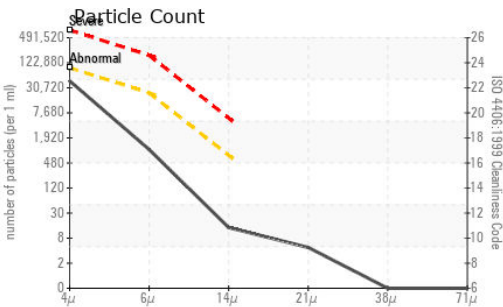
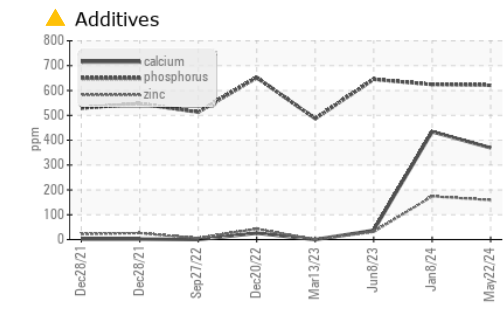
The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>11	<b>3</b>	2	2
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	1
Water		WC Method	>0.075	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>80000	<b>38906</b>	24119	48215
Particles >6µm		ASTM D7647	>20000	<b>887</b>	2779	5336
Particles >14µm		ASTM D7647	>640	<b>12</b>	747	125
Particles >21µm		ASTM D7647	>160	<b>4</b>	248	23
Particles >38µm		ASTM D7647	>40	<b>0</b>	8	0
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>23/21/16	<b>22/17/11</b>	22/19/17	23/20/14
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

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

Sodium	ppm	ASTM D5185m	>21	<b>&lt;1</b>	<1	0
Boron	ppm	ASTM D5185m		<b>0</b>	0	5
Barium	ppm	ASTM D5185m		<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	6
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>2</b>	3	18
Calcium	ppm	ASTM D5185m		<b>369</b>	434	37
Phosphorus	ppm	ASTM D5185m	827	<b>621</b>	624	645
Zinc	ppm	ASTM D5185m	0	<b>▲ 159</b>	▲ 174	31
Sulfur	ppm	ASTM D5185m	13	<b>602</b>	587	88
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	<b>0.32</b>	0.39	0.057
Visc @ 40°C	cSt	ASTM D445	47	<b>47.5</b>	47.4	48.6



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0214877 **Received** : 24 May 2024  
**Lab Number** : 06190375 **Tested** : 29 May 2024  
**Unique Number** : 11047127 **Diagnosed** : 29 May 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)