



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

Machine Id  
**JOHN DEERE 300G 1FF300GXHNF732039**  
 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>JR0200234</b>	JR0180149	JR0164905
Sample Date		Client Info		<b>04 Jan 2024</b>	12 Sep 2023	11 Jul 2023
Machine Age	hrs	Client Info		<b>2459</b>	1943	1662
Oil Age	hrs	Client Info		<b>2459</b>	0	1662
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Filter Changed		Client Info		<b>Not Chngd</b>	Changed	Not Chngd
Sample Status				<b>ABNORMAL</b>	ABNORMAL	NORMAL

### WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	<b>14</b>	16	10
Iron	ppm	ASTM D5185m	>32	<b>4</b>	2	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	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185m	>28	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>50	<b>5</b>	4	3
Tin	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>LIGHT</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

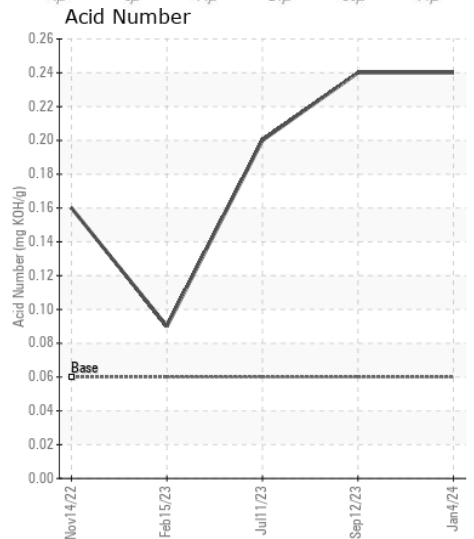
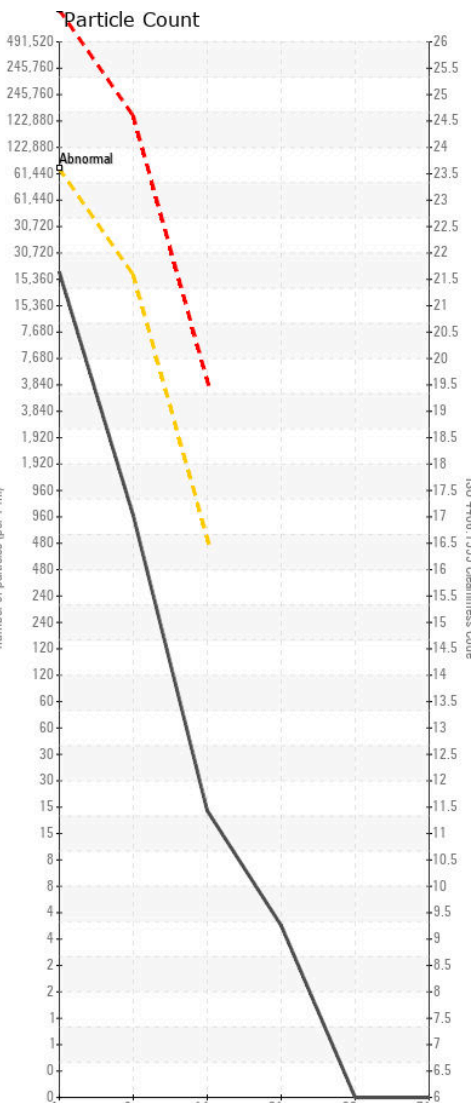
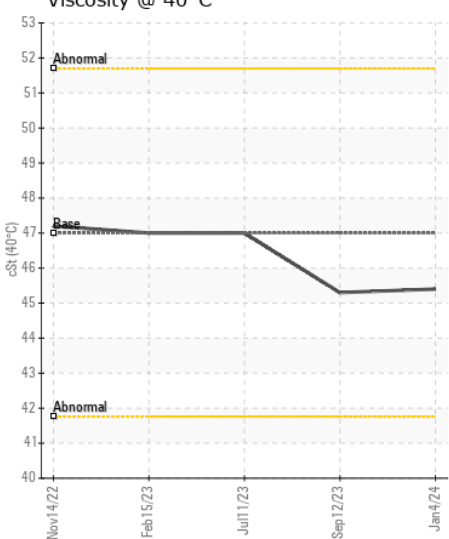
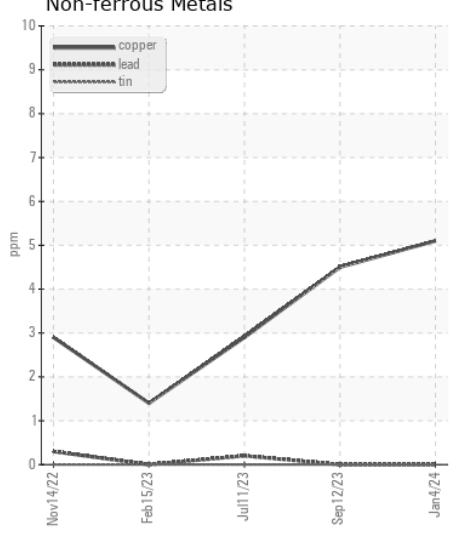
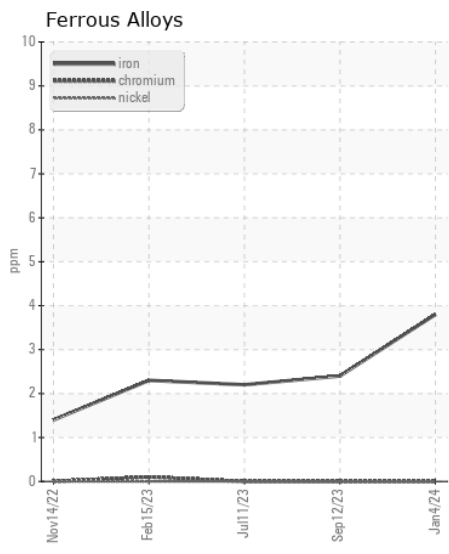
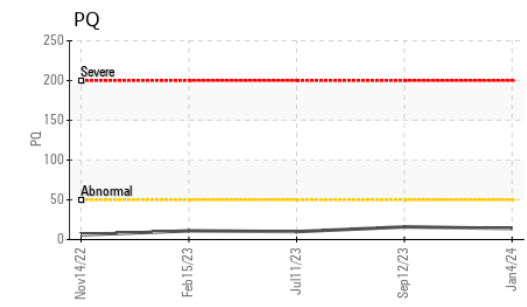
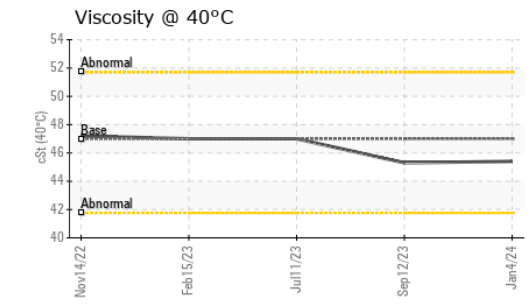
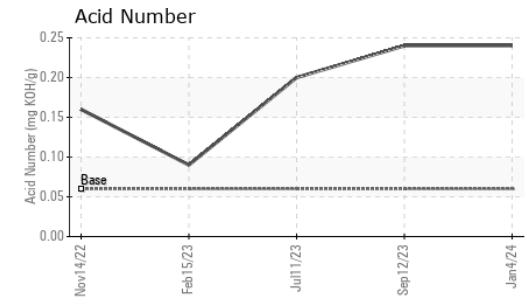
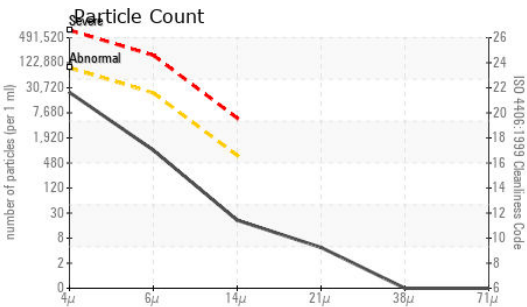
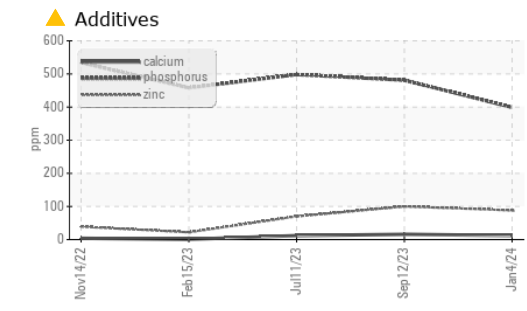
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>11	<b>&lt;1</b>	1	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	4
Water		WC Method	>0.075	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>80000	<b>20739</b>	5206	5964
Particles >6µm		ASTM D7647	>20000	<b>857</b>	116	186
Particles >14µm		ASTM D7647	>640	<b>18</b>	2	7
Particles >21µm		ASTM D7647	>160	<b>4</b>	1	2
Particles >38µm		ASTM D7647	>40	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>23/21/16	<b>22/17/11</b>	20/14/9	20/15/10
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	LIGHT
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	1
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>0</b>	0	2
Calcium	ppm	ASTM D5185m		<b>12</b>	16	12
Phosphorus	ppm	ASTM D5185m	827	<b>399</b>	481	498
Zinc	ppm	ASTM D5185m	0	<b>▲ 88</b>	▲ 100	70
Sulfur	ppm	ASTM D5185m	13	<b>61</b>	390	278
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	<b>0.24</b>	0.24	0.20
Visc @ 40°C	cSt	ASTM D445	47	<b>45.4</b>	45.3	47.0



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0200234 **Received** : 09 Jan 2024  
**Lab Number** : 06055323 **Diagnosed** : 10 Jan 2024  
**Unique Number** : 10821272 **Diagnostician** : Angela Borella  
**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)