



# OIL ANALYSIS REPORT

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



Area  
**Store 8 - Pikeville**  
Machine Id  
**JOHN DEERE 350G 1FF350GXCJF812424**  
Component  
**Hydraulic System**  
Fluid  
**HITACHI HYDRAULIC SUPER EX 46HN (77 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>LEC0047298</b>	LEC0037459	LEC0037744
Sample Date		Client Info		<b>12 Jan 2024</b>	06 Sep 2023	15 Feb 2023
Machine Age	hrs	Client Info		<b>4343</b>	4069	3753
Oil Age	hrs	Client Info		<b>4343</b>	4069	3753
Filter Age	hrs	Client Info		<b>1192</b>	1689	1133
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ATTENTION

## WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	<b>16</b>	21	15
Iron	ppm	ASTM D5185m	>32	<b>31</b>	▲ 37	12
Chromium	ppm	ASTM D5185m	>9	<b>8</b>	5	1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>3</b>	4	0
Lead	ppm	ASTM D5185m	>28	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>9</b>	6	<1
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</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

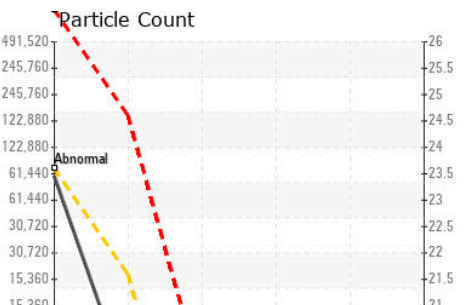
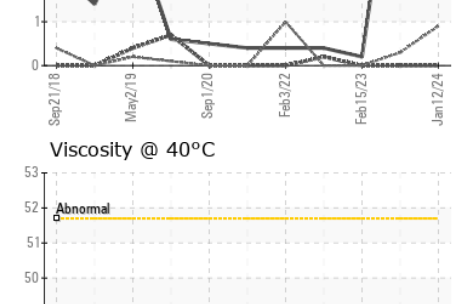
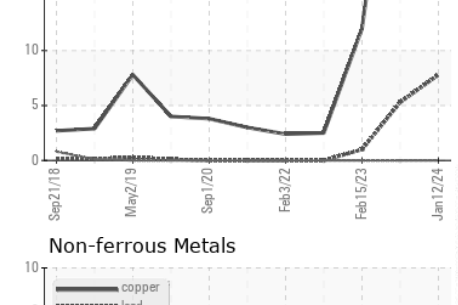
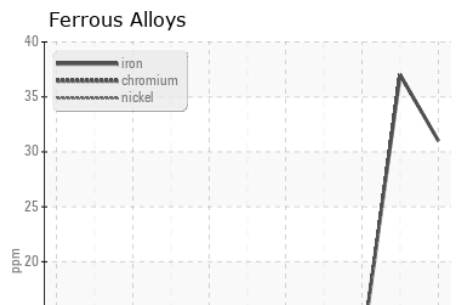
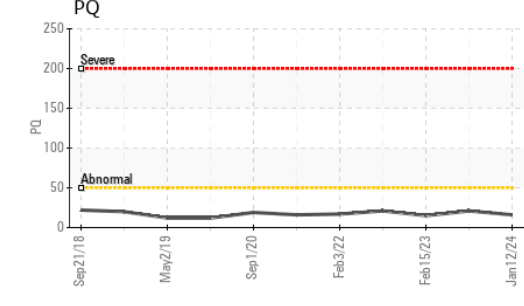
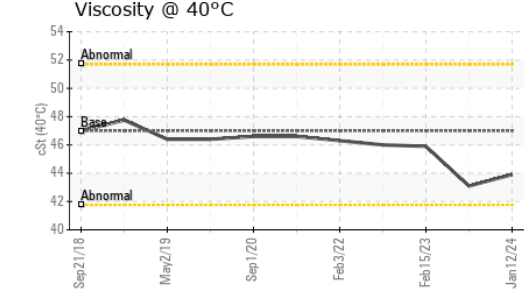
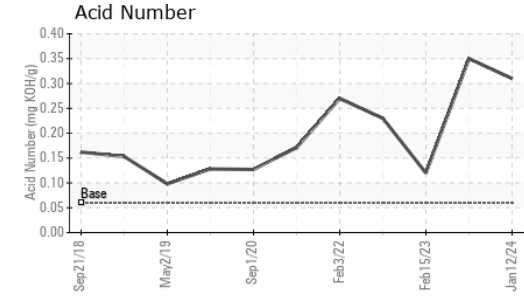
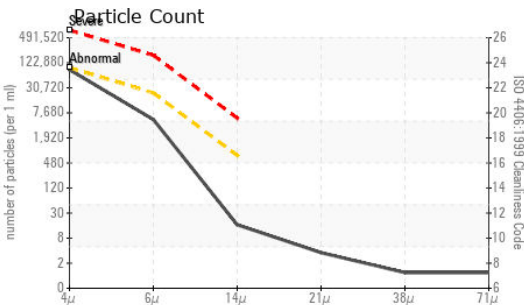
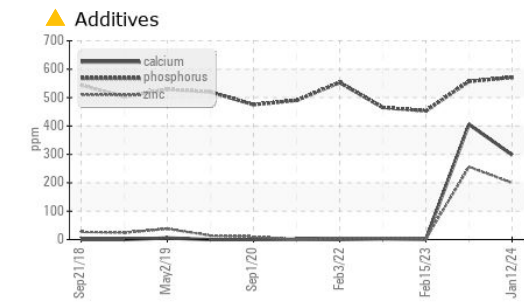
The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>11	<b>8</b>	10	1
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	<1
Water		WC Method	>0.075	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>80000	<b>72571</b>	21224	▲ 135795
Particles >6µm		ASTM D7647	>20000	<b>4644</b>	91	11925
Particles >14µm		ASTM D7647	>640	<b>14</b>	8	6
Particles >21µm		ASTM D7647	>160	<b>3</b>	3	1
Particles >38µm		ASTM D7647	>40	<b>1</b>	0	0
Particles >71µm		ASTM D7647	>10	<b>1</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>23/21/16	<b>23/19/11</b>	22/14/10	▲ 24/21/10
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</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>2</b>	4	0
Boron	ppm	ASTM D5185m		<b>13</b>	19	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>9</b>	15	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>61</b>	76	1
Calcium	ppm	ASTM D5185m		<b>298</b>	406	1
Phosphorus	ppm	ASTM D5185m	827	<b>571</b>	557	453
Zinc	ppm	ASTM D5185m	0	▲ <b>200</b>	▲ 256	3
Sulfur	ppm	ASTM D5185m	13	<b>952</b>	1484	107
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	<b>0.31</b>	0.35	0.12
Visc @ 40°C	cSt	ASTM D445	47	<b>43.9</b>	43.1	45.9



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0047298 **Received** : 18 Jan 2024  
**Lab Number** : 06064205 **Diagnosed** : 20 Jan 2024  
**Unique Number** : 10835587 **Diagnostician** : Don Baldrige  
**Test Package** : CONST ( Additional Tests: PQ )

**LESLIE EQUIPMENT COMPANY**  
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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)