



# OIL ANALYSIS REPORT

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

Area  
**Store 5 - Cross Lanes**  
Machine Id  
**JOHN DEERE 1FF350GXVEE809964**  
Component  
**Hydraulic System**  
Fluid  
**HITACHI HYDRAULIC SUPER EX 46HN (51 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LEC0046020</b>	LEC0041836	LEC0039326
Sample Date		Client Info		<b>26 Jan 2024</b>	14 Jun 2023	12 Apr 2023
Machine Age	hrs	Client Info		<b>7204</b>	7073	7031
Oil Age	hrs	Client Info		<b>7204</b>	7073	7031
Filter Age	hrs	Client Info		<b>1681</b>	5523	7031
Oil Changed		Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Not Changed
Sample Status				<b>NORMAL</b>	NORMAL	ATTENTION

## WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	<b>14</b>	12	11
Iron	ppm	ASTM D5185m	>32	<b>1</b>	2	4
Chromium	ppm	ASTM D5185m	>9	<b>2</b>	2	<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>&lt;1</b>	0	0
Lead	ppm	ASTM D5185m	>28	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>50	<b>&lt;1</b>	<1	1
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

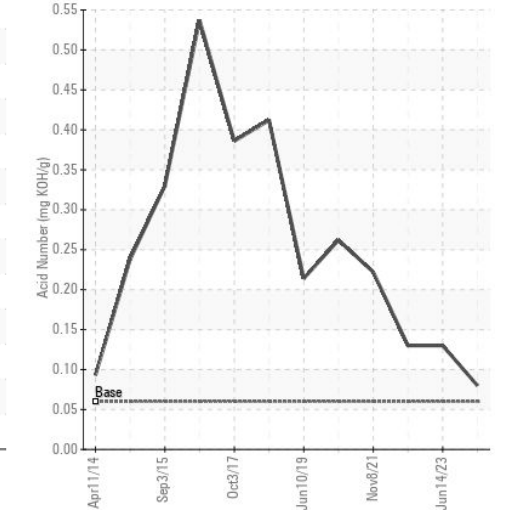
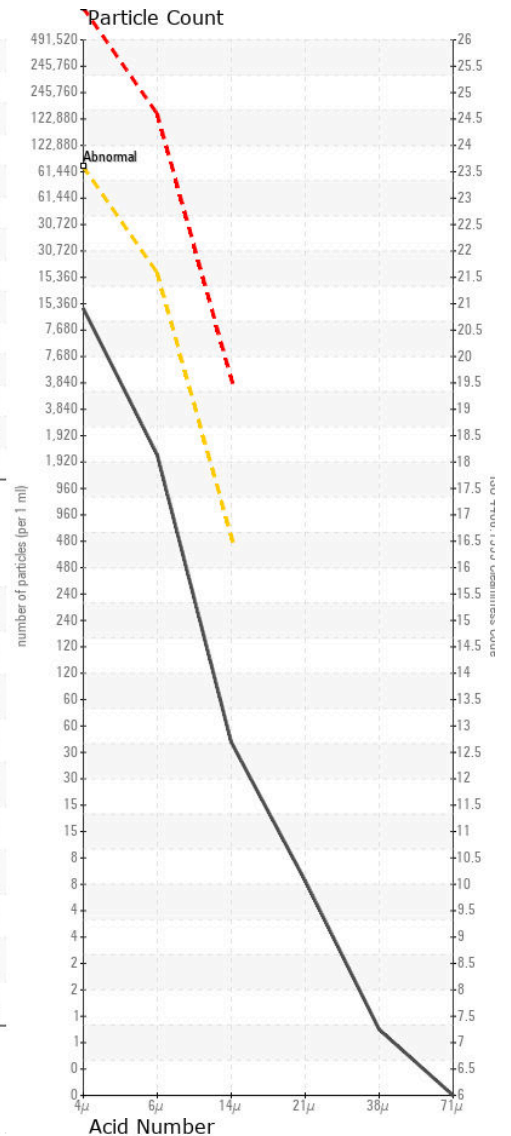
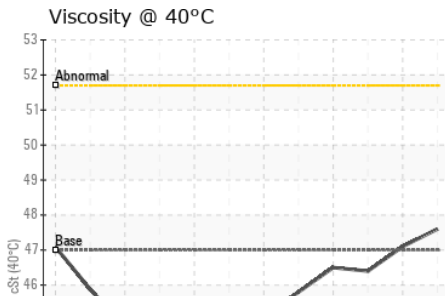
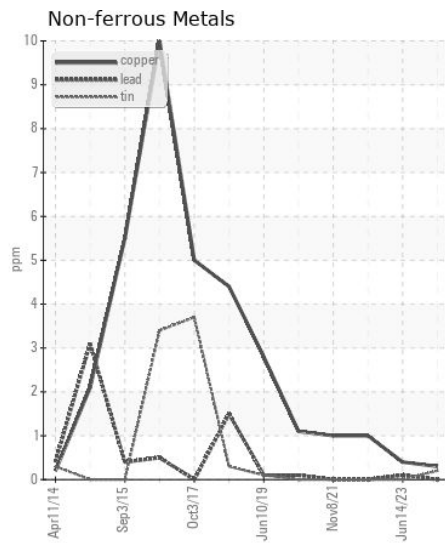
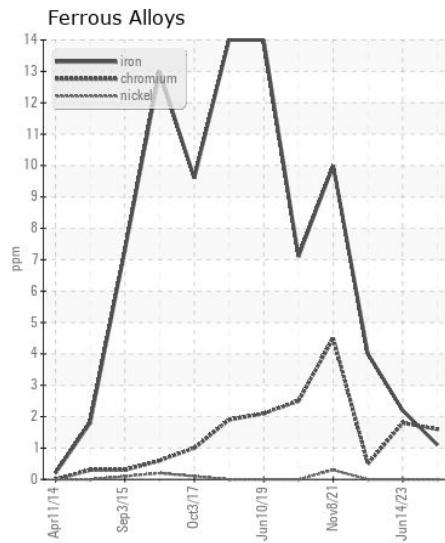
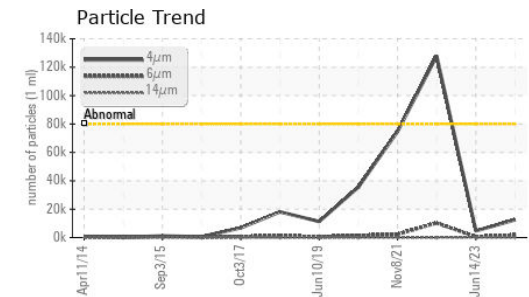
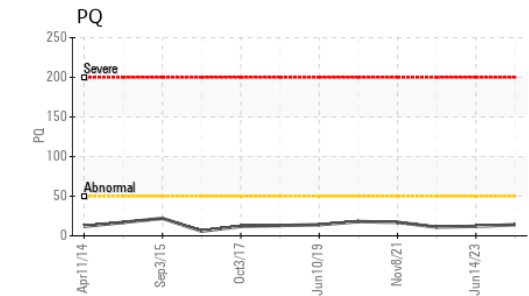
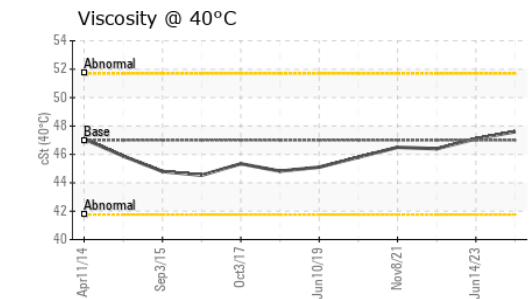
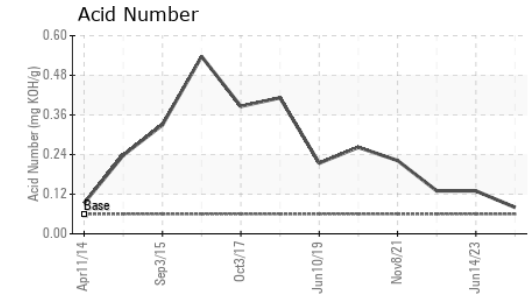
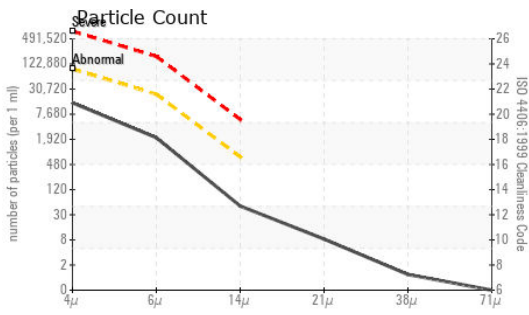
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>11	<b>1</b>	<1	11
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	2
Water		WC Method	>0.075	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>80000	<b>12516</b>	4703	▲ 127910
Particles >6µm		ASTM D7647	>20000	<b>1843</b>	548	10225
Particles >14µm		ASTM D7647	>640	<b>43</b>	45	30
Particles >21µm		ASTM D7647	>160	<b>7</b>	14	7
Particles >38µm		ASTM D7647	>40	<b>1</b>	0	0
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>23/21/16	<b>21/18/13</b>	19/16/13	▲ 24/21/12
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

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>21	<b>&lt;1</b>	0	13
Boron	ppm	ASTM D5185m		<b>0</b>	2	0
Barium	ppm	ASTM D5185m		<b>0</b>	2	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>0</b>	<1	2
Calcium	ppm	ASTM D5185m		<b>8</b>	5	6
Phosphorus	ppm	ASTM D5185m	827	<b>609</b>	573	360
Zinc	ppm	ASTM D5185m	0	<b>4</b>	6	25
Sulfur	ppm	ASTM D5185m	13	<b>61</b>	173	59
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	<b>0.08</b>	0.13	0.13
Visc @ 40°C	cSt	ASTM D445	47	<b>47.6</b>	47.1	46.4



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0046020 **Received** : 31 Jan 2024  
**Lab Number** : 06075623 **Diagnosed** : 01 Feb 2024  
**Unique Number** : 10857714 **Diagnostician** : Angela Borella  
**Test Package** : CONST ( Additional Tests: PQ )

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)

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