



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

Area

**[44089]**

Machine Id

**JOHN DEERE 1FF350PACNF000226**

Component

**Hydraulic System**

Fluid

**HITACHI HYDRAULIC SUPER EX 46HN (220 QTS)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0199328</b>	JR0187472	JR0176234
Sample Date		Client Info		<b>09 Jan 2024</b>	27 Sep 2023	10 Jul 2023
Machine Age	hrs	Client Info		<b>1483</b>	972	458
Oil Age	hrs	Client Info		<b>1483</b>	972	458
Filter Age	hrs	Client Info		<b>0</b>	0	458
Oil Changed		Client Info		<b>N/A</b>	N/A	Not Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	Not Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	<b>11</b>	13	11
Iron	ppm	ASTM D5185m	>32	<b>3</b>	2	2
Chromium	ppm	ASTM D5185m	>9	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>2</b>	<1	1
Lead	ppm	ASTM D5185m	>28	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>2</b>	3	2
Tin	ppm	ASTM D5185m	>5	<b>0</b>	0	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

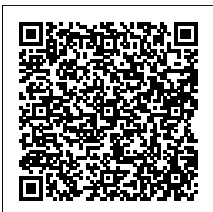
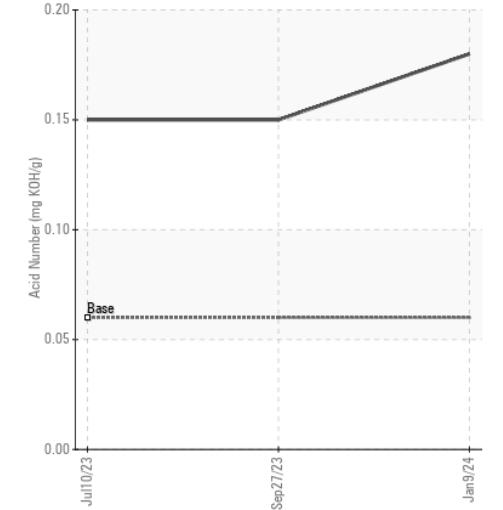
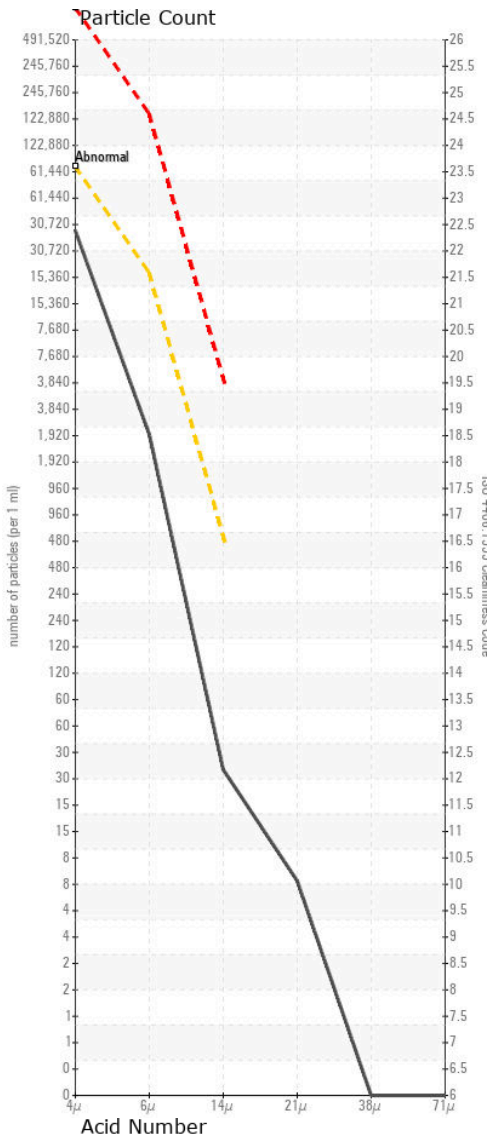
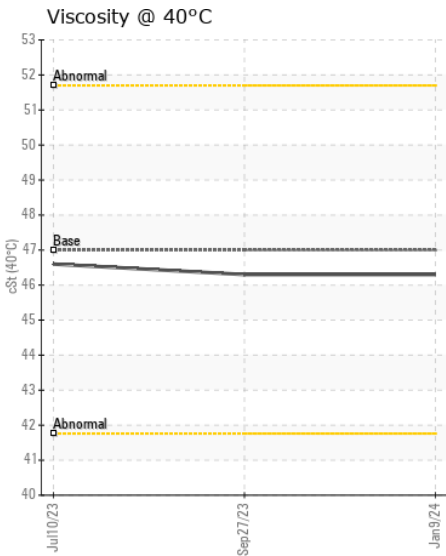
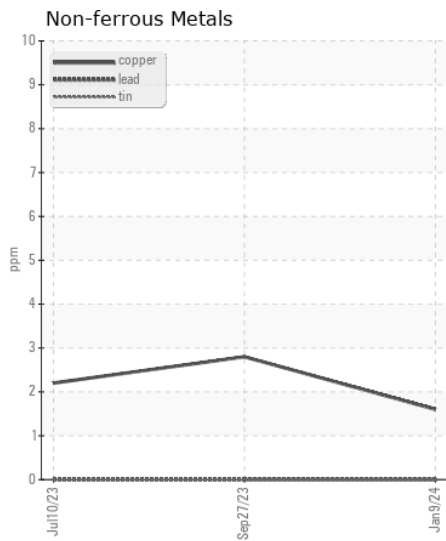
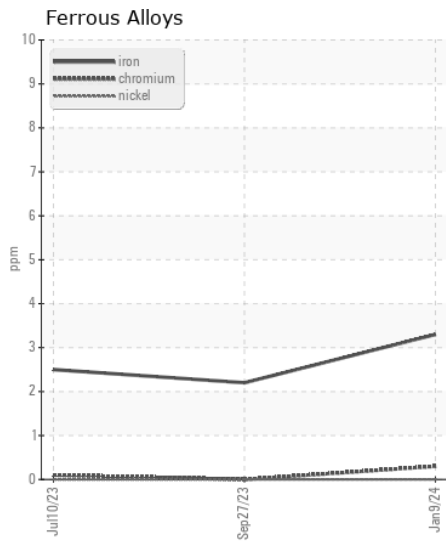
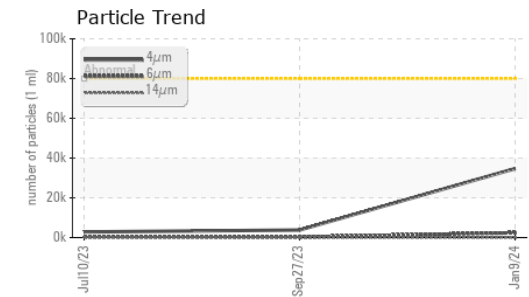
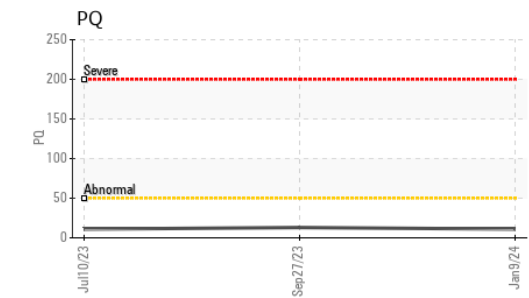
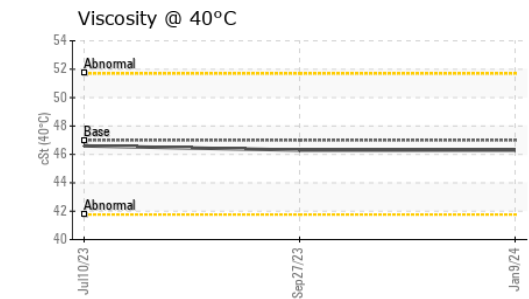
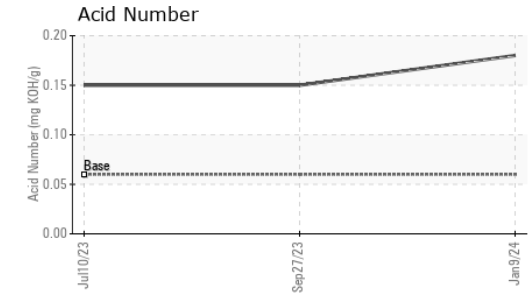
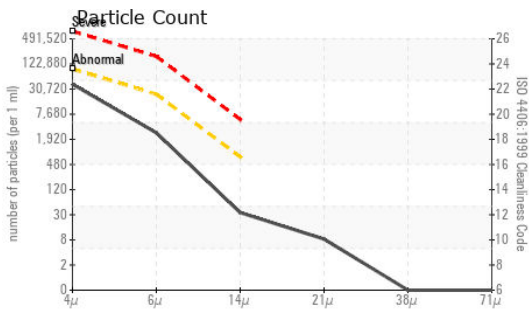
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>11	<b>0</b>	<1	<1
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	0
Water		WC Method	>0.075	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>80000	<b>34715</b>	3800	2837
Particles >6µm		ASTM D7647	>20000	<b>2414</b>	272	381
Particles >14µm		ASTM D7647	>640	<b>30</b>	18	13
Particles >21µm		ASTM D7647	>160	<b>7</b>	7	5
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>22/18/12</b>	19/15/11	19/16/11
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>0</b>	<1	0
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>3</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>0</b>	2	0
Calcium	ppm	ASTM D5185m		<b>2</b>	2	1
Phosphorus	ppm	ASTM D5185m	827	<b>573</b>	524	584
Zinc	ppm	ASTM D5185m	0	<b>0</b>	22	21
Sulfur	ppm	ASTM D5185m	13	<b>72</b>	95	161
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	<b>0.18</b>	0.15	0.15
Visc @ 40°C	cSt	ASTM D445	47	<b>46.3</b>	46.3	46.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0199328 **Received** : 17 Jan 2024  
**Lab Number** : 06063494 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10834876 **Diagnostician** : Don Baldrige  
**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)

**CWS-STRITTMATTER**  
 9102 OWENS DR  
 MANASSAS PARK, VA  
 US 20111

Contact: EDDIE GARRETSON  
 egarretson@strittmattercompanies.com

T: (703)335-2255

F: (703)335-8095