



# OIL ANALYSIS REPORT

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



Area  
**Store 2 - Beaver [RO#139069]**  
Machine Id  
**JOHN DEERE 210G 1FF210GXCNF530300**  
Component  
**Hydraulic System**  
Fluid  
**HITACHI HYDRAULIC SUPER EX 46HN (63 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LEC0040582</b>	LEC0038733	LEC0035500
Sample Date		Client Info		<b>11 May 2023</b>	01 Mar 2023	27 Dec 2022
Machine Age	hrs	Client Info		<b>419</b>	398	317
Oil Age	hrs	Client Info		<b>419</b>	398	317
Filter Age	hrs	Client Info		<b>419</b>	398	317
Oil Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Filter Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	<b>7</b>	14	9
Iron	ppm	ASTM D5185m	>32	<b>2</b>	0	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>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>3</b>	<1	0
Lead	ppm	ASTM D5185m	>28	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>3</b>	3	4
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

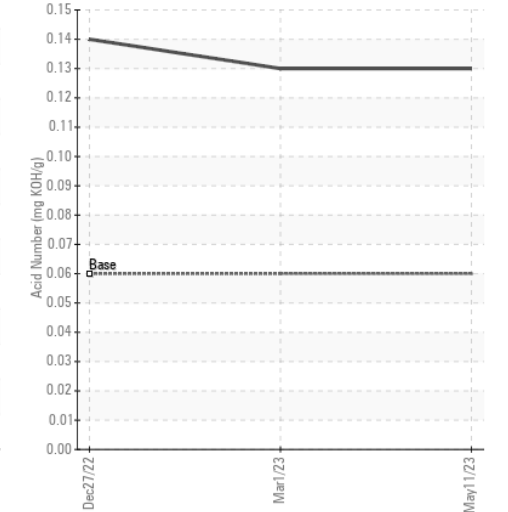
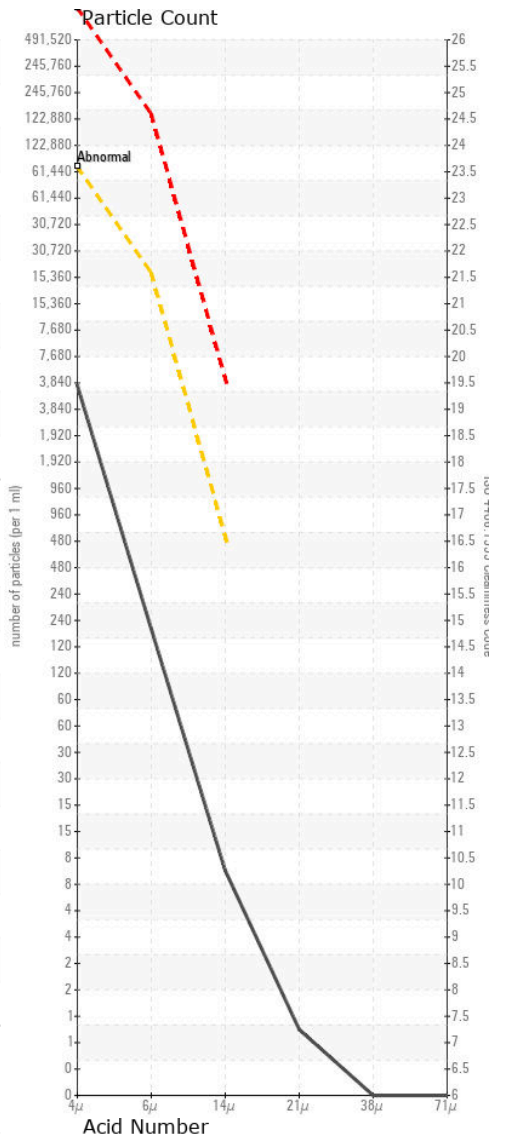
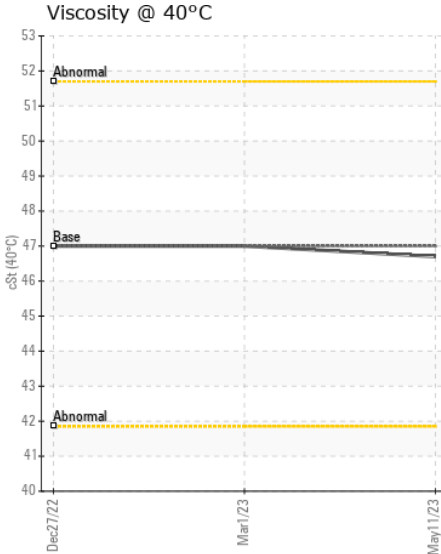
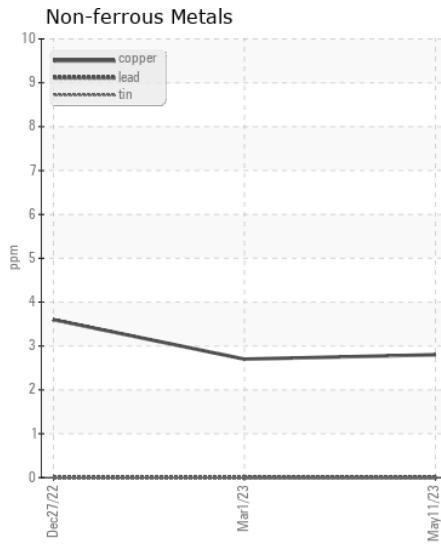
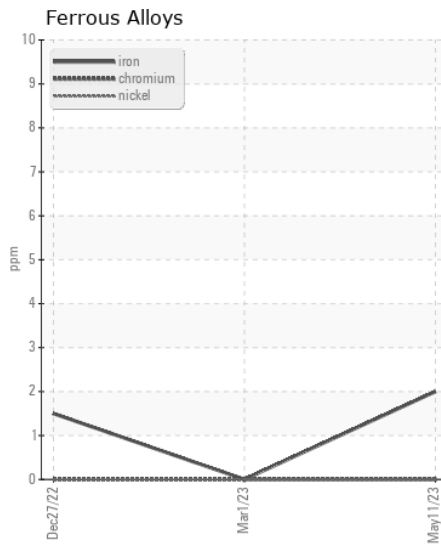
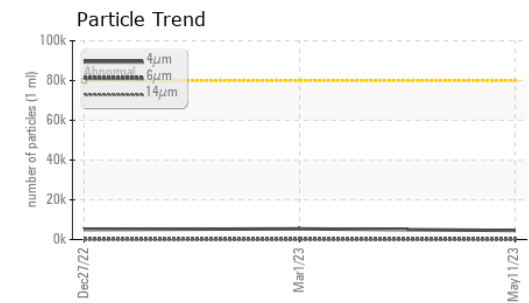
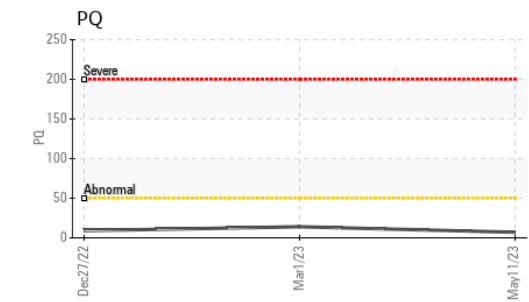
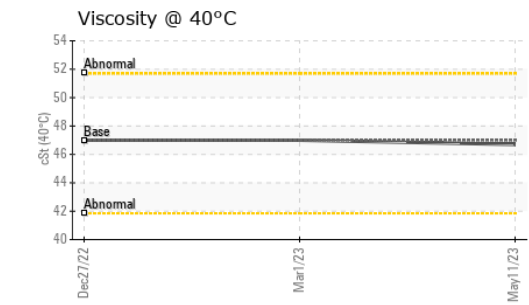
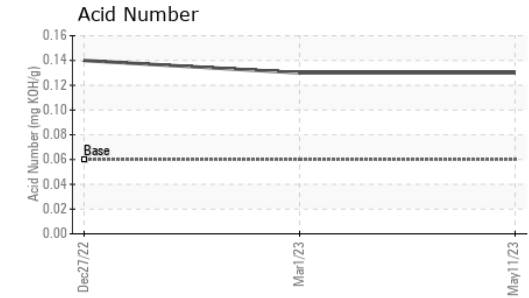
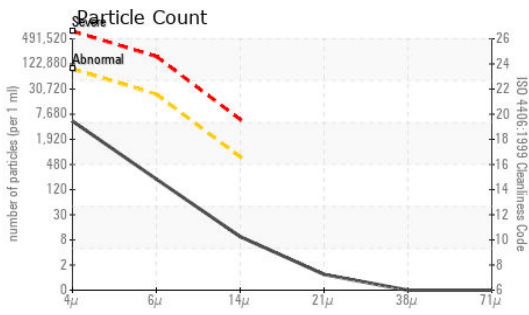
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>11	<b>1</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>4584</b>	5418	5054
Particles >6µm		ASTM D7647	>20000	<b>189</b>	274	392
Particles >14µm		ASTM D7647	>640	<b>8</b>	14	24
Particles >21µm		ASTM D7647	>160	<b>1</b>	4	6
Particles >38µm		ASTM D7647	>40	<b>0</b>	0	1
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>23/21/16	<b>19/15/10</b>	20/15/11	20/16/12
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>0</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>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>&lt;1</b>	3	0
Calcium	ppm	ASTM D5185m		<b>5</b>	0	12
Phosphorus	ppm	ASTM D5185m	827	<b>515</b>	461	549
Zinc	ppm	ASTM D5185m	0	<b>31</b>	32	29
Sulfur	ppm	ASTM D5185m	13	<b>0</b>	0	150
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	<b>0.13</b>	0.13	0.14
Visc @ 40°C	cSt	ASTM D445	47	<b>46.7</b>	47.0	47.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0040582 **Received** : 15 May 2023  
**Lab Number** : 05846998 **Diagnosed** : 17 May 2023  
**Unique Number** : 10471105 **Diagnostician** : Jonathan Hester  
**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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