



# OIL ANALYSIS REPORT

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



Area  
**Store 4 - Fairmont**  
Machine Id  
**JOHN DEERE 210G 1FF210GXCKF527836**  
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>LEC0051048</b>	LEC0045363	LEC0039603
Sample Date		Client Info		<b>20 Jun 2024</b>	28 Sep 2023	03 Mar 2023
Machine Age	hrs	Client Info		<b>3579</b>	2878	2404
Oil Age	hrs	Client Info		<b>3579</b>	2878	2404
Filter Age	hrs	Client Info		<b>701</b>	2023	1549
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	NORMAL

## WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	<b>16</b>	16	13
Iron	ppm	ASTM D5185m	>32	<b>0</b>	4	<1
Chromium	ppm	ASTM D5185m	>9	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	<1	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>0</b>	0	0
Lead	ppm	ASTM D5185m	>28	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>4</b>	5	<1
Tin	ppm	ASTM D5185m	>5	<b>0</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

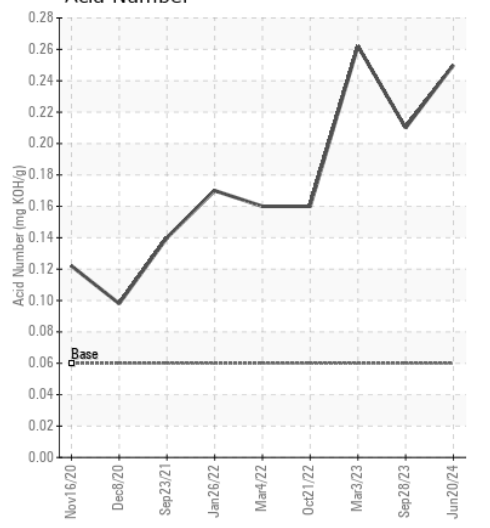
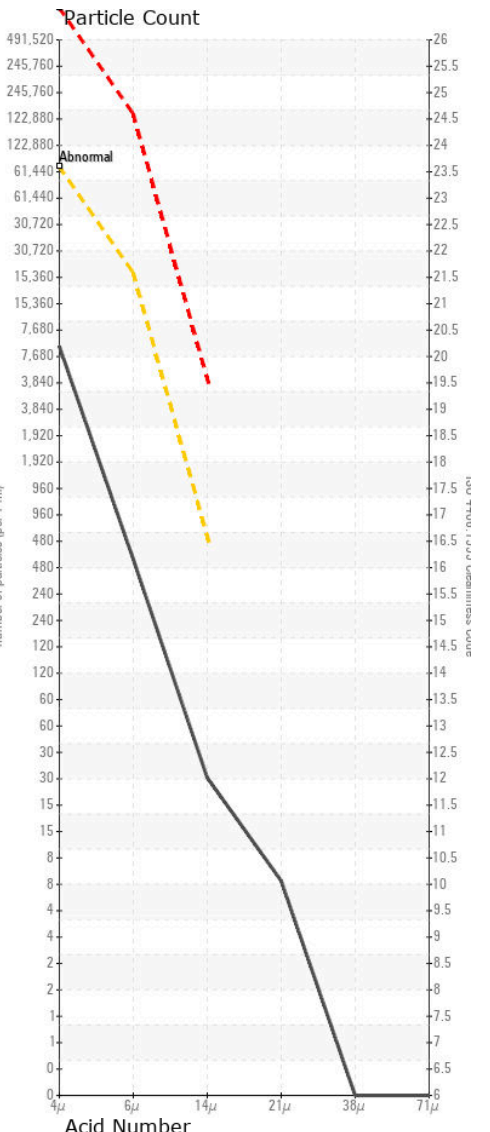
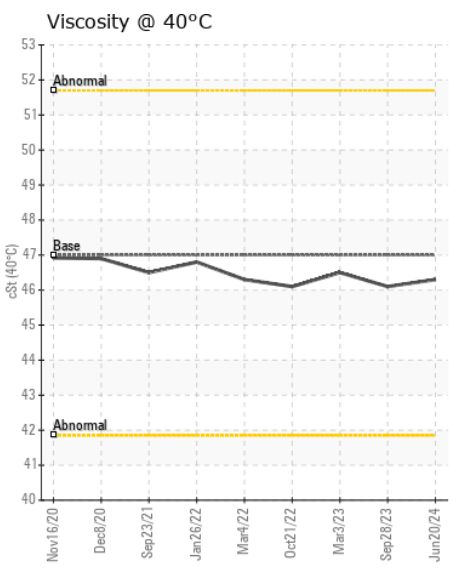
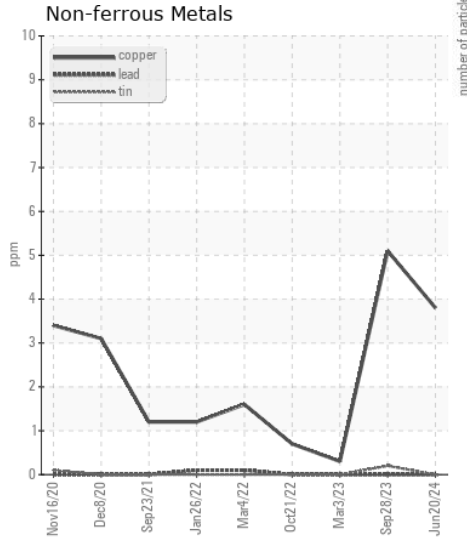
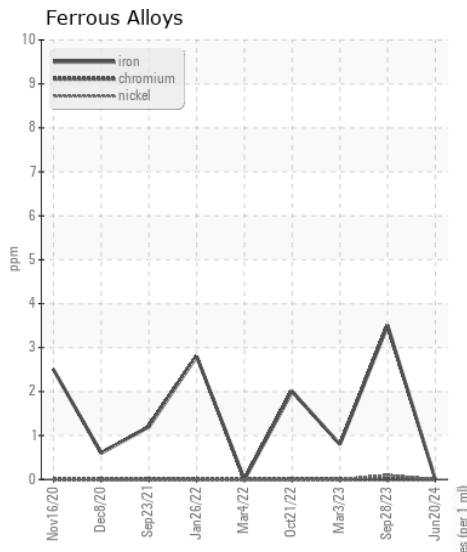
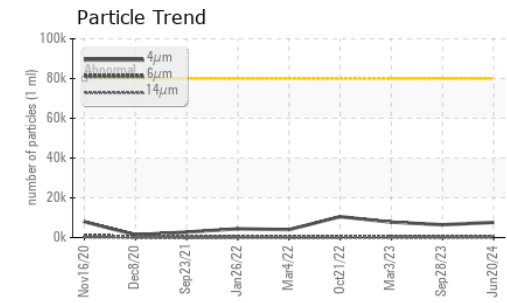
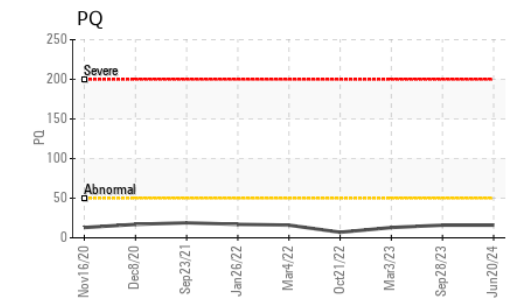
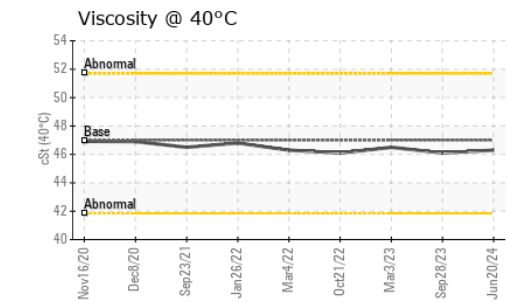
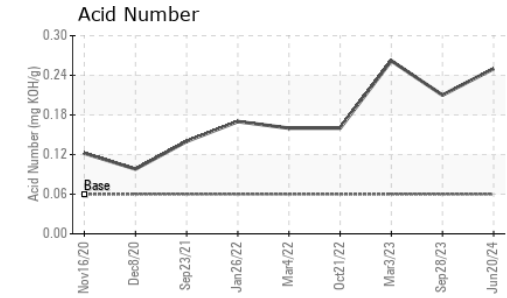
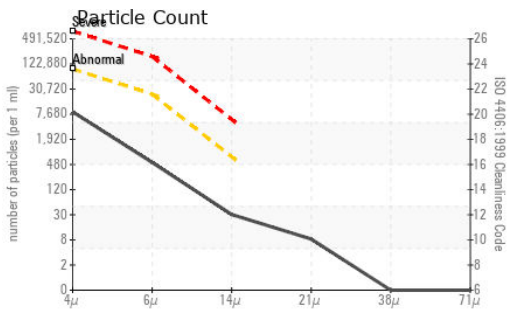
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>11	<b>&lt;1</b>	1	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Water		WC Method	>0.075	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>80000	<b>7641</b>	6459	7757
Particles >6µm		ASTM D7647	>20000	<b>471</b>	290	345
Particles >14µm		ASTM D7647	>640	<b>27</b>	12	11
Particles >21µm		ASTM D7647	>160	<b>7</b>	4	5
Particles >38µm		ASTM D7647	>40	<b>0</b>	0	3
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	2
Oil Cleanliness		ISO 4406 (c)	>23/21/16	<b>20/16/12</b>	20/15/11	20/16/11
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>2</b>	0	0
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	<1
Magnesium	ppm	ASTM D5185m		<b>0</b>	2	<1
Calcium	ppm	ASTM D5185m		<b>52</b>	71	12
Phosphorus	ppm	ASTM D5185m	827	<b>507</b>	557	472
Zinc	ppm	ASTM D5185m	0	<b>36</b>	50	0
Sulfur	ppm	ASTM D5185m	13	<b>159</b>	155	0
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	<b>0.25</b>	0.21	0.262
Visc @ 40°C	cSt	ASTM D445	47	<b>46.3</b>	46.1	46.5



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0051048 **Received** : 25 Jun 2024  
**Lab Number** : 06219596 **Tested** : 26 Jun 2024  
**Unique Number** : 11097793 **Diagnosed** : 26 Jun 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: PQ )

**LESLIE EQUIPMENT COMPANY**  
 105 TENNIS CENTER DR.  
 MARIETTA, OH  
 US 45750-9765  
 Contact: LEANNE KENDALL  
 KendalLeanne@lec1.com

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)

T: (740)373-5570