



# OIL ANALYSIS REPORT

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



Area  
**Store 8 - Pikeville**  
 Machine Id  
**JOHN DEERE 210G 1FF210GXCNF530286**  
 Component  
**Hydraulic System**  
 Fluid  
**HITACHI HYDRAULIC SUPER EX 46HN (63 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor. ( Customer Sample  
 Comment: OIL FILTER CADDIED AS WELL )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LEC0042787</b>	LEC0041074	LEC0040198
Sample Date		Client Info		<b>11 Oct 2023</b>	13 Jul 2023	12 May 2023
Machine Age	hrs	Client Info		<b>1570</b>	1083	831
Oil Age	hrs	Client Info		<b>1570</b>	1083	831
Filter Age	hrs	Client Info		<b>1570</b>	1083	831
Oil Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Filter Changed		Client Info		<b>Not Chngd</b>	Changed	Not Chngd
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

## WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	<b>15</b>	13	10
Iron	ppm	ASTM D5185m	>32	<b>6</b>	5	4
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>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>0</b>	2	3
Lead	ppm	ASTM D5185m	>28	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>9</b>	7	3
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	▲ MODER	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

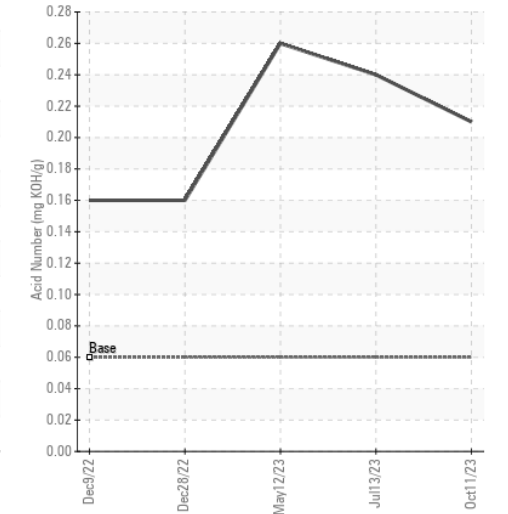
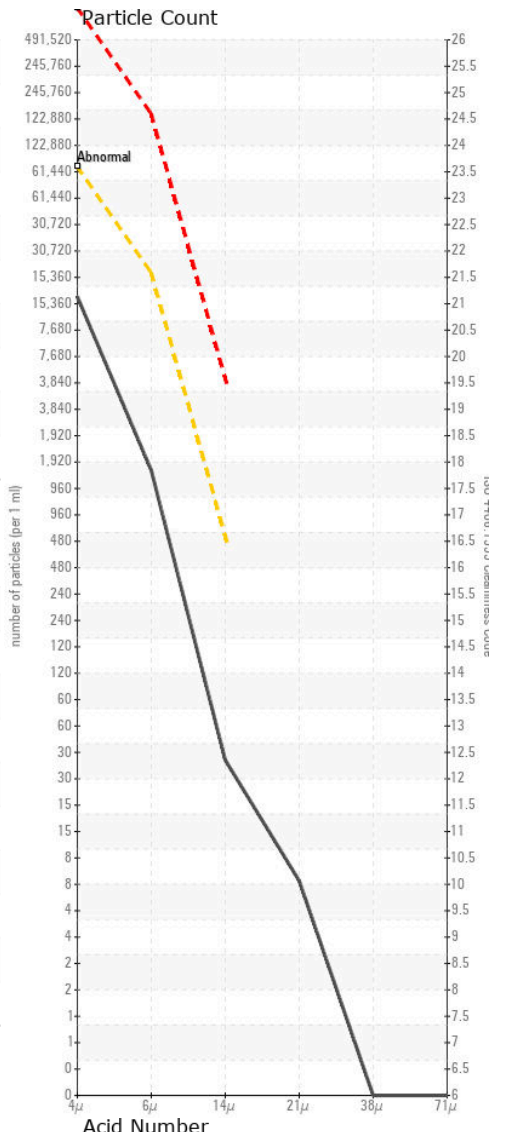
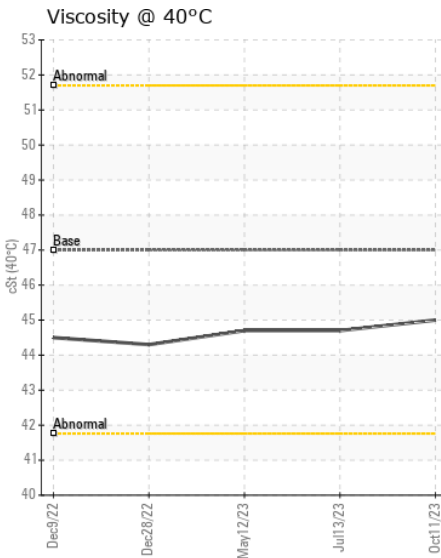
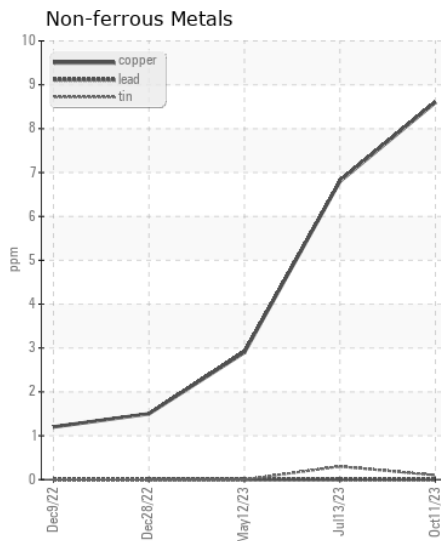
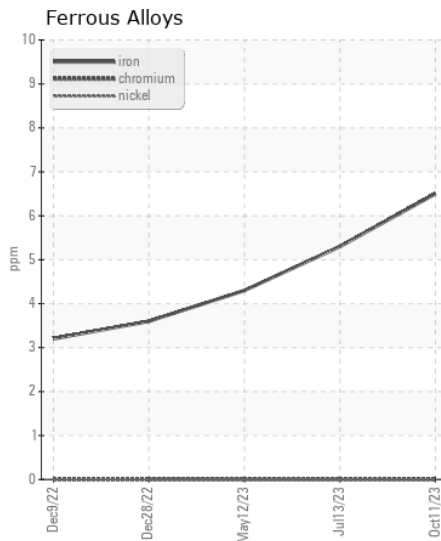
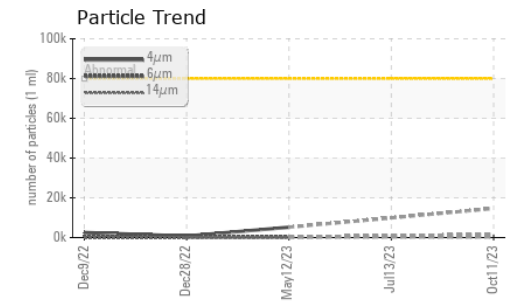
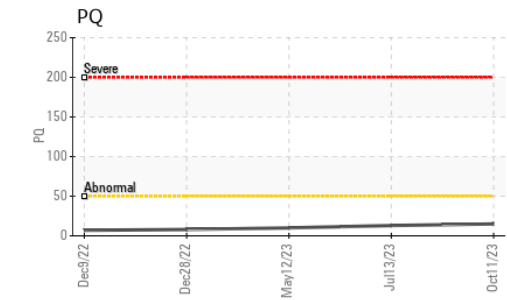
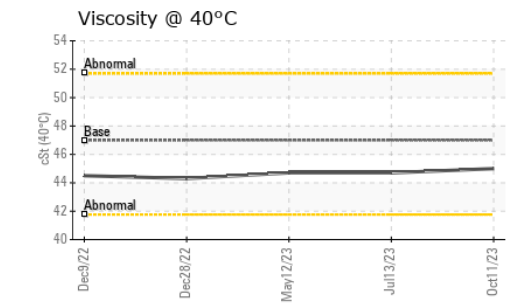
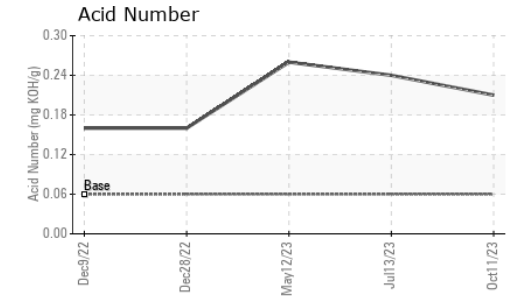
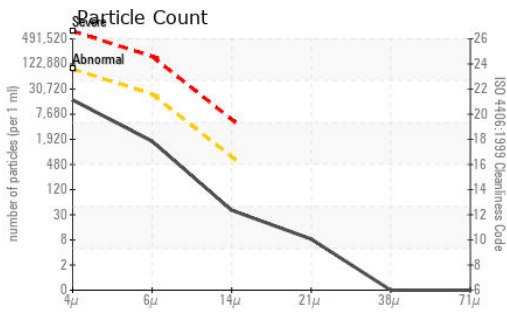
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Water		WC Method	>0.075	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>80000	<b>14627</b>	---	5213
Particles >6µm		ASTM D7647	>20000	<b>1507</b>	---	270
Particles >14µm		ASTM D7647	>640	<b>34</b>	---	7
Particles >21µm		ASTM D7647	>160	<b>7</b>	---	2
Particles >38µm		ASTM D7647	>40	<b>0</b>	---	0
Particles >71µm		ASTM D7647	>10	<b>0</b>	---	0
Oil Cleanliness		ISO 4406 (c)	>23/21/16	<b>21/18/12</b>	---	20/15/10
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>1</b>	<1	0
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>5</b>	2	4
Calcium	ppm	ASTM D5185m		<b>47</b>	50	54
Phosphorus	ppm	ASTM D5185m	827	<b>213</b>	221	194
Zinc	ppm	ASTM D5185m	0	<b>76</b>	75	56
Sulfur	ppm	ASTM D5185m	13	<b>405</b>	492	129
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	<b>0.21</b>	0.24	0.26
Visc @ 40°C	cSt	ASTM D445	47	<b>45.0</b>	44.7	44.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0042787 **Received** : 13 Oct 2023  
**Lab Number** : 05978205 **Tested** : 17 Oct 2023  
**Unique Number** : 10695500 **Diagnosed** : 17 Oct 2023 - Don Baldrige  
**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