



# OIL ANALYSIS REPORT

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

Area

{unassigned}

Machine Id

JOHN DEERE 35G 1FF035GXKKK287092

Component

Hydraulic System

Fluid

HITACHI HYDRAULIC SUPER EX 46HN (15 GAL)

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LEC0036633</b>	LEC0018664	LEC0012811
Sample Date		Client Info		<b>11 Nov 2022</b>	21 May 2021	29 Jul 2020
Machine Age	hrs	Client Info		<b>1442</b>	961	491
Oil Age	hrs	Client Info		<b>1442</b>	961	491
Filter Age	hrs	Client Info		<b>1442</b>	470	491
Oil Changed		Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	<b>9</b>	23	19
Iron	ppm	ASTM D5185m	>32	<b>5</b>	6	7
Chromium	ppm	ASTM D5185m	>9	<b>0</b>	<1	<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>2</b>	<1	0
Aluminum	ppm	ASTM D5185m	>9	<b>&lt;1</b>	<1	0
Lead	ppm	ASTM D5185m	>28	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m	>50	<b>2</b>	3	4
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	<1
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

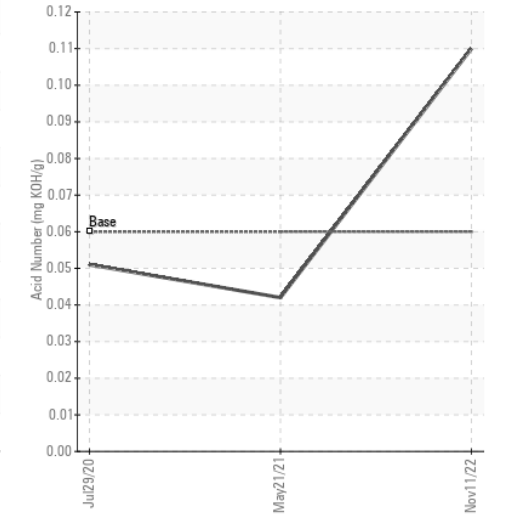
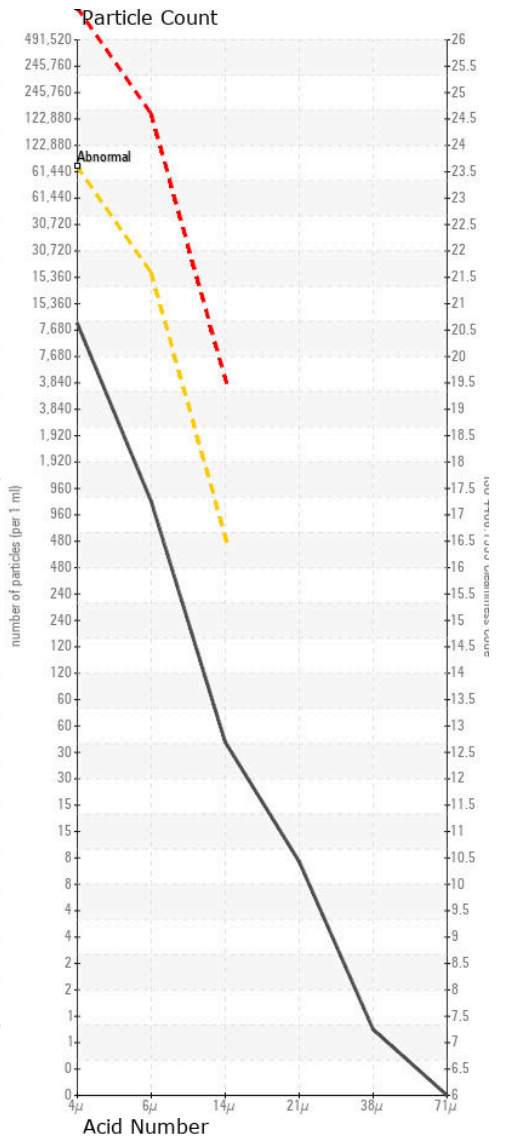
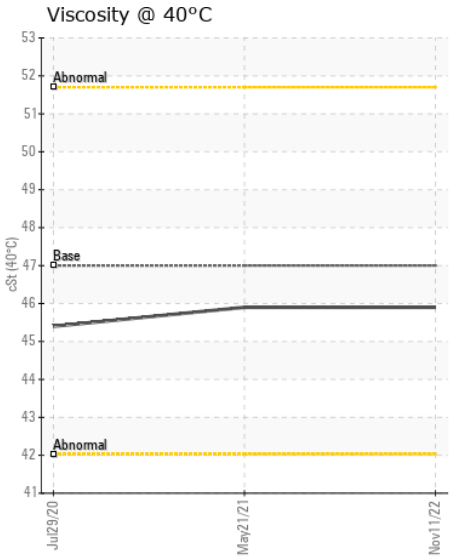
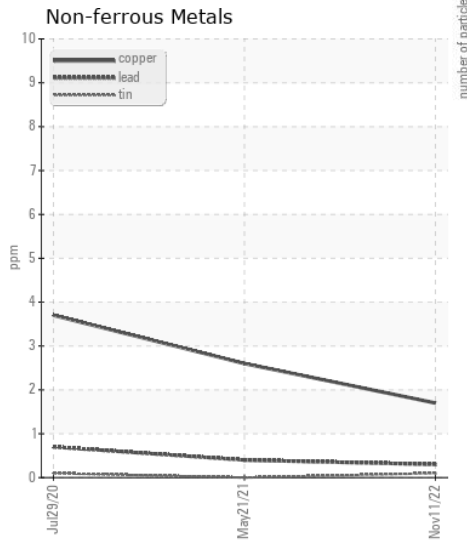
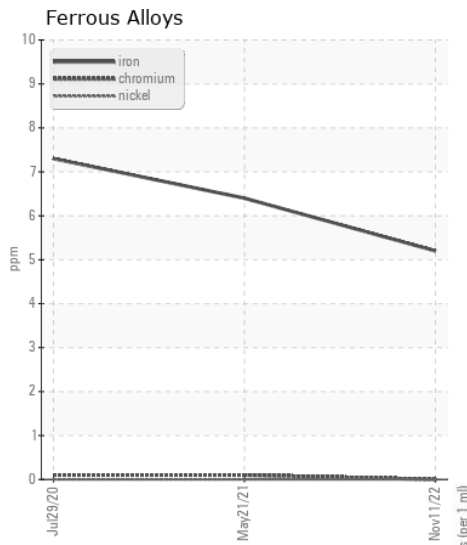
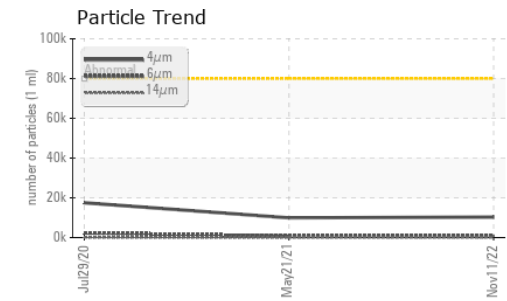
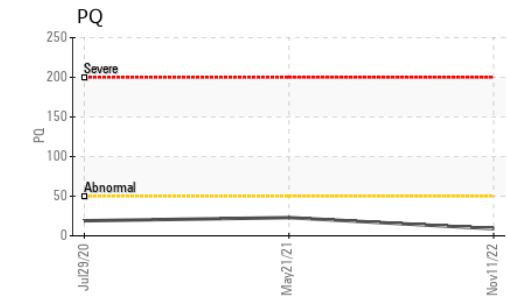
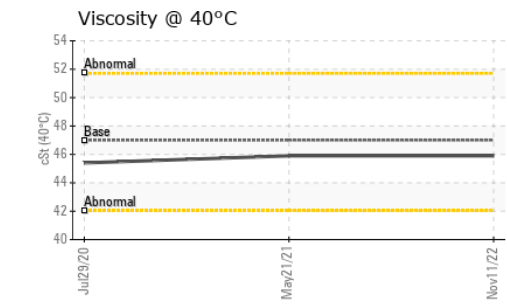
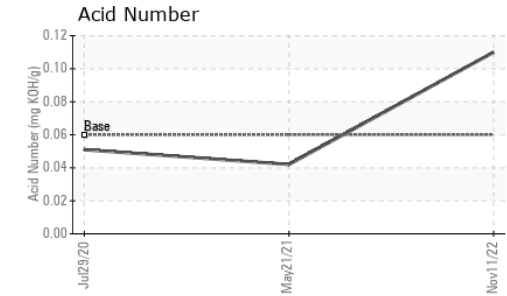
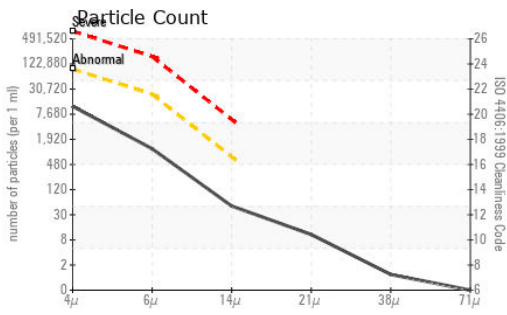
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>11	<b>1</b>	<1	2
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0	<1
Water		WC Method	>0.075	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>80000	<b>10313</b>	9909	▲ 17511
Particles >6µm		ASTM D7647	>20000	<b>1001</b>	651	▲ 2315
Particles >14µm		ASTM D7647	>640	<b>43</b>	10	56
Particles >21µm		ASTM D7647	>160	<b>9</b>	4	6
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>21/17/13</b>	20/17/10	▲ 21/18/13
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	VLITE
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>	2	0
Boron	ppm	ASTM D5185m		<b>0</b>	1	0
Barium	ppm	ASTM D5185m		<b>0</b>	<1	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>5</b>	10	13
Calcium	ppm	ASTM D5185m		<b>&lt;1</b>	0	4
Phosphorus	ppm	ASTM D5185m	827	<b>288</b>	305	315
Zinc	ppm	ASTM D5185m	0	<b>56</b>	42	33
Sulfur	ppm	ASTM D5185m	13	<b>1470</b>	1049	1139
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	<b>0.11</b>	0.042	0.051
Visc @ 40°C	cSt	ASTM D445	47	<b>45.9</b>	45.9	45.4



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0036633 **Received** : 15 Nov 2022  
**Lab Number** : 05693930 **Tested** : 16 Nov 2022  
**Unique Number** : 10218503 **Diagnosed** : 16 Nov 2022 - Jonathan Hester  
**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)

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