



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[144237]
 Machine Id
JOHN DEERE 210GLC 1FF210GXPNF529831
 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		LEC0044252	LEC0040538	LEC0041747
Sample Date		Client Info		18 Oct 2023	22 Aug 2023	31 May 2023
Machine Age	hrs	Client Info		1724	1324	1113
Oil Age	hrs	Client Info		1724	1324	1113
Filter Age	hrs	Client Info		611	211	1113
Oil Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Filter Changed		Client Info		Not Chngd	Not Chngd	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	10	11	12
Iron	ppm	ASTM D5185m	>32	1	2	1
Chromium	ppm	ASTM D5185m	>9	0	0	0
Nickel	ppm	ASTM D5185m	>5	<1	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>9	<1	0	<1
Lead	ppm	ASTM D5185m	>28	<1	<1	<1
Copper	ppm	ASTM D5185m	>50	4	2	1
Tin	ppm	ASTM D5185m	>5	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

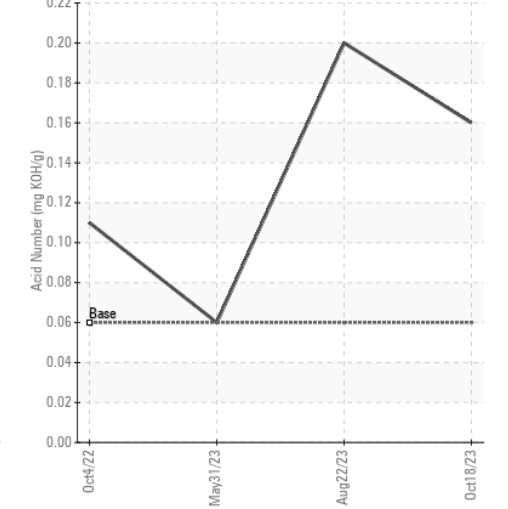
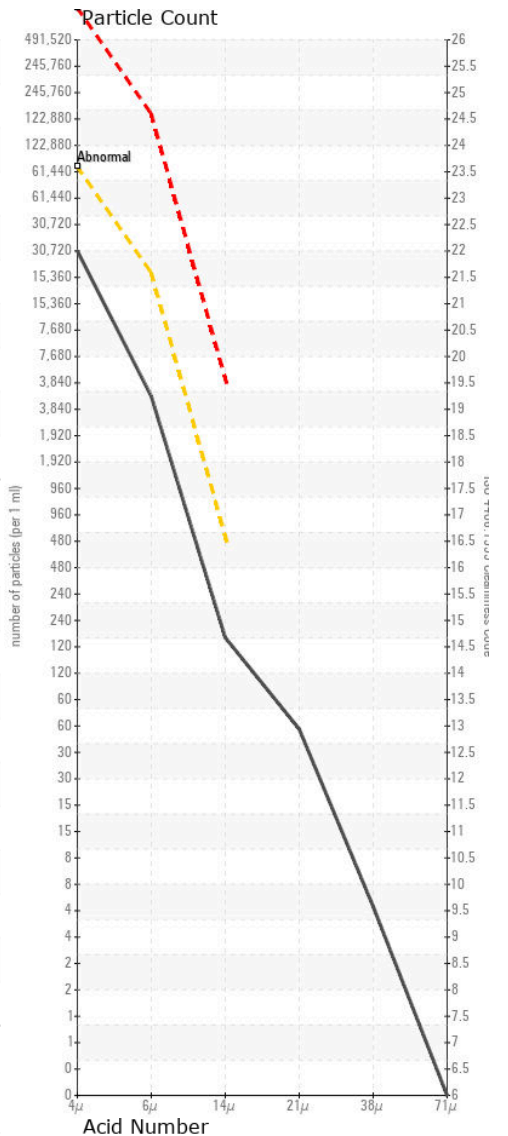
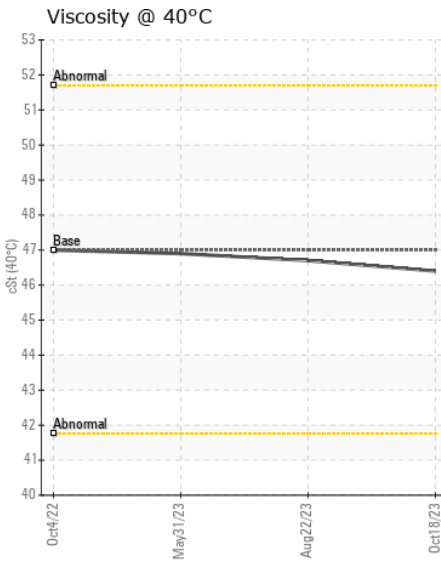
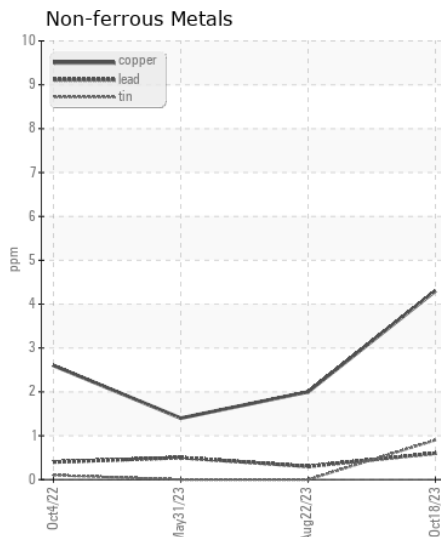
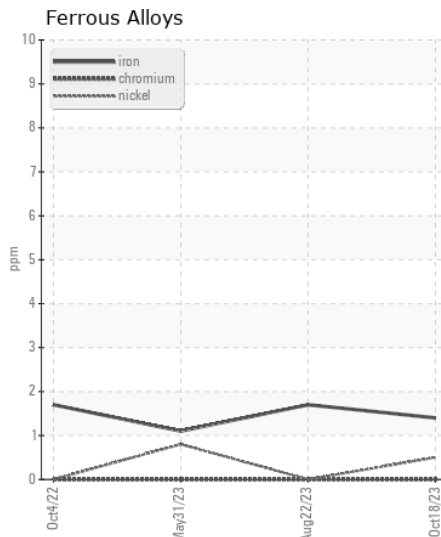
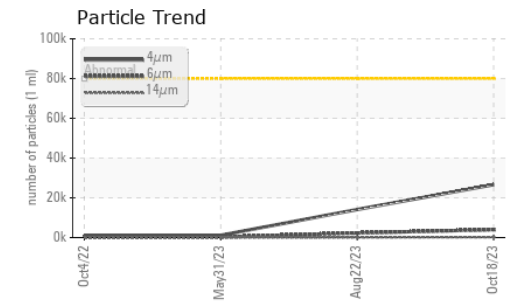
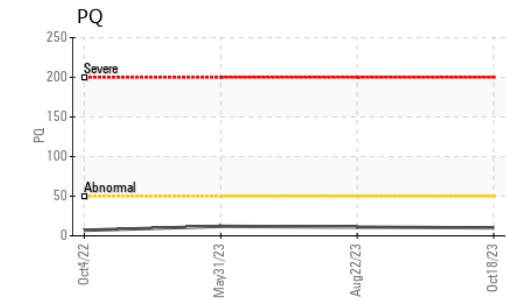
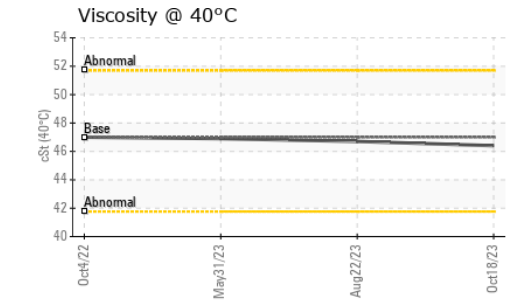
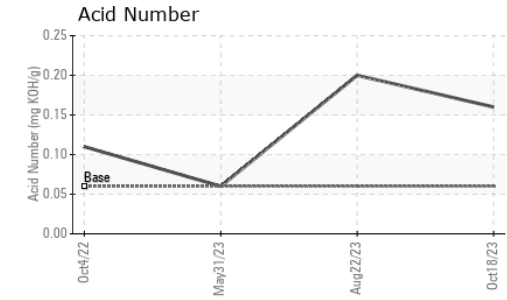
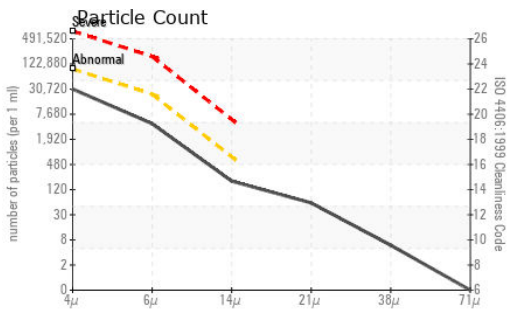
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>11	<1	<1	0
Potassium	ppm	ASTM D5185m	>20	2	2	2
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	26629	14124	1150
Particles >6µm		ASTM D7647	>20000	3971	2311	271
Particles >14µm		ASTM D7647	>640	169	50	19
Particles >21µm		ASTM D7647	>160	51	14	5
Particles >38µm		ASTM D7647	>40	5	0	1
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>23/21/16	22/19/15	21/18/13	17/15/11
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.075	NEG	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	2	0	1
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	2	0
Molybdenum	ppm	ASTM D5185m		0	<1	<1
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		5	1	<1
Calcium	ppm	ASTM D5185m		58	8	9
Phosphorus	ppm	ASTM D5185m	827	519	511	554
Zinc	ppm	ASTM D5185m	0	63	43	26
Sulfur	ppm	ASTM D5185m	13	176	0	0
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.16	0.20	0.06
Visc @ 40°C	cSt	ASTM D445	47	46.4	46.7	46.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0044252 **Received** : 23 Oct 2023
Lab Number : 05986382 **Tested** : 24 Oct 2023
Unique Number : 10709044 **Diagnosed** : 24 Oct 2023 - 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:
 F: (740)373-5570