



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 210G 1FF210GXKNF530401
 Component
Hydraulic System
 Fluid
HITACHI HYDRAULIC SUPER EX 46HN (--- GAL)

RECOMMENDATION

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0207831	JR0188721	---
Sample Date		Client Info		23 May 2024	15 Sep 2023	---
Machine Age	hrs	Client Info		1027	561	---
Oil Age	hrs	Client Info		1027	561	---
Filter Age	hrs	Client Info		1027	0	---
Oil Changed		Client Info		Not Changed	Not Changed	---
Filter Changed		Client Info		Changed	Not Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	18	14	---
Iron	ppm	ASTM D5185m	>32	2	3	---
Chromium	ppm	ASTM D5185m	>9	0	0	---
Nickel	ppm	ASTM D5185m	>5	0	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>9	0	0	---
Lead	ppm	ASTM D5185m	>28	0	0	---
Copper	ppm	ASTM D5185m	>50	<1	3	---
Tin	ppm	ASTM D5185m	>5	0	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

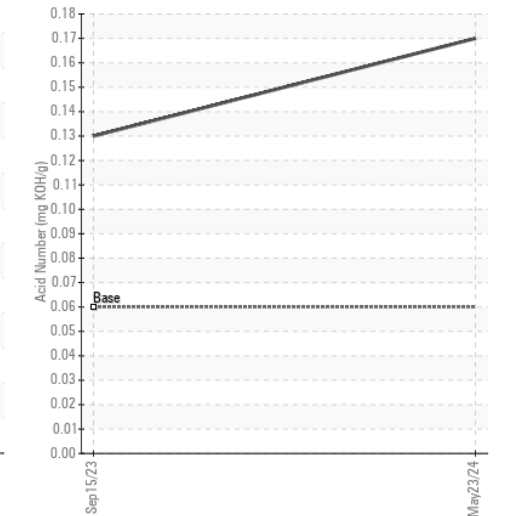
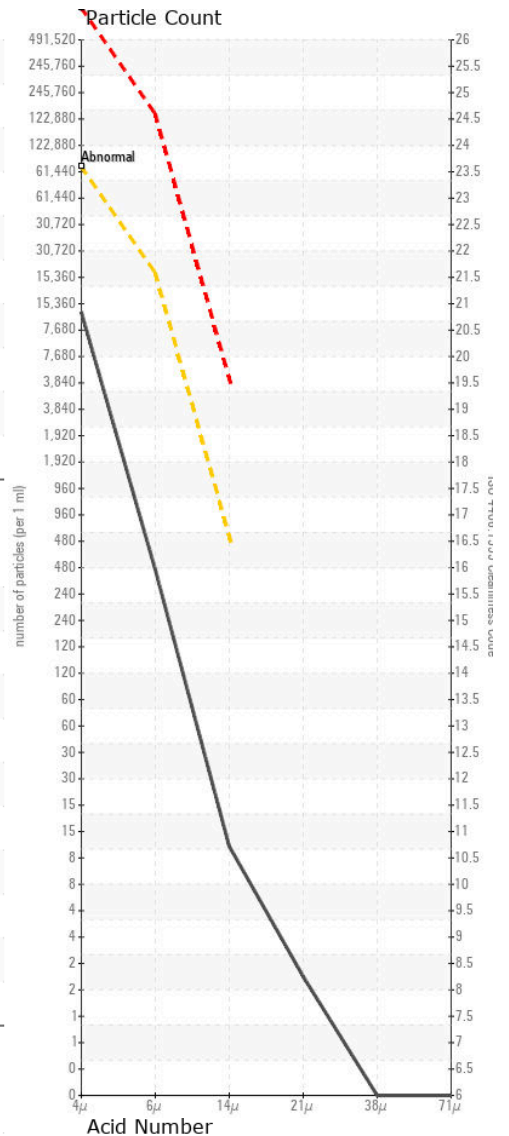
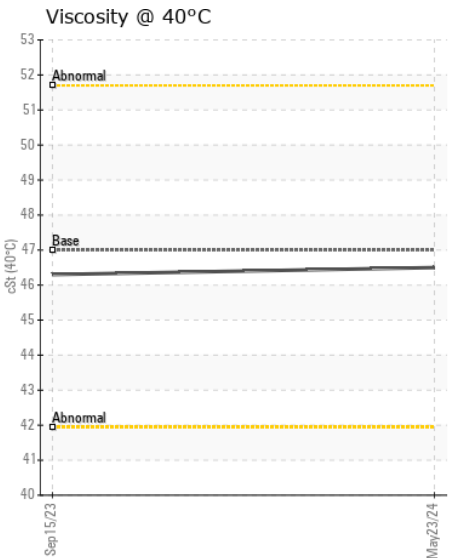
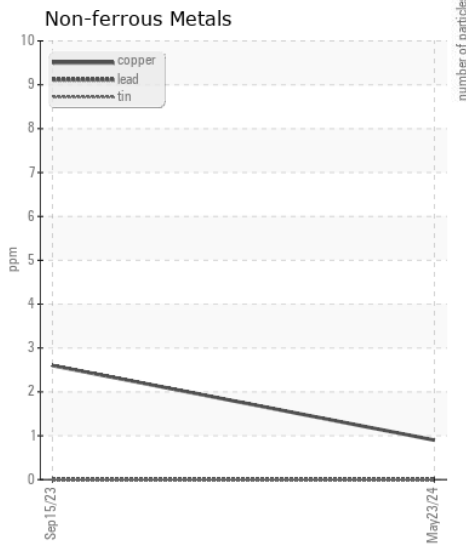
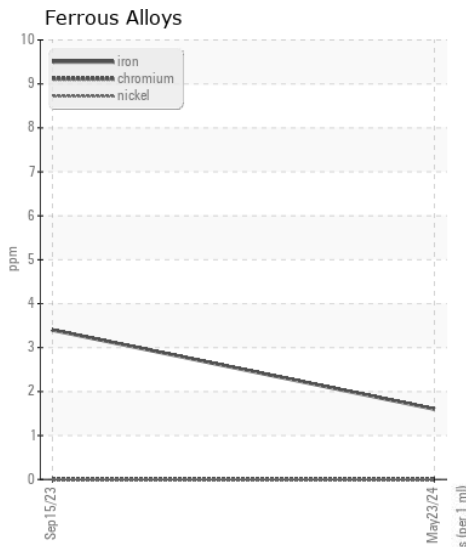
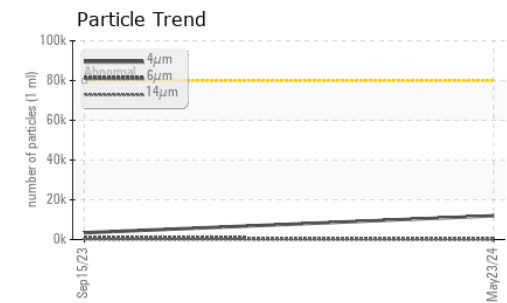
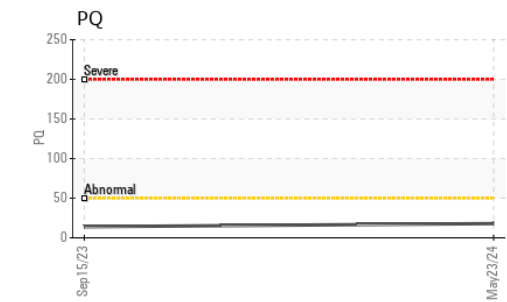
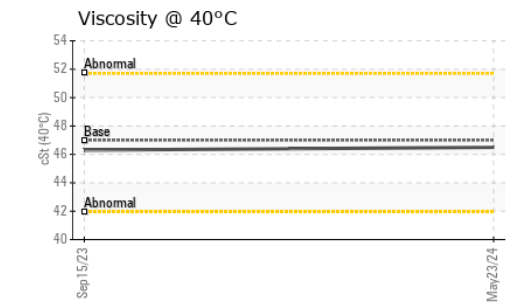
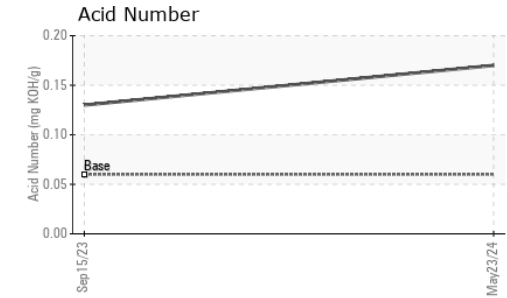
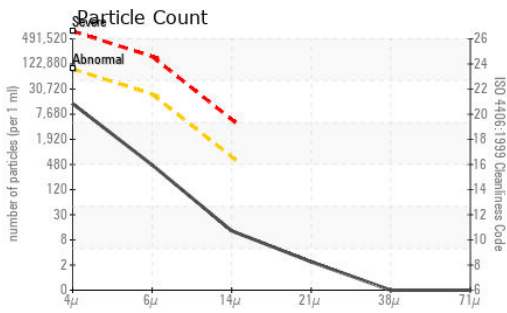
The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>11	<1	<1	---
Potassium	ppm	ASTM D5185m	>20	<1	<1	---
Water		WC Method	>0.075	NEG	NEG	---
Particles >4µm		ASTM D7647	>80000	11967	3436	---
Particles >6µm		ASTM D7647	>20000	411	704	---
Particles >14µm		ASTM D7647	>640	11	43	---
Particles >21µm		ASTM D7647	>160	2	8	---
Particles >38µm		ASTM D7647	>40	0	1	---
Particles >71µm		ASTM D7647	>10	0	0	---
Oil Cleanliness		ISO 4406 (c)	>23/21/16	21/16/11	19/17/13	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.075	NEG	NEG	---

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>21	0	2	---
Boron	ppm	ASTM D5185m		0	0	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		0	0	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		2	2	---
Calcium	ppm	ASTM D5185m		11	4	---
Phosphorus	ppm	ASTM D5185m	827	521	515	---
Zinc	ppm	ASTM D5185m	0	23	24	---
Sulfur	ppm	ASTM D5185m	13	76	86	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.17	0.13	---
Visc @ 40°C	cSt	ASTM D445	47	46.5	46.3	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0207831 **Received** : 28 May 2024
Lab Number : 06192104 **Tested** : 29 May 2024
Unique Number : 11048856 **Diagnosed** : 30 May 2024 - Angela Borella
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)

JRE - ASHEVILLE
 101 BRUCE DRIVE
 ASHEVILLE, NC
 US 28806

Contact: Randy Warren
 randy.warren@jamesriverequipment.com

T: (528)667-0176

F: (828)667-4865