



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[05W46759]
 Machine Id
JOHN DEERE 210G 1FF210GXJNF530402
 Component
Hydraulic System
 Fluid
HITACHI HYDRAULIC SUPER EX 46HN (120 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0214477	JR0208588	JR0190010
Sample Date		Client Info		29 May 2024	28 Feb 2024	16 Oct 2023
Machine Age	hrs	Client Info		2035	1478	962
Oil Age	hrs	Client Info		2035	1478	962
Filter Age	hrs	Client Info		1000	0	962
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	16	11	11
Iron	ppm	ASTM D5185m	>32	2	1	2
Chromium	ppm	ASTM D5185m	>9	0	0	0
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>9	0	0	0
Lead	ppm	ASTM D5185m	>28	0	0	0
Copper	ppm	ASTM D5185m	>50	<1	1	<1
Tin	ppm	ASTM D5185m	>5	0	0	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

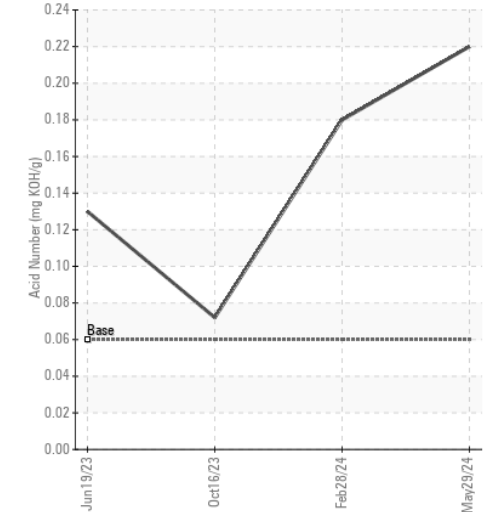
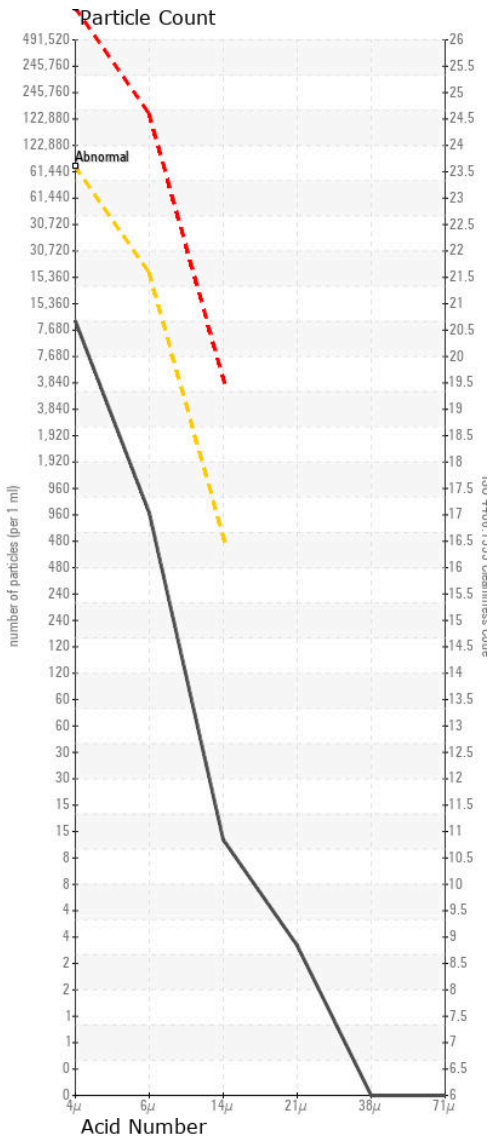
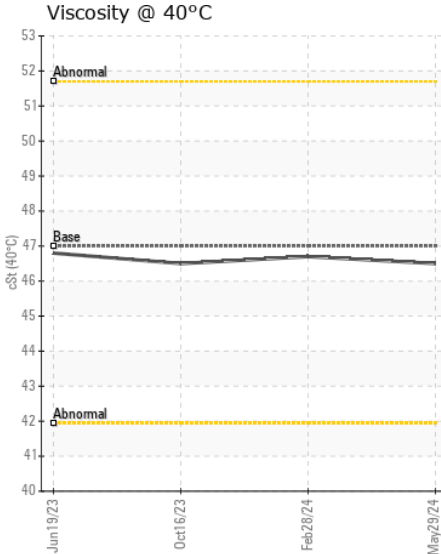
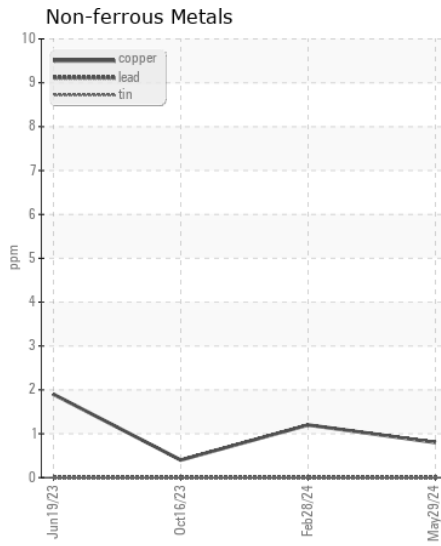
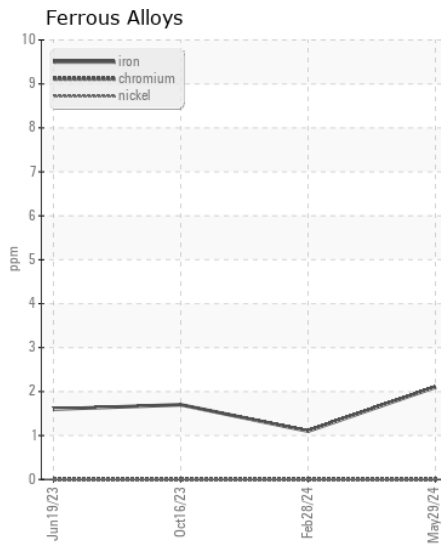
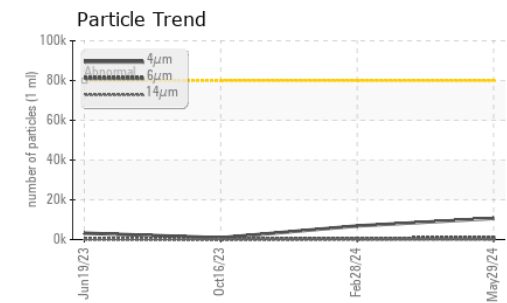
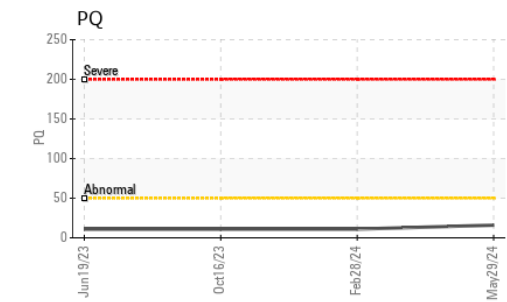
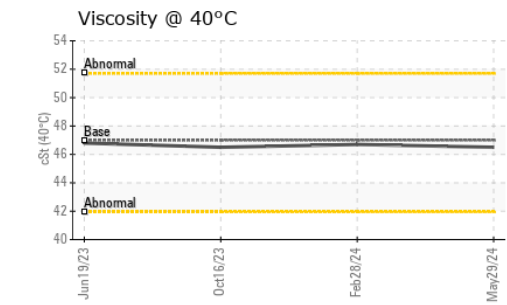
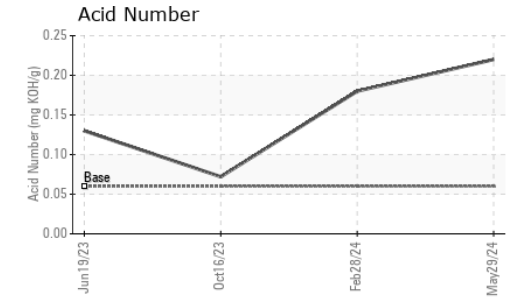
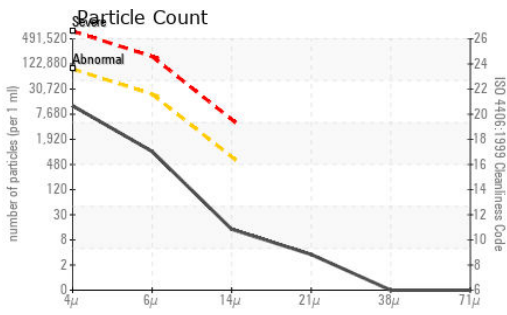
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>11	<1	<1	<1
Potassium	ppm	ASTM D5185m	>20	<1	0	2
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	10652	6873	904
Particles >6µm		ASTM D7647	>20000	864	401	225
Particles >14µm		ASTM D7647	>640	12	8	20
Particles >21µm		ASTM D7647	>160	3	1	5
Particles >38µm		ASTM D7647	>40	0	0	0
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>23/21/16	21/17/11	20/16/10	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	<1	2	<1
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	3
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		2	0	0
Calcium	ppm	ASTM D5185m		6	4	2
Phosphorus	ppm	ASTM D5185m	827	516	517	538
Zinc	ppm	ASTM D5185m	0	24	26	37
Sulfur	ppm	ASTM D5185m	13	108	95	117
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.22	0.18	0.072
Visc @ 40°C	cSt	ASTM D445	47	46.5	46.7	46.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : JR0214477

Lab Number : 06196581

Unique Number : 11058704

Test Package : CONST (Additional Tests: PQ)

Received : 31 May 2024

Tested : 03 Jun 2024

Diagnosed : 03 Jun 2024 - Don Baldrige

JRE - MANASSAS PARK

9107 OWENS DRIVE

MANASSAS PARK, VA

US 20111

Contact: TECHNICIAN ACCOUNT

catherine.anastasio@wearcheck.com

T:

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)

F: (703)631-4715