



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area

JAMES NOAH

Machine Id

JOHN DEERE 210GLC JOHN DEERE 210 GLC (S/N 1FF210GXENF530554)

Component

Tank Return Hydraulic System

Fluid

HITACHI HYDRAULIC SUPER EX 46HN (40 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WE0003546	WE0003411	---
Sample Date		Client Info		25 Jun 2024	08 May 2023	---
Machine Age	hrs	Client Info		1019	498	---
Oil Age	hrs	Client Info		1019	498	---
Filter Age	hrs	Client Info		1019	498	---
Oil Changed		Client Info		Not Chngd	N/A	---
Filter Changed		Client Info		Not Chngd	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	14	14	---
Iron	ppm	ASTM D5185m	>32	<1	2	---
Chromium	ppm	ASTM D5185m	>9	0	<1	---
Nickel	ppm	ASTM D5185m	>5	0	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m		0	<1	---
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

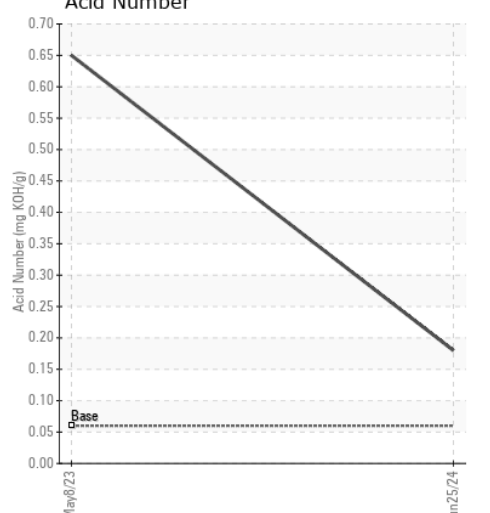
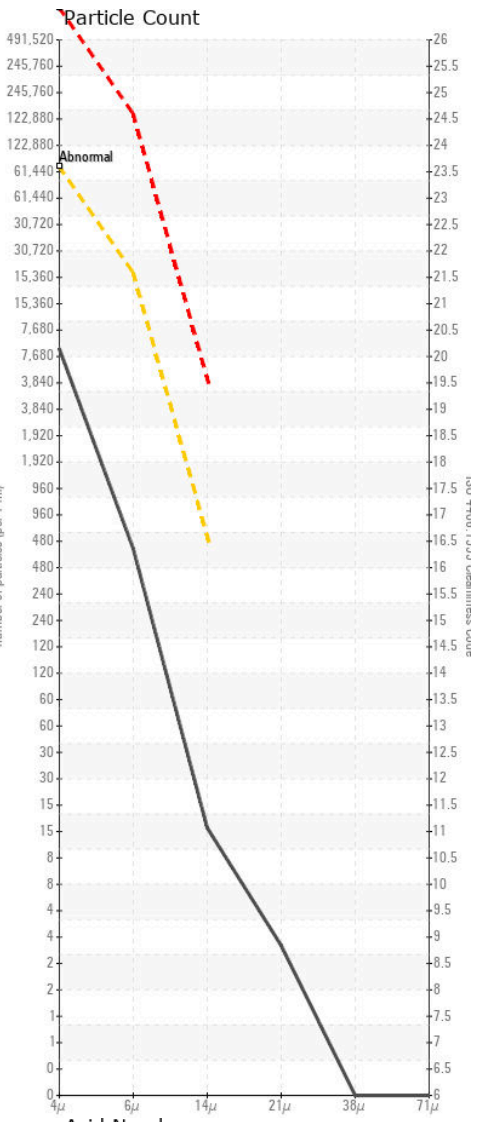
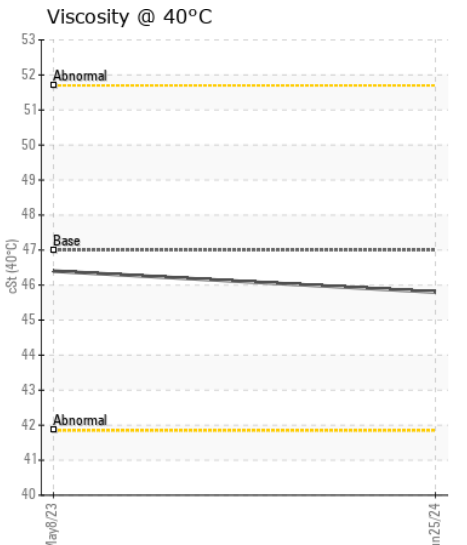
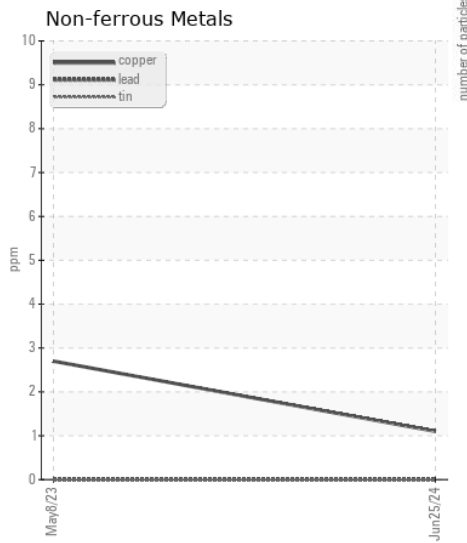
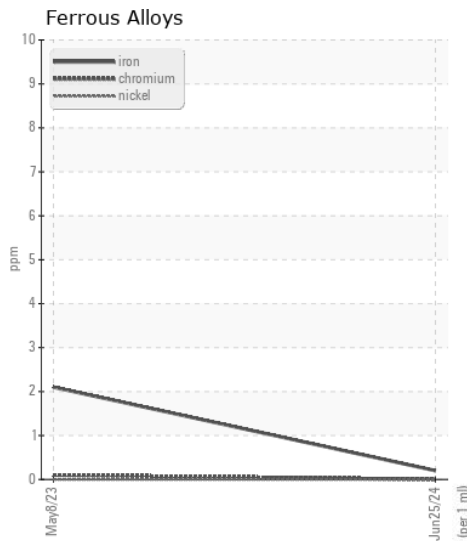
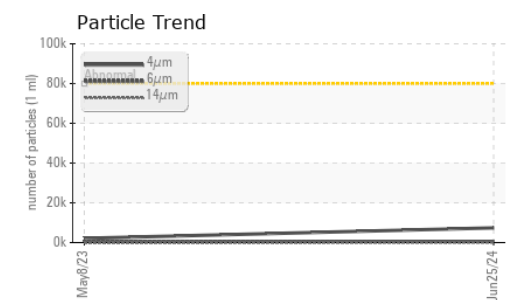
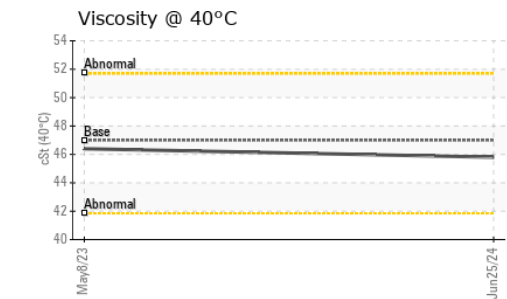
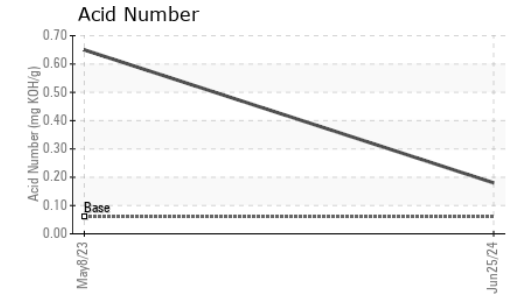
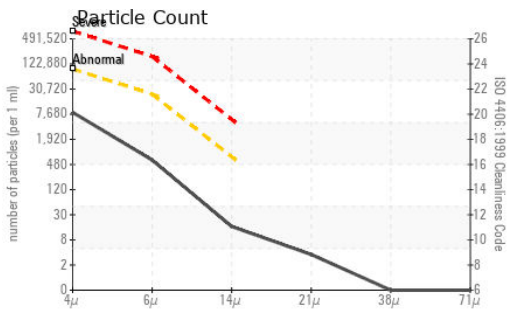
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>11	<1	0	---
Potassium	ppm	ASTM D5185m	>20	0	<1	---
Water		WC Method	>0.075	NEG	NEG	---
Particles >4µm		ASTM D7647	>80000	7407	2141	---
Particles >6µm		ASTM D7647	>20000	540	307	---
Particles >14µm		ASTM D7647	>640	14	13	---
Particles >21µm		ASTM D7647	>160	3	3	---
Particles >38µm		ASTM D7647	>40	0	0	---
Particles >71µm		ASTM D7647	>10	0	0	---
Oil Cleanliness		ISO 4406 (c)	>23/21/16	20/16/11	18/15/11	---
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 suitable for further service.

Sodium	ppm	ASTM D5185m	>21	<1	<1	---
Boron	ppm	ASTM D5185m		0	0	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		0	<1	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m		0	1	---
Calcium	ppm	ASTM D5185m		0	4	---
Phosphorus	ppm	ASTM D5185m	827	521	583	---
Zinc	ppm	ASTM D5185m	0	24	30	---
Sulfur	ppm	ASTM D5185m	13	83	147	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.18	0.65	---
Visc @ 40°C	cSt	ASTM D445	47	45.8	46.4	---



Certificate L2367

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

Sample No. : WE0003546

Lab Number : 06222273

Unique Number : 11100470

Test Package : CONST (Additional Tests: PQ)

Received : 27 Jun 2024

Tested : 28 Jun 2024

Diagnosed : 28 Jun 2024 - Don Baldrige

WARRIOR TRACTOR AND EQUIPMENT - HUNTSVILLE

25135 ONE AVIATION WAY SW

MADISON, AL

US 35756

Contact: BOBBY LUCKY

warriorparts033@gmail.com

T:

F:

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)