



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 50G 1FF050GXAKH291948
 Component
Hydraulic System
 Fluid
HITACHI HYDRAULIC SUPER EX 46HN (14 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0212171	JR0136984	---
Sample Date		Client Info		28 May 2024	12 Jul 2022	---
Machine Age	hrs	Client Info		2377	1896	---
Oil Age	hrs	Client Info		500	1896	---
Filter Age	hrs	Client Info		500	1896	---
Oil Changed		Client Info		Not Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	16	25	---
Iron	ppm	ASTM D5185m	>32	3	5	---
Chromium	ppm	ASTM D5185m	>9	<1	0	---
Nickel	ppm	ASTM D5185m	>5	<1	0	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m		1	0	---
Aluminum	ppm	ASTM D5185m	>9	1	1	---
Lead	ppm	ASTM D5185m	>28	<1	1	---
Copper	ppm	ASTM D5185m	>50	2	2	---
Tin	ppm	ASTM D5185m	>5	<1	<1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	LIGHT	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

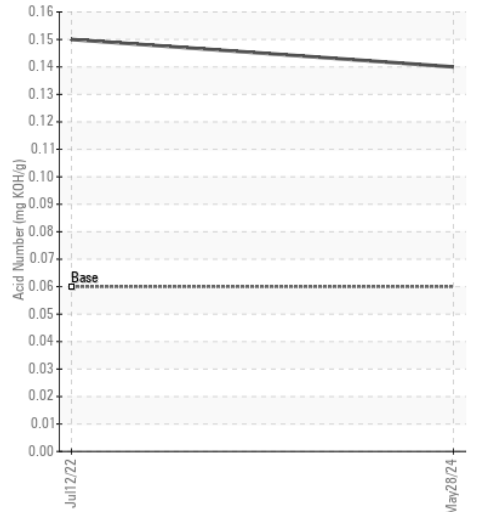
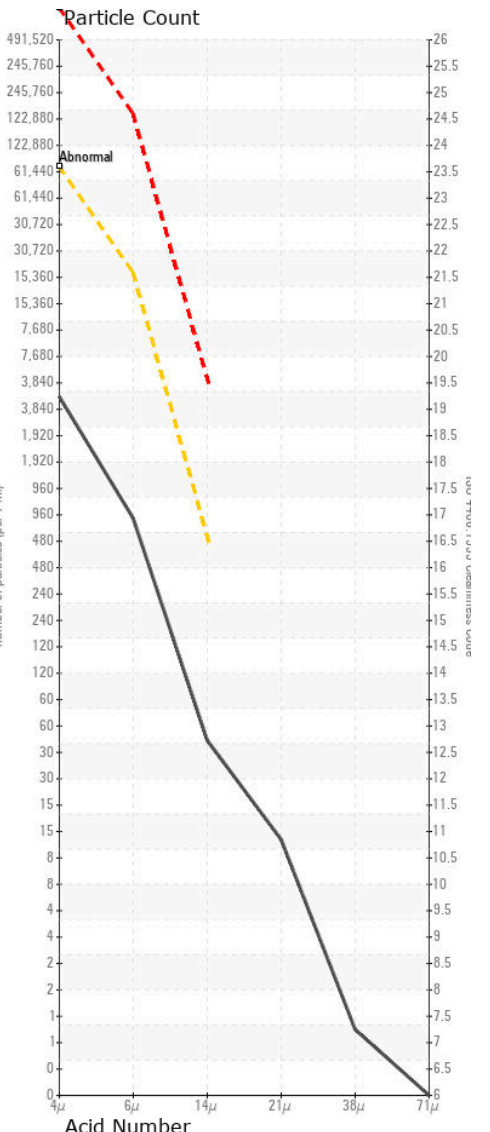
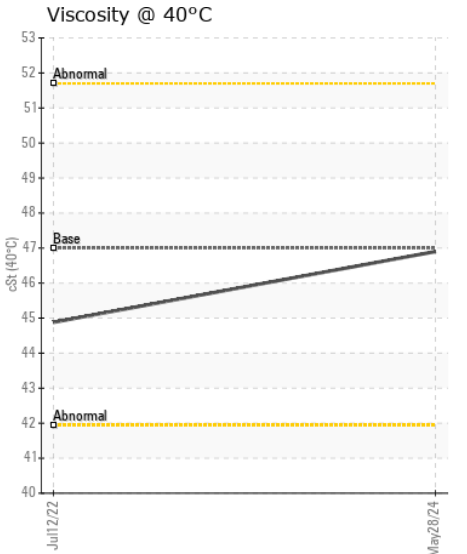
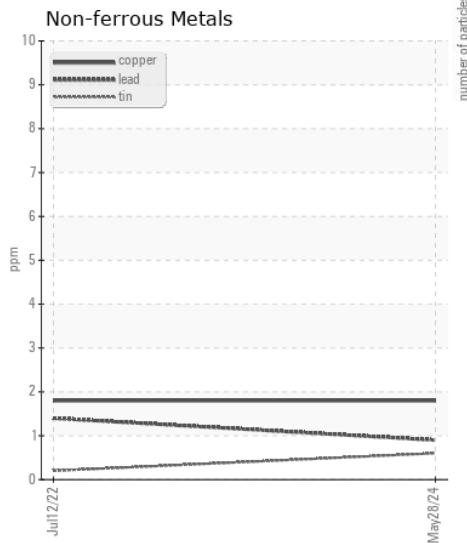
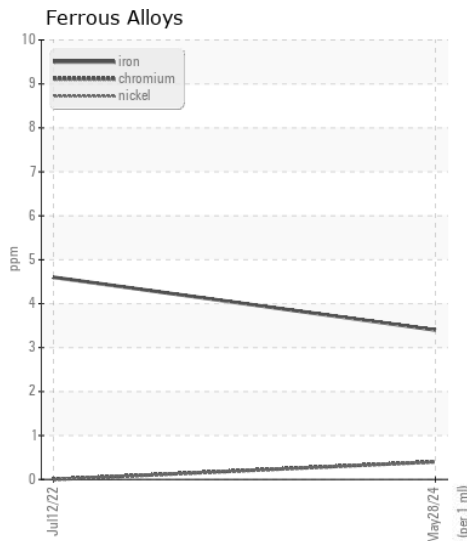
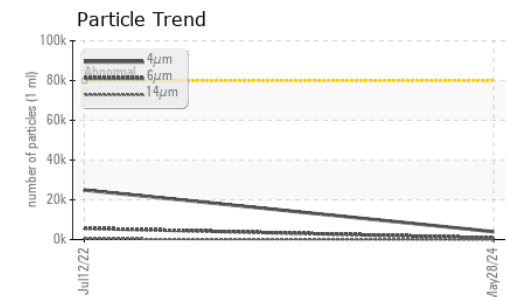
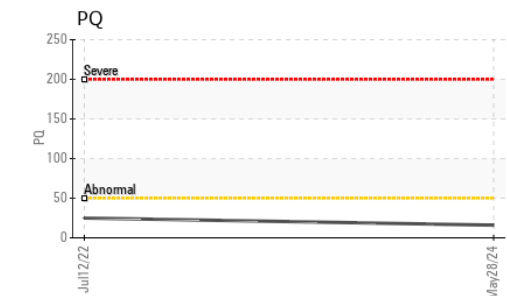
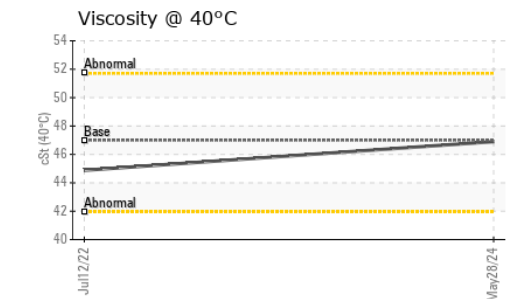
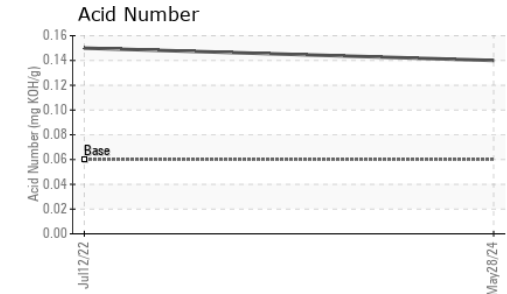
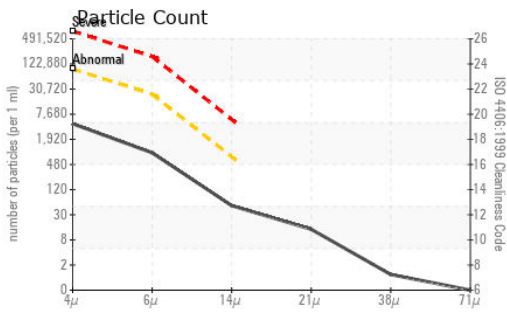
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>11	2	1	---
Potassium	ppm	ASTM D5185m	>20	<1	<1	---
Water		WC Method	>0.075	NEG	NEG	---
Particles >4µm		ASTM D7647	>80000	3956	24928	---
Particles >6µm		ASTM D7647	>20000	802	5656	---
Particles >14µm		ASTM D7647	>640	44	337	---
Particles >21µm		ASTM D7647	>160	12	94	---
Particles >38µm		ASTM D7647	>40	1	5	---
Particles >71µm		ASTM D7647	>10	0	0	---
Oil Cleanliness		ISO 4406 (c)	>23/21/16	19/17/13	22/20/16	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	LIGHT	---
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	0	0	---
Boron	ppm	ASTM D5185m		0	<1	---
Barium	ppm	ASTM D5185m		0	2	---
Molybdenum	ppm	ASTM D5185m		<1	<1	---
Manganese	ppm	ASTM D5185m		<1	0	---
Magnesium	ppm	ASTM D5185m		3	8	---
Calcium	ppm	ASTM D5185m		0	10	---
Phosphorus	ppm	ASTM D5185m	827	406	330	---
Zinc	ppm	ASTM D5185m	0	37	45	---
Sulfur	ppm	ASTM D5185m	13	581	1241	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.14	0.15	---
Visc @ 40°C	cSt	ASTM D445	47	46.9	44.88	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0212171 **Received** : 29 May 2024
Lab Number : 06194601 **Tested** : 30 May 2024
Unique Number : 11056724 **Diagnosed** : 30 May 2024 - Wes Davis
Test Package : CONST (Additional Tests: PQ)

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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)