



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[CITY OF CHARLESTOWN]
 Machine Id
JOHN DEERE 50G 1FF050GXPGH285200
 Component
Hydraulic System
 Fluid
HITACHI HYDRAULIC SUPER EX 46HN (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0210649	JR0130679	---
Sample Date		Client Info		12 Mar 2024	13 May 2022	---
Machine Age	hrs	Client Info		1815	1132	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Not Changd	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	15	21	---
Iron	ppm	ASTM D5185m	>32	10	7	---
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	<1	---
Aluminum	ppm	ASTM D5185m	>9	<1	<1	---
Lead	ppm	ASTM D5185m	>28	0	0	---
Copper	ppm	ASTM D5185m	>50	1	2	---
Tin	ppm	ASTM D5185m	>5	<1	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

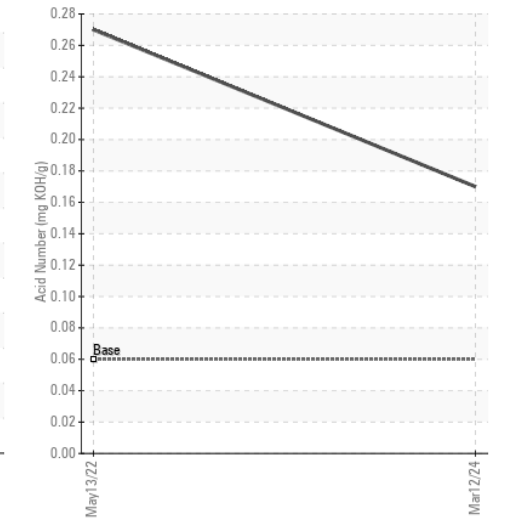
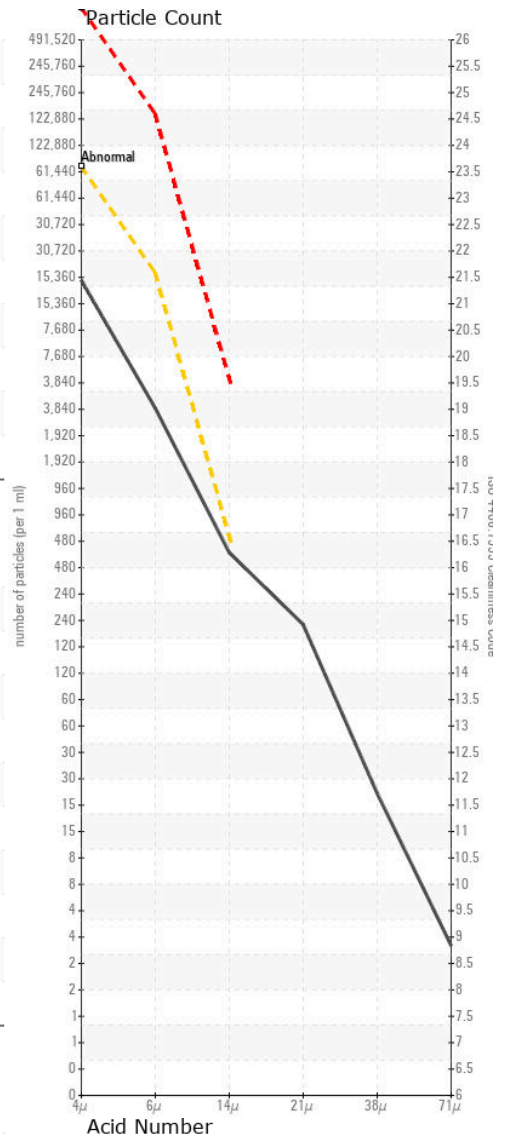
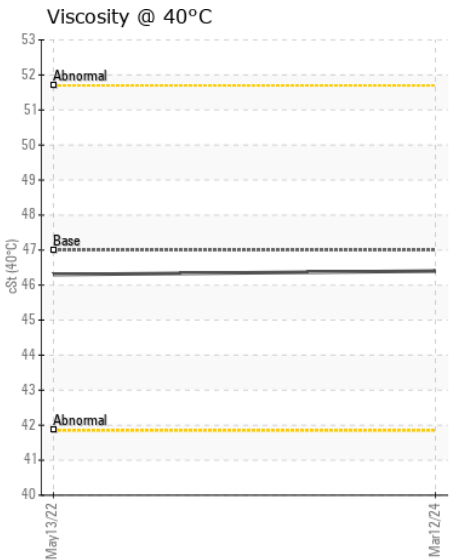
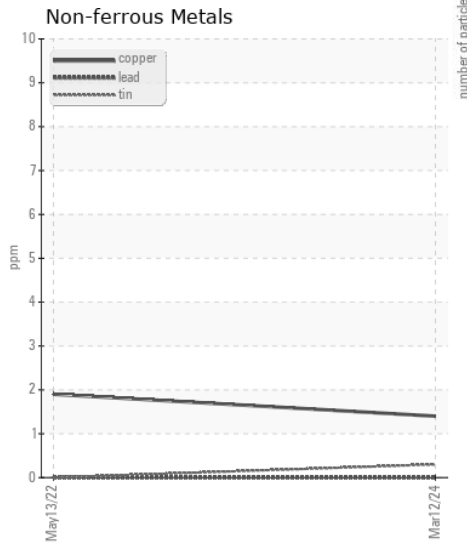
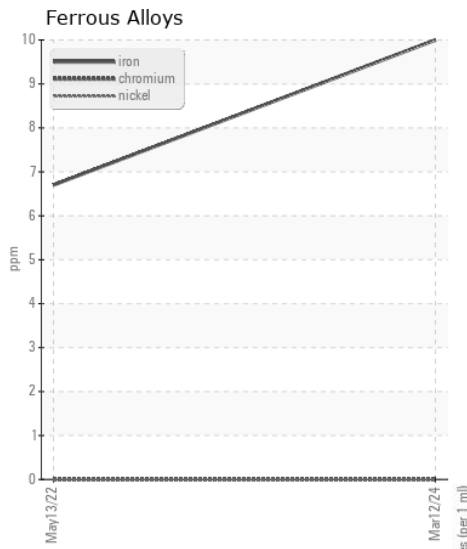
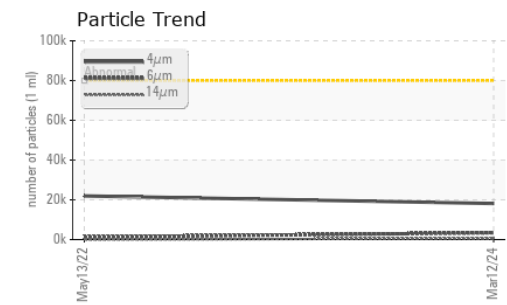
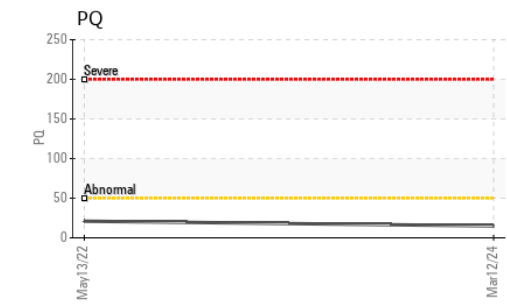
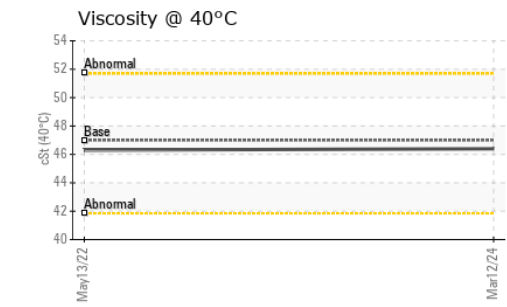
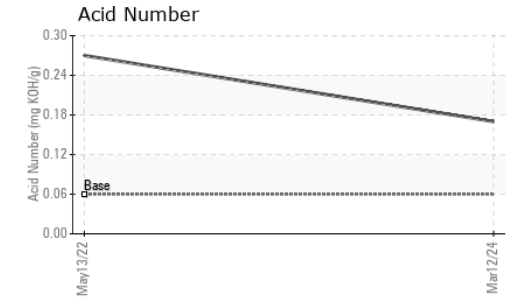
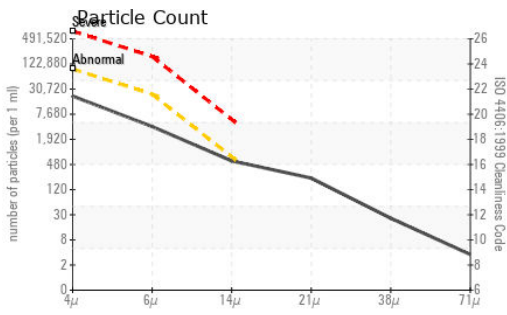
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>11	2	<1	---
Potassium	ppm	ASTM D5185m	>20	0	0	---
Water		WC Method	>0.075	NEG	NEG	---
Particles >4µm		ASTM D7647	>80000	18149	21975	---
Particles >6µm		ASTM D7647	>20000	3394	1247	---
Particles >14µm		ASTM D7647	>640	514	14	---
Particles >21µm		ASTM D7647	>160	200	1	---
Particles >38µm		ASTM D7647	>40	22	0	---
Particles >71µm		ASTM D7647	>10	3	0	---
Oil Cleanliness		ISO 4406 (c)	>23/21/16	21/19/16	22/17/11	---
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	<1	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		<1	<1	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		5	5	---
Calcium	ppm	ASTM D5185m		19	15	---
Phosphorus	ppm	ASTM D5185m	827	331	347	---
Zinc	ppm	ASTM D5185m	0	74	62	---
Sulfur	ppm	ASTM D5185m	13	906	813	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.17	0.27	---
Visc @ 40°C	cSt	ASTM D445	47	46.4	46.3	---



Certificate L2367

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

Sample No. : JR0210649

Lab Number : 06123563

Unique Number : 10937714

Test Package : CONST (Additional Tests: PQ)

Received : 20 Mar 2024

Tested : 24 Mar 2024

Diagnosed : 24 Mar 2024 - Wes Davis

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 - STEPHENSON

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