



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
Store 5 - Cross Lanes
Machine Id
JOHN DEERE 1FF350GXVEE809964
Component
Hydraulic System
Fluid
HITACHI HYDRAULIC SUPER EX 46HN (51 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0041836	LEC0039326	LEC0023711
Sample Date		Client Info		14 Jun 2023	12 Apr 2023	08 Nov 2021
Machine Age	hrs	Client Info		7073	7031	5875
Oil Age	hrs	Client Info		7073	7031	5875
Filter Age	hrs	Client Info		5523	7031	0
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Changed	Not Changed	Changed
Sample Status				NORMAL	ATTENTION	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	12	11	17
Iron	ppm	ASTM D5185m	>32	2	4	10
Chromium	ppm	ASTM D5185m	>9	2	<1	4
Nickel	ppm	ASTM D5185m	>5	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>9	0	0	2
Lead	ppm	ASTM D5185m	>28	<1	0	0
Copper	ppm	ASTM D5185m	>50	<1	1	1
Tin	ppm	ASTM D5185m	>5	0	0	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

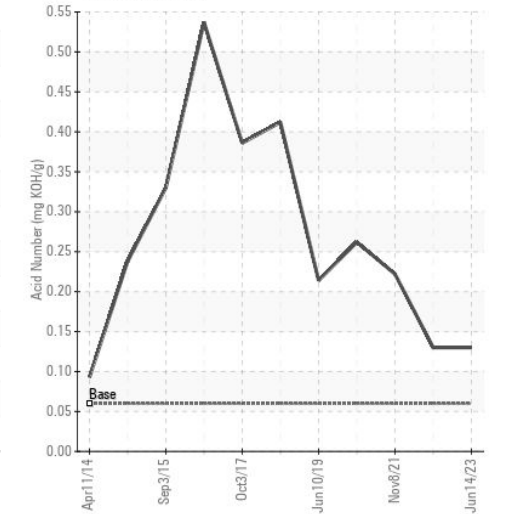
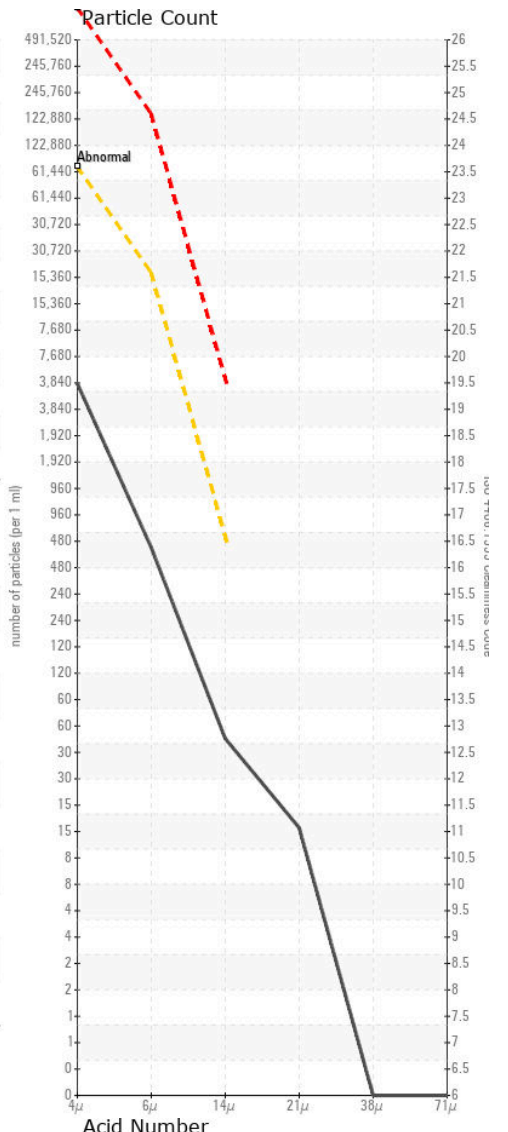
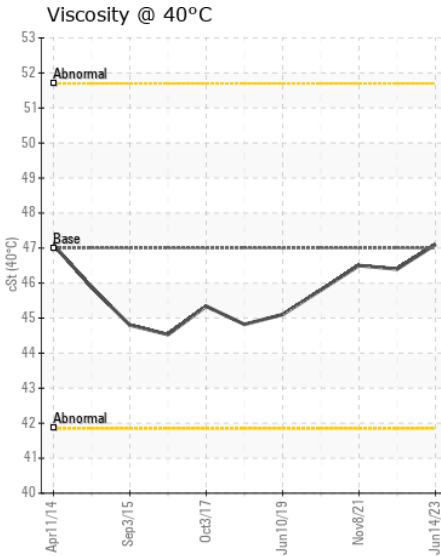
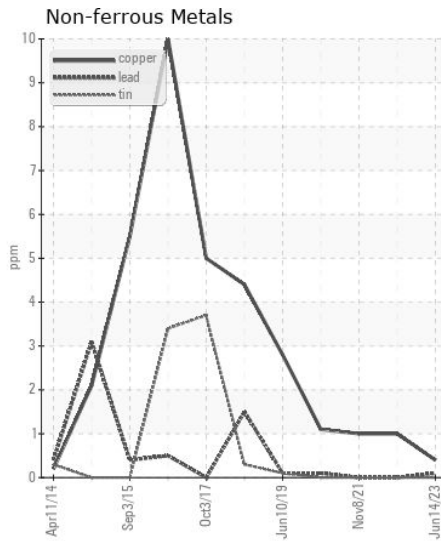
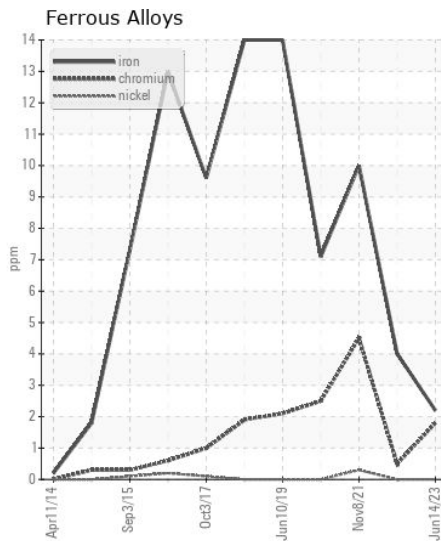
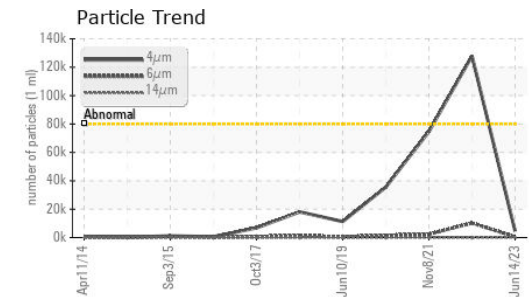
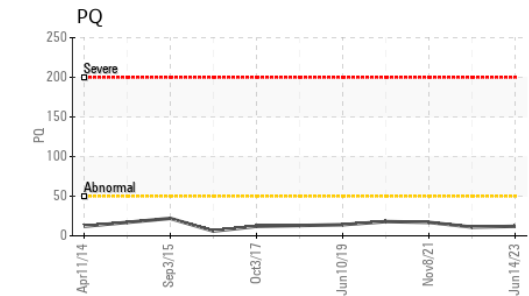
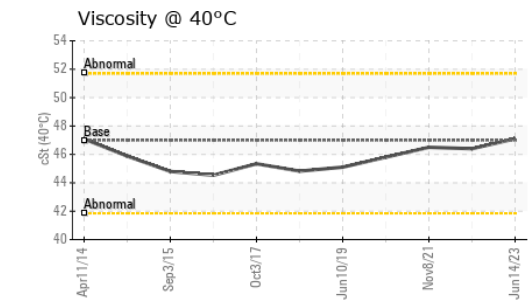
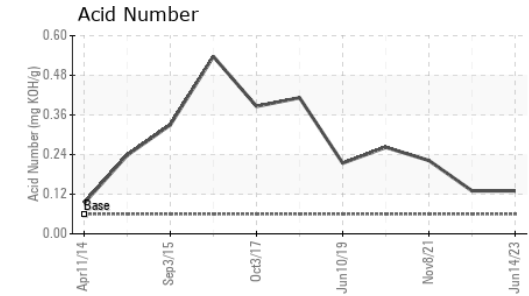
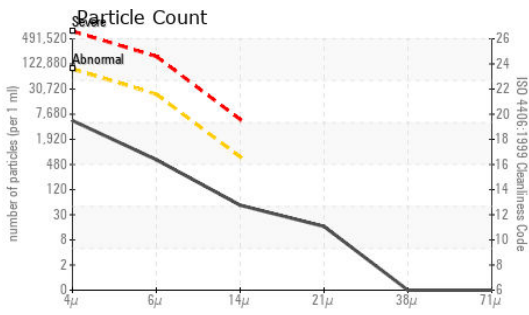
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>11	<1	11	3
Potassium	ppm	ASTM D5185m	>20	1	2	4
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	4703	▲ 127910	74692
Particles >6µm		ASTM D7647	>20000	548	10225	2354
Particles >14µm		ASTM D7647	>640	45	30	7
Particles >21µm		ASTM D7647	>160	14	7	2
Particles >38µm		ASTM D7647	>40	0	0	0
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>23/21/16	19/16/13	▲ 24/21/12	23/18/10
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	0	13	0
Boron	ppm	ASTM D5185m		2	0	0
Barium	ppm	ASTM D5185m		2	0	<1
Molybdenum	ppm	ASTM D5185m		0	0	<1
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		<1	2	3
Calcium	ppm	ASTM D5185m		5	6	28
Phosphorus	ppm	ASTM D5185m	827	573	360	592
Zinc	ppm	ASTM D5185m	0	6	25	32
Sulfur	ppm	ASTM D5185m	13	173	59	217
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.13	0.13	0.222
Visc @ 40°C	cSt	ASTM D445	47	47.1	46.4	46.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0041836 **Received** : 16 Jun 2023
Lab Number : 05875428 **Diagnosed** : 19 Jun 2023
Unique Number : 10520531 **Diagnostician** : Wes Davis
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)

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